

# The Malaysian Surveyor

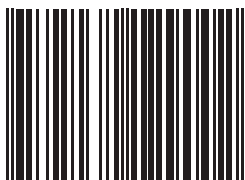
THE PROFESSIONAL JOURNAL OF ROYAL INSTITUTION OF SURVEYORS MALAYSIA

**RISM Activities**  
Inaugural Lady  
Surveyors' Morning  
Coffee Talk

## Practices for Private Finance Initiative (PFI) Procurement Process



ISSN 2232-1292



9 772232 129002 >



# The 17<sup>th</sup> Pacific Association of Quantity Surveyors Congress

Softel Xian on Renmin Square.  
Xi'an China

18 - 21 May 2013

## Congress Theme

Construction Information -  
Cornerstone of the Valuation Management



- Website: [www.paqs2013.cn](http://www.paqs2013.cn)
- E-mail: [organise@ceca.org.cn](mailto:organise@ceca.org.cn)    [paper@ceca.org.cn](mailto:paper@ceca.org.cn)
- Tel: (0086-10) 5781 1845
- Fax: (0086-10) 5781 1485



The Malaysian Surveyor is a quarterly publication which covers the development of the surveying profession, innovations in the surveying technology and surveyors' contribution towards the property market and building industry.

The Institute as a body does not hold itself responsible for statements made or opinions expressed in the articles and advertisements printed in this publication, or for the strict accuracy of references to law cases, which are intended only as a gloss on authorised reports. Rights of translation and reproduction reserved.

**President**  
YBhg. Dato' Sr Abdull Manaf Hj Hashim, FRISM

**Hon. Secretary General**  
Sr Ang Fuey Lin, MRISM

**Editorial Board**

**Editor**  
Prof. Sr Dr. Ting Kien Hwa, FRISM

**Sub-editor**  
Sr Mohamad Shazali Sulaiman, MRISM

**Members**  
Sr Firdaus b Musa, FRISM  
Assoc. Prof. Sr Dr. Adi Irfan B Che Ani, MRISM  
Assoc. Prof. Sr Dr. Syahrul Nizam B Kamaruzzaman, MRISM  
Dr. Norngainy Mohd Bt Tawil  
Prof. Sr. Dr. Hj Wan Muhd Aminuddin B Wan Hussin, FRISM  
Sr Dr. Hj Md Said @ Mohd Zaid B Abdullah, FRISM  
Sr Dr. Helmi Zulhaidi B Mohd Shafri, MRISM  
Sr Dr. Zulkiflee Abd. Latif, MRISM  
Sr A. Mahadevan, FRISM  
Assoc. Prof. Sr Dr. Mohd Hisham Ariffin, FRISM

**Secretary to the Board**  
Zarinah bt. Danial

Royal Institution of Surveyors Malaysia  
3rd Floor, Bangunan Juruukur  
No. 64-66, Jalan 52/4  
46200 Petaling Jaya  
Selangor Darul Ehsan  
t: +603 7954 8358 (hunting line) / 7956 9728 / 7955 1773  
f: +603 7955 0253  
e: editor@rism.org.my  
w: www.rism.org.my

**Subscription Rates for Non-Members (Quarterly 4 issues)**

Local		RM48
Overseas	ASEAN countries	US\$30
	Asia & Australia	US\$40
	Europe, Africa & America	US\$55

**Publishing Consultant**  
DeCalais Sdn Bhd  
D-3-8, Plaza Damas  
60, Jalan Sri Hartamas 1  
Sri Hartamas  
50480 Kuala Lumpur  
T +603 6201 8857  
F +603 6210 8850  
E: deepa@decalais.com

# The Malaysian Surveyor

THE PROFESSIONAL JOURNAL OF ROYAL INSTITUTION OF SURVEYORS MALAYSIA

## CONTENTS

### 4 Editorial

#### RISM Activities

- 5 RISM Editorial Board Workshop  
6 Inaugural Lady Surveyors' Morning Coffee Talk

#### Peer Review Articles

- 8 The Effect of Structural Content On The Performance of Refurbishment Projects  
*Azlan Shah Ali, Zahiriah Yahya, Farid Wajdi Akashah, UmikalsumZulkify, Norhanim Zakaria*
- 13 Analysis of Practices for Private Finance Initiative (PFI) Procurement Process: Malaysia vs. United Kingdom  
*Nurshuhada Zainon, Eric Lou, Mohd Suhaimi Mohd-Danuri, Faizul A.Rahim*

#### Forum

- 22 ADR Sub-Committee Of RISM QS Division - Its Role And Functions

#### Professional Practice

- 23 How Adjusted Are Professional Malaysian Expatriates During Assignment Abroad?  
*Assoc. Prof. Dr. Halmi bin Zainol, Professor Dr. Sr Abdul Rashid bin Abdul Aziz*

#### Property Watch

- 25 Thomson Reuters/GPR/APREA Real Estate Composite Indices: A New Listed Real Estate Index for Asia Pacific Region  
*Professor Sr Dr. Ting Kien Hwa*

#### Managing Stress

- 26 Reduce Stress by Learning Toleration  
*W. M. A. Wan Hussin FRISM*

#### Management

- 28 Combining Rational Thought & Creativity: 4 Key Principles  
*Dr Norman Chorn*

#### Regulars

- 30 Member Updates  
33 Advertisements



# DRIVING NEW SECTORS TO THE MALAYSIAN CONSTRUCTION INDUSTRY

Construction industry in Malaysia is soaring. Strong private consumption and robust private investment is currently sustaining the economy coupled with conducive financial market conditions, stable prices and a favourable labour market. Supportive government policies such as the Tenth Malaysia Plan (2011-2015), Economic Transformation Programme (ETP) and the 2012 National Budget also played an important role in sustaining the strong growth. The establishment of new sectors and drives in the construction industry in Malaysia has also contributed to the growth.

Refurbishment sector in the Malaysian construction industry has been growing rapidly over the years. Refurbishment projects are generally more uncertain than other construction projects, and are mostly completed exceeding the targeted cost and time. The obstacles presented by refurbishment projects can be far more limiting than new build projects. Listed planning conditions, discovery on site and the confines of an existing building are some of the limiting factors that more often than not, add to an already significant list of design and building challenges. In the wrong hands quality and workmanship, budgets and programmes are compromised.

Private Finance Initiative (PFI) in Malaysia is defined as involving the transfer of the responsibility of financing and managing capital investment and services of public sector assets to the private sector including the construction, management, maintenance, refurbishment and replacement of public sector assets, in return for lease charges that commensurate with the level, quality and timeliness of service provision as well as an amount sufficient to ensure returns on investment where the asset and facilities will be transferred to the public sector at the expiry of the concession period. The main aim of

PFI is to achieve closer partnerships between public and private sectors. Critical to the success of PFI are three problematic concerns. First, the public sector must be able to define, over a considerable length of time, the good or service that it is purchasing. Second, an appropriate understanding and allocation of the various risks, to the public sector and the private sector, is essential. Third, the public sector may need to help create a competitive market to produce the service and to manage effectively that market development activity.

The introduction of the new listed Real Estate Index for Asia Pacific Region will connect the global financial community and represents a significant step forward in addressing the benchmarking needs of the investment community. The indices also support Asia Pacific Real Estate Association (APREA)'s vision to give Asian real estate more visibility through indices and give appropriate recognition to the significant position that Asia now occupies in global institutional investment.

Despite its growth and healthy contribution to the GDP, Malaysian construction industry is under constant pressure to improve its performance. The emergence of new sectors and drives change the way the team members are interrelated in the construction industry. Such sectors and drives will bring the public and the private sector firms together in projects in which very high quality standards, tight schedules and cost targets are aimed at. With this, it is hoped that the construction industry in Malaysia will continuously improve and contribute more to the growth of the economics.

Sr Mohamad Shazali Sulaiman  
Sub-editor



## ANNOUNCEMENT

### MAY 2013 PROFESSIONAL EXAMINATIONS

(DIRECT FINAL/FINAL, INTERMEDIATE, FIRST AND FOUNDATION EXAMINATIONS)

Applications to sit for the above examinations are now open and application forms can be obtained from the RISM Secretariat. The application form should be submitted to the RISM Secretariat **not later than December 31, 2013 together with the examination fees.**

A penalty fee is payable if you submit your application between January 1, 2014 and February 28, 2014 after which no application will be accepted. The rules and syllabuses of the Professional Examination and past years question papers are available for sale at the RISM Secretariat.

The examination fees are as follows:-

1. Foundation Exam – RM30.00 per subject
2. First Exam – RM50.00 per subject
3. Intermediate Exam – RM100.00 per subject
4. Final/Direct Final Exam – RM150.00 per subject

# RISM Editorial Board Workshop



**A**N EDITORIAL BOARD WORKSHOP WAS HELD ON the 17 January 2013 at the Perdana Room, Royal Lake Club, Kuala Lumpur. The title of the Workshop is 'Achieving Scopus status for RISM journals'. A total of 11 members from The Malaysian Surveyor (TMS) and International Surveying Research Journal (ISrJ) Editorial Boards attended the workshop. The aim of the workshop is to identify ways of elevating RISM journals to a higher level of Scopus status so that the journals can become a source of reference for surveying knowledge and issues.

Three papers are presented by invited speakers who are established editors in their respective fields:

**Paper 1: "Malaysian Citation Index – Objectives and Roles"**

Assoc. Prof. Dr. Abrizah Ibrahim,  
Deputy Director, Malaysian Citation Centre, Universiti Malaya  
Executive Editor, Malaysian Journal of Library & Information Science

**Paper 2: "Achieving ISI/Scopus status – Sains Malaysiana's experience"**

Professor Dato' Dr. Roslan Abd Shukor, Universiti Kebangsaan Malaysia  
Editor, Sains Malaysiana

**Paper 3: "Organising multiple conferences and journals – Journal of Asian Behavioural Studies experience"**

Professor Dr Mohamed Yusoff Abbas, Universiti Teknologi MARA  
Editor, Journal of Asian Behavioural Studies

The papers presented were very informative and the participants had much to learn from the experience of the speakers. The Q&A session after each paper presentation



provided the opportunities for the participants to interact with the speakers. The sessions are moderated by Associate Professor Sr Dr. Ting Kien Hwa, Editor of The Malaysian Surveyor and International Surveying Research Journal. The Editorial Board members were glad that the presenters had shared invaluable information, data and knowledge to help RISM to strategise and position RISM journals to achieve higher citations and visibility. ■



# Inaugural Lady Surveyors' Morning Coffee Talk



**F**EBRUARY 23, 2013 VILLAMAY, SHAH ALAM: THE Balinese styled décor at the hotel was a perfect setting for RISM's first Lady Surveyors' Morning Coffee Talk.

The organisers, Sr Dainna Baharuddin and Sr Amnah Salleh, together with the RISM Secretariat welcomed 39 participants from the private and public construction sectors.

The ladies enjoyed a light breakfast served at a breezy gazebo whilst engaging in polite conversation with friends old and new. Tummy filled, they settled themselves in the lounge on large comfy puffets eagerly waiting for the Talk by the Institution's first lady President PP Prof. Sr Dr Wan Maimun Wan Abdullah. Dr Wan shared the statistics of women and men employed in the institutions of higher learning, workplace and managerial level. The number of women employed in the institutions of higher learning are higher compared to other workplaces, but reduced drastically at upper management level. According to Dr Wan, this is due to the phenomena of "sticky floor" or "glass ceiling." She motivated the ladies to pursue their careers to a higher level and keep themselves relevant in their workplaces. She identified qualities and characters that make a woman a natural project manager and how to manage time for the family and building a career. Dr Wan shared her journey as a wife, mother, daughter and a career woman. She ended with the notion that every woman shares similar challenges at home and at work. With women's instincts and abilities, women should not be afraid in "Conquering your Everest."

Still wide-eyed, the participants were introduced to Dr Dalilah Kamaruddin from the National Cancer Society Malaysia. Dr Dalilah reminded the ladies of the dos and don'ts of healthy living. She pointed out the importance of not only physical health but also mental health, and being amongst family and friends is part of maintaining a healthy mind. Dr Dalilah continued by emphasising the need to have greater awareness on breast cancer; ways to minimise the risks, monthly self-care and the need to

have for yearly examination. The graphic illustration of cancer patients left the ladies eager to lead a healthier lifestyle despite their busy schedules.

The only male speaker for the day was Mr Shamir Rajadurai from KickOut, who came with an entourage of ladies ready to share the art of Practical Self Defence. A woman can get herself out of trouble using a few simple moves, no fancy martial art movements required. Squeals and laughter filled the villa when the ladies got physical practicing the moves against each other. Mr Shamir also educated the participants about ways to keep safe when facing danger or a dangerous situation. Being careful, conscious of the surrounding and vigilant at all times are the key words ... and learn to scream!

The ladies ended the event by touring Villamay, enjoying the beautiful landscaped gardens.

The RISM Sports and Social Committee's objective when organising this event was to recognise women as important and unique contributing individuals in the surveying profession. The success of this Talk has prompted the Committee to plan and organise more of such activities in the near future for the benefits of RISM's Lady Surveyors. ■





**RISM  
FAMILY  
DAY  
2013**  
13 April 2013

**@Tasik Taman Jaya,  
Petaling Jaya, Selangor**

**INVITING  
ALL**

**RISM Students,  
Probationers, Graduates,  
Members & Fellows  
and their Family  
Members ONLY**

**Commitment Fee**

RM 5/Children and RM 10/Adult

**Includes**

Breakfast, Lunch, Free flow drinks and  
Ice Cream, Telematch, Quiz at Museum  
PJ, Karaoke, Senamrobic & Lakeside  
Walk, Playground, Clown, Flea Market  
and Many More!

**Flea Market**

RM 20/Table (table only, no  
skirting nor table cloth provided)

Info and Form available at [www.rism.org.my](http://www.rism.org.my)



# The Effect of Structural Content

## On The Performance of Refurbishment Projects



Azlan Shah Ali, Zahiriah Yahya, Farid Wajdi  
Akashah, UmikalsumZulkifly, Norhanim Zakaria  
Centre for Construction, Building and Urban Studies,  
Faculty of Built Environment,  
University of Malaya

Refurbishment projects contribute to increase the number of building physical improvements, extensions and extensive repair works. However, refurbishment projects are more difficult to manage compared to new-built projects. This is due to the uncertainty factors inherent in projects. The uncertainty of refurbishment project is reflected in the difficulty of obtaining structural design information during the design process. As a result, most of the refurbishment projects end up with poor project performance. Therefore, the main objectives of this paper are to present how the structural content in a refurbishment project could affect the overall performance of refurbishment projects. This paper employed the triangulation technique with a combination of quantitative and qualitative approaches. The study started with literature review followed by semi-structured interviews with 21 professional structural engineers and a final questionnaire survey. The final questionnaires were distributed to 100 refurbishment projects. This study concludes that the performance of refurbishment projects suffered from the uncertainty where the structural content affected the project performance.

### Introduction

“REFURBISHMENT” IS DEFINED AS A WORK on existing building that comprises rehabilitation, modernisation, renovations, improvements, adaptation, additions, repairs, renewal and retrofitting; carried out on existing buildings but excludes routine maintenance and cleaning work (Young et al., 1996). The refurbishment sector has grown rapidly and has become an important economic driver in some developed countries such as United Kingdom, Europe and the United States. However, there is no comprehensive and accurate data on the value of refurbishment work in Malaysia. The data compiled by the Malaysian Construction Industry Development Board (CIDB) shows that repair and maintenance, which is normally used by practitioners as a guide on the value of refurbishment work, accounted for 2 percent of total construction output in the year 2002. It rose to approximately 20 percent of total construction output in year 2010. The data however, does not include illegal renovation works carried out by house owners or by unregistered contractors. Therefore, the actual value of refurbishment works is probably larger.

Refurbishment works is further compounded by the project uncertainty factor. Researchers such as Hashim (2004) have provided evidence of the uncertainty of refurbishment projects. The problem mainly derives from the lack of information available to perform a task, especially during the initial stage of the design process (Stacey et al., 2000). Many construction management writers agree that uncertainty in refurbishment projects makes them more difficult to manage (Ali, 2008). Refurbishment projects became even more uncertain when they involve structural modifications, which are sensitive, dangerous and difficult in operations. Extra precautions need to be taken into account when dealing with structural modifications (Daoud, 1997). Temporary supports, which are normally needed for demolition and alteration of building structure, are more widely used in this type of refurbishment work compared with new-build projects (Friedman and Oppenheimer, 1998). Moreover, according to Egbu (1997), a refurbishment project is normally dangerous when it involves demolition work. In this case, the designers are required to have extra knowledge of the building structure in order to produce a



design for temporary supports such as scaffolding and shoring. It is the responsibility of the designers to ensure that the temporary supports used can withstand the necessary loads and that the site conditions are safe to deliver what they have designed during the commencement of alteration works. Hence, the temporary support needs to be designed by a certified engineer.

As the refurbishment sector grows in importance, the difficulty of managing performance provides an impetus for this study.

## The Structural Work in Refurbishment Work

Ali (2008) pointed out the important of structural item in refurbishment projects. His study revealed that almost two-thirds of the buildings renovated for the same class usage required changes to the structural system and almost 90 percent of the buildings renovated for new class usage required structural alterations. The statement shows that the majority of the refurbished building involved structure alterations as part of their scope of work.

In line with this argument, Friedman and Oppenheimer (1998) highlighted that in refurbishment projects, the difficulty of particular structural change can greatly influence the architectural design part. He added that the amount of design work required in refurbishment projects influenced by the scope of alteration of an existing building and the state of existing building structural elements. The design work could be more difficult if the scope of work involves demolition and stabilising the existing structure. In the unique project like that, it usually involves procedures and many steps of investigation such as probing, testing and shoring that resultant to the destruction of architectural finishes. The important sources of information concerning to the structural for refurbishment design were establishing history of the building, its structural system and cause of any known damage. In absence of this information, it is almost certain to cause the final design document be incomplete, the cause of delays and extra cost to the refurbishment projects. Ali (2008) maintained the importance of having site investigation with the use of probing and testing techniques to reveal the required information concerning the structure of a building due to the uncertainty of structural information.

In addition, Friedman and Oppenheimer emphasised that during the handling of this situation, the engineer needs to be familiar with the load travels in an existing building and guide the designer architect who needs to be familiar with the concept of building structure and to participate in structural discussions. The coordination is important to avoid any important missing information that could cause harm to the building. Daoud (1997) maintained that the role played by the designer is important as it has serious impact to the building systems. He added that the design and installation of

additional supports is sensitive and difficult, and it needs to be approached cautiously by the designer.

The nature of refurbishment project requires a lot of information prior to planning and coordination in contrast with new-build projects. The constraint imposed by the existing structures invariably gives rise to all sorts of problems with regards to installation work. Ali (2008) highlighted that refurbishment work often involved alteration of the existing building structure that needs shoring and temporary supports. It could be argued that the respective project manager and design team need to work closely to ensure a safer engineering design is executed. Nonetheless, the involvement of the client is important to ensure the responsibilities are clearly defined and accepted during the early stage of the project.

Similarly, Clancy (1995) maintained that refurbishment and repair projects are found to be more complicated compared to new-build projects. This is due to the need to consider more unknowns and the need for more predictions to be done for this type of projects. Clancy (1995) argued that the structural appraisal exercise require close coordination where the engineer should liaise frequently and constantly with the other design team members.

The review of literature shows the important of structural aspects in refurbishment projects. It is argued that the greater content of structural work could affect the refurbishment project performance.

## Research Methodology

This study was designed with a triangulation technique, which combined quantitative and qualitative approaches. Semi-structured interviews were used for the qualitative part while for the quantitative part, questionnaires surveys were used for data collection. The respondents in this study were structural engineers who have experience in refurbishment of building structures. A set of questionnaire was sent to the final list of 100 respondents. After filtration was made from 92 replied questionnaires, 81 questionnaires were found to be useful to form a database for analysis. The replied questionnaires represent 81 different refurbishment projects with a minimum contract value of RM500,000.00 (USD150,000.00). As for the qualitative part, the data was analysed together with the discussion in descriptive analysis to complement the answers. This is to make the discussion more realistic.

**...it is necessary for designers or surveyors to use special techniques such as destructive and non-destructive testing to obtain more accurate design information.**

**Table 1: Percentage of Structural Work**

% of Structural Work to Contract Value	Percentage (N=81)
0% -10%	28.6
11% -20%	37.1
21% -30%	11.4
31% -40%	10.0
More than 40%	12.9
<b>Total</b>	<b>100.0</b>

## Result and Discussion

Table 1 shows the percentage of structural works in refurbishment projects. The results indicate that about 35 percent of the refurbishment projects have structural work where the content is more than 20 percent of the contract value.

The content of structural work is lower, indicating it is less important in refurbishment projects. Rahmat's (1997) result in Table 2 indicates that the percentage of structural work for refurbishment projects are lower in the UK; that is only about 20 percent of refurbishment projects involve a structural content of more than 20 percent.

Again, the percentage is higher for refurbishment projects in the Malaysian study. A comparison of results indicates that refurbishment projects in Malaysia are more uncertain, concerning the content of structural works. A higher content of structural works signify greater complexity and uncertainty in refurbishment projects. It could be even more difficult if the scope of

work involves demolition and stabilising of the existing structure, which requires extensive works in design and construction to be carried out. There could be much unknown information associated with structural elements. The result implies that designers need to use design information that is as accurate as possible when dealing with structural alteration, and one of the ways is by conducting appropriate testing of the structural elements. This supports the view of Friedman and Oppenheimer

(1998) who suggested the use of testing when dealing with structural parts of a building. Besides testing, shoring and demolition works, structural work also involves a large quantity of dust and debris that cause problems for the designers to carry out investigation on the buildings. The occupants could also find it difficult to stay in the building during a period of the design process. Three principal structural engineers in Kuala Lumpur and Johor Bahru mentioned during the semi-structured interviews that due to occupancy problems, some of the owners did not allow the designers to carry out massive testing during the schematic design stage. As a result, many assumptions had to be made by the designers to cover the risk of lack of access to the refurbishment site to obtain information. However, the interview revealed that in many cases where the content of structural works in the refurbishment projects was higher, the likelihood of people staying in the building during the schematic design and construction stage is very slim.

Table 3 shows results for associative test between structural content in

**Table 2: The Percentage of Structural Work to Contract Value**

% of Structural Work	Percentage (N=62)
Less than 10%	40.3
11% -15%	21.3
16% -20%	17.7
21% -30%	4.8
More than 30%	16.1
<b>Total</b>	<b>100.0</b>

Source: Rahmat (1997)

**Table 3: The Correlation Matrix between Structural Content and Design Performance**

Project variables	Completeness of design before work started	Changes of design during the construction stage	provisional sum to contract value	Time variance	Cost variance	Compatible of design to existing site
Structural content	-.049	-.117	<b>-.319**</b>	-.148	-.067	-.069

\* Correlation at 5% significance level

\*\* Correlation at 1% significance level

refurbishment works with project performance. A significant correlation between the structural content and the provisional sum to the contract value was detected. Structural works involve complex activities such as temporary supports, wall hacking and demolition work. This requires extra design work. Uncertainty about structural parts includes aspects of structural integrity such as steel bar size and concrete strength.

It is difficult to ensure the structural integrity of an existing building when the higher structural content is involved. The amount of material and scope of work involved in the alteration of a building's structure is difficult to estimate. Therefore, the provisional sum can be used to substantiate the uncertainty of structural works. The result supports statements by Daoud (1997) who said that structural content affects the design performance in refurbishment projects.

The result implies that it is necessary for designers or surveyors to use special techniques such as destructive and non-destructive testing to obtain more accurate design information. The uncertainty in information such as concrete strength could be revealed by applying a crushing test and the size and routing of steel bars could be confirmed by using an appropriate tool, i.e. a concrete hammer test meter. This would help the designers to make accurate decisions pertaining to this issue. Second, it is important to involve the C&S engineer during design process when the structural content in refurbishment projects is high. Structural alteration in refurbishment projects is complex and dangerous work. The C&S engineer is more

## **The C&S engineer is more knowledgeable about building structure and is able to decide the appropriate testing that needs to be used in order to obtain accurate design information.**

knowledgeable about building structure and is able to decide the appropriate testing that needs to be used in order to obtain accurate design information. In addition, the advice from the C&S engineer is vital to determine the location of temporary supports that may be required in a refurbishment projects.

### **Conclusion**

In conclusion, almost one fourth of the refurbishment projects, the content of structural work were more than 30 percent. Structural scope in refurbishment project is a complex task, which involved temporary supports and destructive testing to obtain accurate design information. However, not many designers carry out detail investigation during the schematic design stage because occupancy and limited designs period. The associative test indicated significance correlation between structural content on amount of provisional sum to contract value. This indicated that performance of refurbishment suffered from greater content of structural scope of work. ■

### **Reference**

- Ali, A.S. (2008). Integrative Mechanism in the Design Process of Building Refurbishment Projects, Unpublished PhD thesis, Universiti Teknologi MARA, Selangor, Malaysia.
- Clancy, B. P. (1995). New building from old: some views of refurbishment projects. *Journal of The Structural Engineer*. Vol. 73, No. 20/17, 341-346.
- Daoud, (1997).The Architect/Engineer's role in rehabilitation work. *Journal of Construction Engineering and Management* Vol. 123, No. 1, 1- 5.
- Egbu, C.O. (1997) Refurbishment management: challenges and opportunities. *Building research and information* Vol. 25, No. 6, 338-347.
- Friedman, D. & Oppenheimer, N. (1998). *The design of renovations*. W. W. Norton & Company New York, London.
- Hashim, A.E. (2004). Planning and control of safety in construction refurbishment projects, Unpublished PhD Thesis, UniversitiTeknologi MARA, Shah Alam, Selangor, Malaysia.
- Rahmat, I. (1997). The planning and control process of refurbishment projects, Unpublished PhD thesis, University College London, UK.
- Stacey, R.D., Griffin, D. & Shaw P. (2000). *Complexity and management*.Routledge, London and New York.
- Young, B.A. Torrance, V.B. &Egbu, C.O. (1996). *Management in refurbishment works in the construction and shipping industry, Project reference CMR 236*. The Bartlett Faculty of Built Environment, University College London, UK.

# Analysis of Practices for Private Finance Initiative (PFI) Procurement Process Malaysia vs. United Kingdom



Nurshuhada Zainon<sup>1</sup>, Eric Lou<sup>2</sup>, Mohd Suhaimi Mohd-Danuri<sup>1</sup>, Faizul A.Rahim<sup>1</sup>

<sup>1</sup> Department of Quantity Surveying, Faculty of Built Environment, University of Malaya

<sup>2</sup> Research Manager, School of Built Environment, Maxwell Building, University of Salford, Manchester

Private Finance Initiative (PFI) offers an alternative to the conventional procurement of public service infrastructure. Originated from the United Kingdom (UK) from its public sector reforms, it has since been widely used in many countries such as Japan, Italy and France. The Malaysian government in the past years has officially announced the adoption of PFI for its construction and infrastructure projects in order to promote greater involvement of the private sector in delivering public services. This paper aims at exploring the true nature of the Malaysian adoption of PFI, against the British experience; by extensive literature review of the official documents published by government bodies and government-link organisations in relation to the implementation of PFI for both countries. To support the literature findings, interview sessions were conducted with Malaysian government agencies where PFI is engaged. Empirical analysis indicates that Malaysia has a unique model of PFI, where it differs from UK in terms of its definition, financing system, and risks allocation. This paper hopes to supplement and improve knowledge in the management of PFI projects in Malaysia, primarily on the possible improvements that could be executed in strengthening PFI implementations in Malaysia by learning from the UK experience.

## 1. INTRODUCTION

THE TERM OF PRIVATE FINANCE INITIATIVE (PFI) was first introduced to the United Kingdom (UK) construction industry in 1992 – a product of its extensive public sector reforms (Langford and Murray, 2003; Takim, Abdul-Rahman et al., 2008). One of its many objectives was to bring in private sector funding and expertise into the running of public services. Since its introduction, PFI have been adopted and implemented successfully by countries such as Japan, Italy, France, Germany, and Australia; and have benefited from lower construction costs and time, and increased quality of construction projects (SERCO, 2007).

The Construction Industry Development Board (CIDB) of Malaysia reported that the Malaysian construction industry has always been plagued with issues such as excessive budgets and time overruns (CIDB Malaysia, 2010). Further, the industry is still very labour intensive and suffers from poor workmanship with much reliance on foreign workers; this has resulted in deficient quality of construction works and sub-standard construction products. On top of this, professionalism and global economic uncertainties added to the burden for the Malaysian construction industry. To address these issues, the government had implemented various privatisation programmes but have not been successful (Abdul-Aziz, 2002; Tan, 2007; Wahab, 2003). For instance, the Build-Operate-Transfer (BOT) programme has been restructured due to its unsustainable financial situations. Inspired by the PFI based on the UK experience, the Malaysian government introduced the PFI under its national long term national planning and budgeting, the Ninth Malaysia Plan 2006-2010, to further improve the situation (Economic Planning Unit, 2006). The introduction of the PFI is among the efforts by the government to encourage private sectors participation in the local development projects and to reduce government's expenditure in providing public services and infrastructure (Takim et al., 2009).

It has been years since the introduction of the PFI into the construction industry, and yet little is known about exactly how the PFI could be used to drive the privatisation projects in Malaysia. There are neither guidelines nor regulations given to the public, and no initiative from the government to promote the scheme to private organisations. This has resulted in poor understanding, the lack of interest and minimal uptake of the PFI in the country. This paper represents the theoretical gap in the extant literature, and would further enhance our understanding on the Malaysian version of the PFI – by reviewing its concept relative to the PFI in the UK's experience. As the pioneer of PFI, practice and experiences from the UK is deemed most appropriate that we can learn from (Smyth and Edkins, 2007). Understanding this issue is important for both the industry and academia because this study will assist in clearing the confusions and expectations surrounding the PFI within the Malaysian context.

## 2. METHODOLOGY

This paper investigates the relative connectivity between what is written and what is practiced. The data collection started with a thorough review of journals, books, and PFI-related government documents, which include the Ninth Malaysia Plan, the PFI Framework of Malaysia, and the PFI documents from HM Treasury, UK. Specialised databases and other information sources available on the Internet were also explored. The selected references were selected based on the well-described methodology, and the research results are available and complete.

As a result of lacking literature of PFI in Malaysia's perspective, the literature findings are further enhanced through interviews with representatives from the public department related to the Malaysian construction industry procurement. Two government departments champion and promote the implementation of the PFI in the Malaysian construction industry. Thus, two separate interview sessions were conducted in the respondent's offices – each of the sessions took about two hours. The interviews involved a number of questions that used open-ended questions to allow the respondents to give their feedback in their own words. Short informal discussions with members of the department also took place to compliment and fill gaps from the interviews.

To maintain the anonymity of the organisations, they will be referred to as Department A and Division B. The first is Department A, which is a subsidiary of the public department related to the Malaysian national economic planning. The Department is currently developing policies and regulations for PFI implementation. In addition, the Department administers the methodology of how PFI projects will be granted to the developers or contractors. The Department also provides services in context of feeding information and advice about PFI to the public sector. Under this Department, there is a sub-division called Division B. This division implements and enforces the PFI policies and regulations, as well as promoting the benefits of PFI in the Malaysian construction industry. Division B manages the fund for PFI project and has full responsibility in administration of PFI projects. Both of these organisations are based in Putrajaya, the administrative capital of Malaysia.

## 3. PROCUREMENTS IN CONSTRUCTION

In the construction industry, several types of project procurement systems are being widely used ranging from the traditional system to the many variations of fast-tracking systems, for examples, design and build, turnkey, management contracting, cost-plus contracting, and others. The different procurement systems have distinct process and procedure of project delivery and also the aspects of management and organisation. Masterman (1996) classified construction procurement systems into three categories based on the relationship and critical interaction between design and construction responsibilities. The categories are:

- 1) Separated and Cooperative System,
- 2) Integrated System, and
- 3) Management-oriented System.

In spite of this, as the construction industry has always faced funding and risk bearing issues, the PFI has been introduced as one of the construction procurements with the growing of privatisation scheme. The concept of PFI originated in the UK when the government first started implementing the PFI in 1992 (Takim et al., 2008). The PFI is one form of Private-Public Partnership (PPP) practiced in the UK (Davies and Eustice, 2005).

### 3.1 PFI Financing Framework

PFI involves a private company or consortium undertaking all aspects of the building and running of the completed project. The creation of such a consortium is necessary since no one company has in-house expertise to complete all the contracted tasks (Carillo et al., 2006). This consortium finances and builds, as well as maintains and operates the facilities throughout the duration of the concessions. In return, the public sector pays the consortium for the work on a performance basis. Upon the expiry of the concession, the facility will be transferred to the government at no cost. Under the PFI framework, payments to the consortium may be withheld or deducted if the facility is not available or service performances are not up to the agreement. The following are a few features of the PFI that makes it distinctive from the other procurement methods (PPP Unit, 2009):

- **Contractual term** – A PFI contract is a long-term contract, usually 15 to 30 years, with a private sector contractor, to provide a clearly defined service (HM Treasury, 2003).
- **Funding** – The private entity makes an investment in capital equipment or infrastructure to provide the service, using shareholder's money and funds borrowed from commercial banks or finance houses, and will then be repaid with interest by the government or a relevant public body.
- **Payment** – Payment will be made in regular instalments over the duration of the contract, based on the quality and performance of the project.
- **Type of projects** – The PFI is applicable for projects with commercial viability.

## 4. BENEFITS OF PFI

Since its inception, the UK government has benefited from the PFI in terms of cost and time savings. According to a report published by the UK's National Audit Office (2009), 96% of PFI projects are being delivered on contracted time and 94% were delivered to original contracted price. In comparison with the conventional procurement approach, only 20%-24% of PFI projects are experiencing cost overruns and/or construction delays as opposed to 70%-73% of projects procured using the

conventional approach. The report found that 90% of PFI's users are satisfied with PFI service in the UK.

Theoretically, the real aim of the PFI is administrative reform – the transfer of the public sectors role to the private sector (Shinohara, 1998). Besides the benefits that have been proved by the UK's implementation, PFI offers other significant benefits such as:

- **Value for money** – PFI is about delivering better value for money when compare to conventional procurement, through private sector innovation in the way that services are delivered (House of Commons, 2003). In a PFI project, the private sector is expected to undertake the design, construction and maintenance or repairs of the infrastructure assets over a long period, usually between 25 and 30 years. The idea here is that the party responsible for the initial design and construction is better placed to manage and control the costs of maintenance over the long run. This whole-life costing approach should yield total cost efficiency and, hence, better value for money.
- **Effective risk transfer** – A study undertaken by the National Audit Office (2003) indicated that there was significant improvement in terms of price certainty and projects being delivered on time.
- **Single point of accountability** – The single entity (a consortium who undertakes the concession) will be responsible for any dispute arises, allowing the government to quickly seek rectification and remedy without having to first determine the cause of the defect.
- **Better certainty in quality** – The service output specifications are clearly identified in a normal PFI contract, by which the level of remuneration for a specified period, monthly or annually, is determined. The private sector is therefore encouraged to resolve any shortfall in service level quickly in order to restore its earnings potential.
- **Better certainty in timing** – Remuneration to the private sector only starts when the service delivery starts. This creates a powerful incentive for the private sector to deliver on time, if not earlier.
- **Encourage innovation** – Specifications are defined based on outcome as opposed to input specifications; the private sector will have the flexibility and room to provide innovative solutions.

## 5. THE MALAYSIAN APPROACH

The Malaysian government defines PFI as involving the transfer of the responsibility of financing and managing capital investments and services in relation to public sector assets to the private sector in return for lease charges that commensurate with the quality of services and an amount sufficient to ensure returns on investment (Economic Planning Unit, 2006). The government

1 The EPF is a compulsory scheme that provides retirement benefits for employees through management of their savings in a reliable manner. It was established on 1 October 1951. The scheme is funded through contributions from both the employees and their employers, and the contributions are paid monthly to the Fund and kept in the individual contributor's account (Employees Provident Fund, 2010).

announced that the Employees Provident Fund (EPF)<sup>1</sup> is to be the financier for PFI projects (Khan et al., 2010). In actual fact, the EPF is a government agency under the Malaysian Ministry of Finance (MMOF). This element makes the Malaysian PFI different from other Malaysian PPP models, where other models are funded through a Consolidated Fund, where the money comes from the taxpayer.

There are two types of PFI models in Malaysia. The first model is targeted at small to medium scale social infrastructure projects such as the building of schools, community halls, police stations, and others. These projects will attract small and medium sized contractors instead of the large construction companies. Due to the smaller size of such projects and given the potential lack of experience of the smaller sized contractors, such projects may not be entirely bankable. In addition, banks may be reluctant to lend long-term to such concessionaires. This led to the EPF to be the chief financier of such projects. The second model involves large-scale projects. The government has announced a few mega-projects to be funded under PFI scheme; namely the new Second Penang Bridge and KL-Singapore bullet train project (MOF Malaysia, 2006).

A special-purpose firm (SPF) was established by the MMOF to manage and oversee the funding mechanism in PFI projects. The government allocates an amount from EPF fund for the firm to be used for financing successful PFI projects tenders through the Accountant's General Department of Malaysia (AGD). The AGD is in charge in paying the progress payment to the contractor by the approval from Public Works Department (PWD) or/and Department of Irrigation and Drainage (DID).

### 5.1 Payment

Grants for all the completed PFI projects is handed to and held by the Department of General Director of Lands and Mines (DGDLM) for a period of the contract. The DGDLM lease nominal the completed

projects to the SPF for the payments of construction cost funded by EPF. This lease and sub-lease agreement between SPF and the DGDLM involves a period of contract of 25 to 30 years. Profits for the EPF are generated through interest payments from the long-term contracts.

### 5.2 Approval Guideline

In the first stage of approval, the Economic Planning Unit (EPU) plays an essential role. The EPU submits all approved proposed projects that cost below RM50 million to selected ministries according to the type of project for the second stage approval. For project costing more than RM50 million, it must be first approved by the MMOF. After the approval process, each ministry runs the tendering as the former procedure. That particular ministry will then appoint the contractor and monitor the project.

### 5.3 Scope of Works

In Malaysian PFI context, a private company is involved in a project only during the construction phase, and continues with the leasing contract between the private company and the government, as illustrated in Figure 1. As contractors are only involved during the construction phase, they therefore do not have any obligation in maintaining the building or provide a service. As a result, the MMOF is required to allocate an operating expenditure for maintenance of the building.

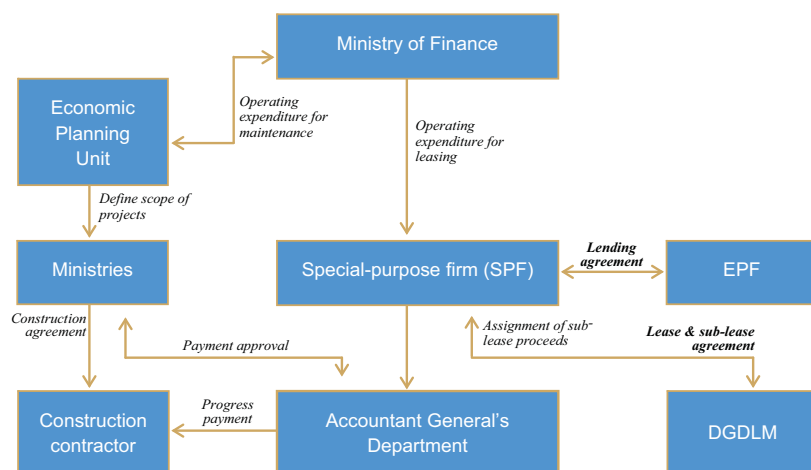
## 6. THE BRITISH PFI EXPERIENCE

The PFI has become the most used PPP model in the UK (Patel and Robinson, 2010). Since it was introduced, over 900 of the public-private deals have been signed at a capital value of approximately £40 billion, encompassing the school sector, health, transport, accommodation and defence sectors (Ruane, 2010). Under this scheme, a project has to be designed, built, financed and managed by the private sector companies, under a contract that typically lasts for 30 years; after which time the buildings will change ownership to the public authority. The private company is contracted to maintain the buildings where it has responsibility in providing cleaning, catering and security services (Ismail, 2011). In exchange, the public authority uses the buildings and begins repaying the private company for the cost of the buildings and their maintenance (plus interest) after the construction is complete, depending on its performance throughout the contract period. For instance, if the private sector misses performance targets, it will be paid less.

### 6.1 UK PFI Structure

HM Treasury governs the UK's PFI structure – the consortium company joint venture model is used as a typical commercial structure of all PFI projects in the UK, as shown in

Figure 1: Malaysian PFI Model (Economic Planning Unit, 2008)



EPF = Employees' Provident Fund  
DGDLM = Department of General Director of Lands and Mines

Figure 2: The UK PFI Model (HM Treasury 2003)

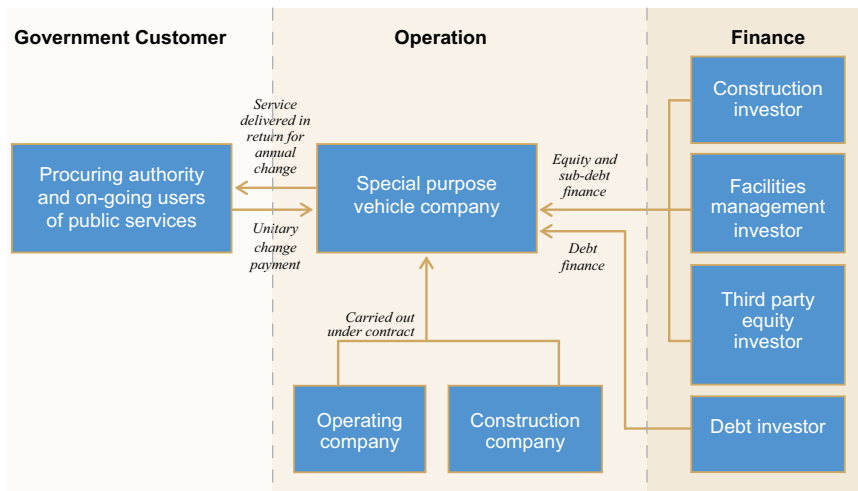


Figure 2. Within this structure, the private sector reallocates risks to the most appropriate parties. Typically, the construction contractor under a sub-contract with the consortium company will bear the design, construction and completion risks while the service provider under a sub-contract with the consortium company will take the risks of timely and cost effective service provision. The insurance company, therefore, will provide protection for risks of damage and business interruption and the consortium company, its lenders and investors are therefore left with a series of residual risks, some of which are credit risks on the sub-contractors' performance (HM Treasury, 2003). The structure permits different parties to become involved in the PFI scheme and share the risks more effectively. Indirectly, it also permits the involvement of third party funders who must assess the strength of the contractual arrangements and the level of support offered as they rely on these when it comes to repayment of their loans.

### 6.2 Funding

The UK PFI is funded through the sale of corporate bonds or directly by banks, and there will be risk capital involved as equity (minor) to which is added debt finance (either loan or bond). The private sector will be paid for work over the period of the contract and if it fails to meet certain specifications, it will lose out on payments until standards are improved.

### 6.3 Procurement Process

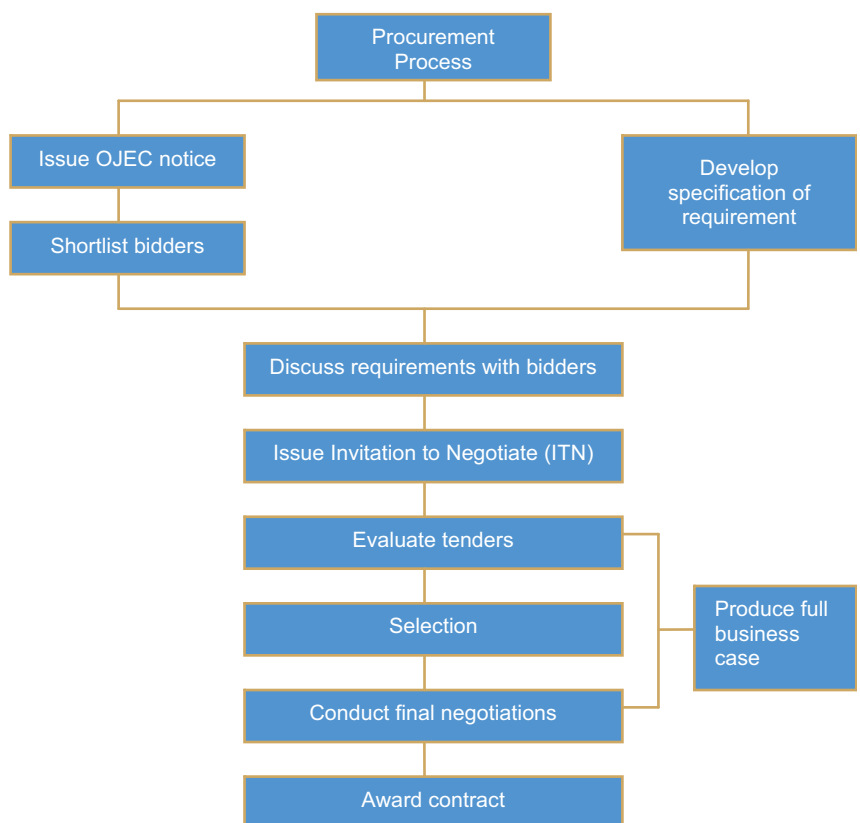
The procurement process starts after the PPP/PFI business case is developed, and it will start from the advertisement in the Official Journal of European Community (OJEC) as shown in Figure 3. At the same time, the authority develops detailed specification of the project's requirements that will be discussed later with the shortlisted bidders. After that, the authority will

issue an 'invitation to negotiate' to all the selected bidders to submit their tenders, followed by a tender evaluation and tender award. Practically, projects taking the PFI route are often more complex in building technologies and specification, and thus require a more complex form of procurement, leading to a much longer lead-in time before construction commences – likely to take between 18 and 24 months from approval of the proposals to contract signature (4ps, 2004; Carillo et al., 2006).

## 7. DISCUSSION

The primary objective of the PFI brings the privatisation concept to a broader range of public infrastructure and combined it with the introduction of services being paid for by the public sector rather than the end-users. Theoretically, the PFI will save governments from having to allocate funds up-front for the development projects, but allow the private sector to source the finance to fund the project (from initiation to facilities management).

Figure 3: The UK's PPP/PFI contract procurement process (HM Treasury, cited by Li et al. 2005)



**Table 1: Comparison between PFI in Malaysia and United Kingdom.**

Characteristics	Malaysia	United Kingdom
Definition of PFI	A project has to be financed and managed by private sector companies, in return for lease charges.	A project has to be designed, built, financed, and managed by a private sector companies. The companies are paid less if they do not reach the targeted performance.
Introduction year	2009	1992
Years of introduction	5 years	19 years
Guideline	No – expected to be out soon. No timeline given.	Complete and keep updated.
Financing mechanism	Through EPF (a government-linked agency)	Private investors
Contract period	Between EPF and DLDGM	30 years
Ownership	Assumes ownership of the asset during hand over (when the construction finishes)	Assumes ownership of the asset at the end of the 25-30 year contract
Role of public sectors	<ul style="list-style-type: none"> <li>▪ Pays lease charge</li> <li>▪ Design and finance the project</li> <li>▪ Maintain the infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pays an annual charge for the completed project for 25-30 years</li> <li>▪ Operates the network and ensures safety although the government is now proposing private sector management</li> </ul>
Role of private sectors	<ul style="list-style-type: none"> <li>▪ Build new projects</li> <li>▪ Maintain during defect liability period.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design, build and finance new projects</li> <li>▪ Maintain the infrastructure over 25-30 years</li> </ul>
Risk definition	Risk distribution	Risk sharing
Risk bearing	<ul style="list-style-type: none"> <li>▪ Government bears the credit risks.</li> <li>▪ Private sectors ensure that the facilities built are functional.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insurance company protects for risks of damage and business interruption.</li> <li>▪ Investors bear residual risks, including credit risks.</li> </ul>

As many PFI projects are ultimately more expensive if they were government-initiated, public-sector budgets could be burdened in the medium term. Under a typical PFI, the private sector gets paid only after the government is satisfied with the performance – this transfers the construction and investment risks from public sector to the private sector.

From the Malaysian context, it appears to follow a different approach in PFI procurement compared to the UK approach. In definition, the Malaysian PFI is described as 'a project has to be financed and managed by private sector companies, in return for lease charges', while the UK PFI is defined as 'a project has to be designed, built, financed, and managed by a private sector companies. The companies are paid less if they do not reach the targeted performance'. From the definition stand-point, the Malaysian PFI model does not take into account the performance benchmarks as in the UK model – a gap which Malaysian consortiums could take advantage of during the lifecycle of the project.

In principle, the structure of the PFI in Malaysia and in the UK is the same; the main difference is in the terms of financing. The UK PFI is funded through the sale of corporate bonds or directly by banks, and there will be risk capital involved as equity (minor) to which is added debt finance (either loan or bond), as shown in Figure 2. The Malaysian model centralises all powers and responsibilities for the implementation of the PFI scheme

under one single body, and is financed by the EPF. Whilst, the EPF is a MMOF entity and financing comes from the public coffers rather than from private financing – this represents the domestic constraints where the government proposed the 'Malaysian version' of PFI to suit the local conditions. In addition, the infancy and restrictions of the Malaysian insurance market and the lack of facilities management expertise is a cause for concern. In this modified Malaysian model, there is limited risk transfer between the public and private sectors as the latter only acts as construction and maintenance contractors. The Malaysian PFI still only reduces project risk for the government, and does not eliminate it – this is the main difference compared to the UK PFI model. This mechanism discourages foreign funds to support the national mega development projects and the long-term development programmes. Table 1 and Figure 5 illustrates the difference between the Malaysian and UK PFI models in a financing mechanism context.

## 8. CONCLUSION

The abbreviation PFI is a new entry for the Malaysian business vocabulary and represents new opportunities for the construction sector. The Malaysian perspective of PFI concurs that the government's upfront payment for selected construction projects are differed, and this could encourage greater private sector participation in infrastructure and utilities projects. From the UK model, the PFI framework allows the public sector to focus on

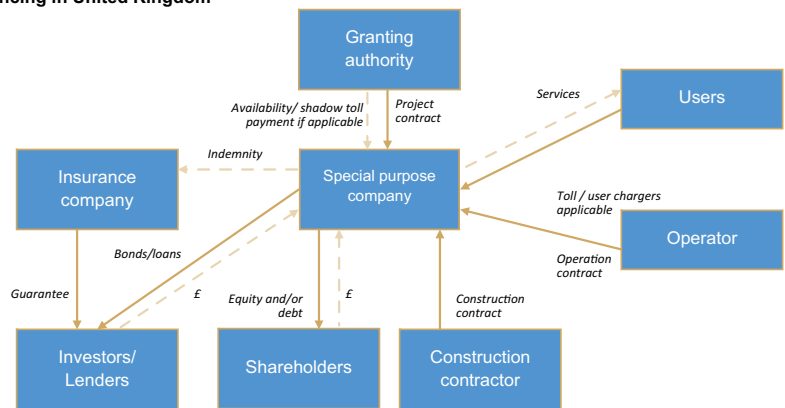
defining the outcome of the services it wants – with recourse to the private sector if the outcome is below expectations – and at the same time, creating a powerful mechanism where the private sector is encouraged to deliver quality service throughout the entire life of the concession. However, the Malaysia PFI does not reflect the original idea of the PFI. Its unique characteristic – it will be the public, rather than the private sector that underwrite all the risks – as contracts are given to government-linked company (GLC), rather than real private companies. If properly implemented, the government has a unique and timely opportunity to use the PFI under the Ninth Malaysia Plan to tackle many of the weaknesses in the existing implementation of privatised projects.

To conclude, the Malaysian version of PFI is fundamentally at a young stage and there is no right or wrong in creating Malaysia's own version of the PFI as long as a holistic, structured and sustainable procurement solution is in place. It is important for the public and the private sectors to carry out PFI procurement process in a fair and transparent manner. A Malaysian PFI can help create an economic multiplier effect that would have not been possible under the current procurement approach, given the funding constraints faced by the government.

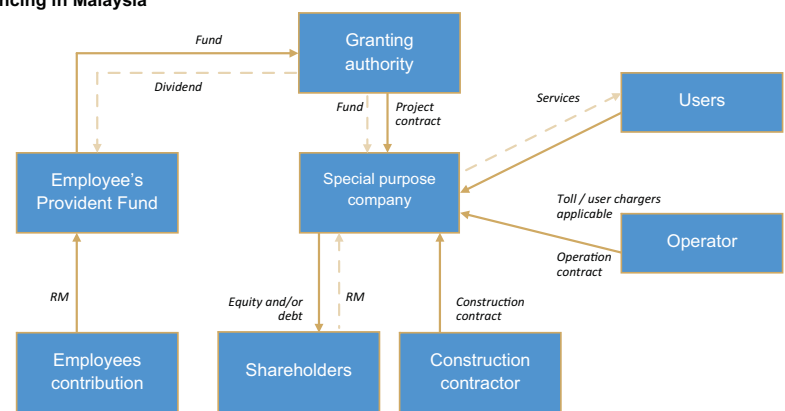
The findings of this study are essential to further understand and grapple with the differences in PFI concepts between the Malaysian and UK model. This paper could assist in clearing-up the confusions

Figure 4: Comparison of the PFI financing structure between the United Kingdom and Malaysia

#### PFI financing in United Kingdom



#### PFI financing in Malaysia



and expectations surrounding the PFI in Malaysia, by building awareness in the construction industry and researchers. In addition, this paper reveals the gaps in the Malaysian PFI model that can contribute in developing a guideline for improving the PFI procurement process.

## 9. FUTURE RESEARCH

The UK's PFI brings the private sector in to lend money from the

bank and this promotes a greater quality of work and services on a project; on the other hand, Malaysia channels the money from the government's fund. Thus, we propose a study on the impact of the quality of work in PFI projects in Malaysia. In addition, after years of implementation, Malaysia is ready to measure the benefits gained from the PFI, in comparison to successful countries. ▣

## Reference

4ps (2004) A map of the PFI process. Project and procurement support for local authorities. *4ps Project Support*, [www.pppfocus.com/publications/4ps/4ps-Map-PFI-Process.pdf](http://www.pppfocus.com/publications/4ps/4ps-Map-PFI-Process.pdf), accessed 28 August 2005.

Abdul-Aziz, A. R. (2002) Privatisation of highways in Malaysia: the Peril of not consulting end-users. *International Journal of Construction Marketing*, 3(2), [http://www.brookes.ac.uk/other/conmark/IJCM/ Vol\\_03/Vol3-Issue2/Papers/IJCMpaper2rashid.htm](http://www.brookes.ac.uk/other/conmark/IJCM/Vol_03/Vol3-Issue2/Papers/IJCMpaper2rashid.htm), accessed 10 July 2009.

Carillo, P. M., Robinson, H. S., Anumba, C. J., and Bouchlaghem, N. M. (2006) A knowledge transfer frameworks: the PFI context. *Construction Management and Economics*, vol. 24, pp. 1045-1056.

- CIDB Malaysia (2010) *Industrialised building systems (IBS) construction research and information*. Kuala Lumpur, Malaysia: Construction Industry Development Board (CIDB) Malaysia.
- Davies, R. and Eustice, K. (2005) *Delivering the PPP promise: A review of PPP issues and activity*. London: PricewaterhouseCoopers.
- Economic Planning Unit (2006) *Ninth Malaysia Plan 2006-2010*. Putrajaya, Malaysia: Prime Minister's Department.
- Economic Planning Unit (2008) *Privatisation Master Plan*. <http://www.epu.jpm.my/Bi/publi/Private/contents.htm>, accessed 19 September 2009.
- Employees Provident Fund (2009) *About EPF*. <http://www.kwsp.gov.my/index.php?ch=p2about>, accessed 16 November 2009.
- HM Treasury (2003) *PFI: Meeting the investment challenge*. [http://www.hm-treasury.gov.uk/media/648B2/PFI\\_604.pdf/](http://www.hm-treasury.gov.uk/media/648B2/PFI_604.pdf/), accessed 19 September 2009].
- HM Treasury (2008) *Making changes in operational PFI projects*. <http://www.publications.parliament.uk/pa/cm200708/cmselect/cmpublic/332/332.pdf>, accessed 19 September 2009.
- House of Commons (2003) *Delivering better value for money from the Private Finance Initiative*. London: Authority of the House of Commons, HMSO.
- Ismail, S. (2011) Profitability of Major Private Sector Companies Involved in the Private Finance Initiative Scheme. *Journal of Business Management and Accounting*, vol. 1(1), pp. 17-39.
- Khan, A., Waris, M. and Khamidi, M. (2010), *An earned value management (EVM) framework for the performance measurement of PFI construction projects in Malaysia*. Langkawi, Kedah, Malaysia: 2nd International Conference on Technology and Operations Management.
- Langford, D. A. and Murray, M. (2003) Rethinking Construction: The Egan Report (1998). In: M. Murray (ed), *Construction Reports 1944-98*, Oxford, UK: Blackwell Publishing, Oxford, pp. 178-195.
- Li, B., Akintoye, A., Edwards, P. J. and Hardcastle, C. (2005) The allocation of risk in PPP/PFI construction projects in the UK. *International Journal of Project Management*, vol. 23, pp. 25-35.
- Masterman, J. W. E. (1996) *Building Procurement Systems: An Introduction*. London: E&FN Spon.
- MOF Malaysia (2006) *A keynote address by YB Tan Sri Nor Mohamed Yakcop*. Kuala Lumpur, Malaysia: Private Finance Initiative (PFI) Seminar, <http://www.treasury.gov.my/index.php?ch=36andpg=126andac=1762>, accessed 8 April 2007.
- National Audit Office. (2003), *PFI: Construction Performance*. London: The Comptroller and Auditor General, HC371(2002-2003), NAO, HMSO.
- National Audit Office. (2009) *Performance of PFI Construction: A Review by the Private Finance Practice*. London: NAO Marketing and Communications Team, October 2009, HMSO.
- Patel, M. and Robinson, H. (2010) Impact of governance on project delivery of complex NHS PFI/PPP schemes. *Journal of Financial Management of Property and Construction*, vol. 15(3), pp. 216-234.
- PPP Unit (2009) *Public Private Partnership (PPP) Guideline*, Putrajaya, Malaysia.
- Ruane, S. (2010) Corporate and political strategy in relation to the Private Finance Initiative in the UK. *Critical Social Policy*, vol. 30(4), pp. 519-540.
- SERCO (2007) *PFI Explained*. [http://www.serco.co.uk/images/PFIExplained-web\\_.pdf](http://www.serco.co.uk/images/PFIExplained-web_.pdf), accessed 13 June 2007.
- Shinohara, F. (1998) Perspective on Private Finance Initiative (PFI) in Japan: The impact on administrative reform, social infrastructure and public services. *NLI Research*, NLI Research Institute, vol. 117, pp. 27-38.
- Takim, R., Abdul-Rahman, R., Ismail, K., and Egbu, C. O. (2008) The acceptability of Private Finance Initiative (PFI) Scheme in Malaysia. *Asian Social Science*, vol. 4(12), pp. 71-82.
- Takim, R., Ismail, K., Nawawi, A. H., and Jaafar, A. (2009) The Malaysian Private Finance Initiative and Value for Money. *Asian Social Science*, vol. 5(3), pp. 103-111.
- Tan, J. (2007) *Privatisation in Malaysia: Regulation, rent-seeking and policy failure*. London: Routledge.
- Wahab, H. (2003) Privatisation: Clearing the doubts, *Malaysian Business*, 1 January 2003, [http://findarticles.com/p/articles/mi\\_qn6207/is\\_20030101/ai\\_n24905910/](http://findarticles.com/p/articles/mi_qn6207/is_20030101/ai_n24905910/), accessed 18 January 2003.



# Educational Loan Awards for 2012/2013

Royal Institution of Surveyors Malaysia invites application from Malaysia Citizens for Educational Loans to pursue full-time courses at local universities.

## Universities

University of Malaya  
University of Technology Malaysia  
University of Technology MARA  
University of Science Malaysia  
International Islamic University of Malaysia  
University Tun Hussein Onn Malaysia

## Field of Study

Land Surveying  
Quantity Surveying  
Building Surveying  
Property Management / Estate Management

## Eligibility

- Candidates must have obtained an offer for admission for full time studies to any of the universities in any of the field specified above.
- Candidates must not have received any scholarship or financial assistance from the Government or any other organization.
- Candidates must have obtained at least CGPA of 3.20 to be short listed to call for an interview.

## Special Incentive

- Degree course candidates who obtained in their studies with CGPA 3.75 and above, the student having to first apply for the conversion of the loan to scholarship for consideration and approval by General Council.
- Diploma course candidates are not eligible to apply for conversion of their loan to scholarship.

## Value of Loan

Degree: Up to RM7,000 per annum  
Diploma: Up to RM5,000 per annum

## Guarantors

Candidates shall obtain the consent of two acceptable guarantors who must provide personal guarantee for repayment of the loan.

## Repayment of Loan

Loan amount must be repaid with a period of not less than 36 months after the recipient has graduated.

## How to apply

The application form, may be obtained from the RISM Secretariat or downloaded from RISM website:  
<http://www.rism.org.my>.

All application must be sent to:

**The Chairman**

**Scholarship and Education Fund Committee**

Royal Institution of Surveyors Malaysia  
3rd Floor, Bangunan Juruukur, 64-66, Jalan 52/4, 46200 Petaling Jaya

# ADR SUB-COMMITTEE OF RISM QS DIVISION

## ITS ROLE AND FUNCTIONS

### Date of Establishment

January 2012

### Meetings

1st Saturday of Every Month

### Members

- i) Sr A.Mahadevan (Chairman)
- ii) Sr Low Khian Seng (Deputy Chairman)
- iii) Sr Nik Hasbi Fathi (Secretary)
- iv) Sr Wan Roslan Wan Endut (Assistant Sec)
- v) Sr Ong Hock Tek
- vi) Sr Lim Chong Fong
- vii) Sr Shaary Yahaya
- viii) Sr Mokhtar Puteh
- ix) Sr Noushad Ali Naseem Ameer Ali
- x) Mr Michael J. McIver
- xi) Sr Dr Norsiah Mahmood

### Objectives

- i) To encourage RISM QS members to be involved in ADR Methods;
- ii) To maintain a panel of Arbitrators, Mediators, Adjudicators & Experts for the President of RISM to appoint when requested;
- iii) To liaise and collaborate with other organisations like KLRCA, MIArb, CIArb, PAM, IEM, MMC of Bar Council, etc on ADR;
- iv) To train QS members of RISM interested in ADR methods to qualify to be in the RISM Panel;
- v) To promote ADR to stake holders in the Malaysian Construction Industry so that ADR is used more widely.

### Rules & Procedures for the various ADR Methods

The sub- committee is now preparing the above for use by members in the Panel.

Members Interested to be in RISM's Panel of Arbitrators, Mediators, Adjudicators & Expert Witnesses to register their interest with the ADR Sub-Committee

QS Members who are Arbitrators, Mediators, Adjudicators and Expert Witnesses interested to be in RISM panel are urged to contact the ADR Sub-Committee. Appropriate training shall be provided for those not trained, before placement in the RISM Panel of Arbitrators, Mediators, Adjudicators and Expert Witnesses.

CPD Talks, Trainings, Seminars and Conferences on ADR Methods

The ADR Sub-Committee shall work with the CPD Sub-Committee of QS Division to conduct CPD Talks, Trainings, Seminars and Conferences. ■

## MARK YOUR DIARY

### 5th RICS-RISM-AALSM International Surveying Conference for Undergraduates

Theme: "Empowering Young Surveyors – Technologies of Tomorrow"

Date: 19 & 20 April 2013

Hosted @ Taylor's University, Lakeside Campus, Selangor, Malaysia

Jointly organised by: Royal Institution of Chartered Surveyors Malaysia (RICS), Royal Institution of Surveyors Malaysia (RISM) and Association of Approved Land Surveyors Malaysia (AALSM).

# How Adjusted Are Professional Malaysian Expatriates During Assignment Abroad?



Assoc. Prof. Dr. Halmi bin Zainol<sup>1</sup>, Professor Dr. Sr Abdul Rashid bin Abdul Aziz<sup>2</sup>

1 Universiti Teknologi MARA (Perak)

2 Universiti Sains Malaysia

**T**HE INVOLVEMENT OF MNCCS abroad is to seek market opportunities, increase the shares of the company involved, strengthen networks and gain experience. A statement from YB Minister of Works, the success of Malaysian construction companies for highway construction projects abroad worth RM 17.5 billion is an opportunity for local companies to undertake projects abroad. It shows the recognition of foreign countries on the ability of Malaysian construction companies. The opportunity gained becomes a platform for Malaysian companies to undertake construction projects successfully and increase their contribution to the economy. Consequently, priority will be given to Malaysian expatriates to lead more future projects.

Malaysian multinational construction overseas projects cover the Middle East, Southeast Asia, Africa and others. As of December 2010, there were 96

According to MITI, the growth rate of GNP in Malaysia grew from 7.6% in 2008 to 8.9% in 2010. The increase number of projects secured in the USA, Indonesia and Japan thus assists to boost the economy of Malaysia. Based on CIBD, 652 projects covering 49 countries were awarded to Malaysian construction companies from 2000 until 2010 to implement projects abroad valued at RM 92.138 million. This indicates that the number of international projects secured by Malaysia multinational construction companies (MNCCs) is growing from year to year, hence giving the Malaysian construction companies the opportunities to operate internationally.

ongoing construction projects abroad worth RM 40.4 billion. The involvement in overseas projects is still new for Malaysian companies if compared to Europe, North America, Japan and Korea. A study by Abdul-Aziz and Wong in 2010 found that only 21% of the

companies had more than 10-year experience in handling overseas projects. In addition, 79% of the companies had plans to expand their overseas operations in a period of five years. Thus, positive development regarding the involvement of MNCC can be seen.

## While serving abroad, expatriates face the shock of adapting to a new environment which is different from the country of origin.

While serving abroad, expatriates face the shock of adapting to a new environment which is different from the country of origin. Past studies on consulting firms that managed projects outside the country found that 2 of 10 companies faced problems during expatriation. Although this amount is small, the impact will be on the construction industry as a whole. Among the problems faced by Malaysian expatriates while outside the country are difficulties in adjusting to the new surroundings and carrying heavy responsibilities.

Reconciliation of personal, work experience as well as influence on job satisfaction leads to satisfactory task performance. Understanding new changes in the environment needs to be appreciated when they are abroad. Past studies found between 33%-70% difficulties in adjustment to new environment prompted the early return of expatriates to their country of origin. This is important because the acceptance of individuals to adapt to the changes highly affects their performance. Family influence plays an important role and influences the adjustment of expatriates living in the country. Other study found the main challenge for family adjustment is 13%, followed by school children 13% and endurance challenges living in the country 13%. Non-technical aspects that influence expatriates' adjustment are 12% for adjustment setting, 11% career concern for the spouse and 10% language barrier. The change of environment for the family abroad will lead to difficulties in making relevant adjustments.

Not all MNCCs provide training for staff prior to departure. The companies are not aware of the importance of non-technical training that can influence expatriates' assignments abroad. They do not feel the need of giving training before departure because they believe that expatriates should be able to adapt themselves to the new country. According to Haile, Jones and Emmanuel (2007), only 50% of companies provided training before departure. The absence of training makes the tasks more difficult and more challenging for the expatriates. It is important for companies to provide employees to handle its operations abroad. Some of the expatriates who have received assignments abroad are unable to complete them in the specified period. There are also those who move to a different company either in the country of origin or outside the country after completing the assignment. Why

does this happen? What drives the expatriate executives to leave the company? Why are they more interested to work for another company? Of course, there are specific reasons that cause such events to occur. The Establishment of Talent Corporation, Malaysia Berhad which was launched by the Prime Minister in January 2011 should be able to identify these conditions.

Nevertheless, there are initiatives undertaken by the Construction Industry Development Board Malaysia (CIDB) to encourage contractors to participate in construction projects overseas. Government's involvement through CIDB creates a directory of the construction companies involved in the construction projects abroad. The issuance of the 'Malaysian Builders Go Global' helps to provide a connection among the actors in the construction industry. With these facilities, Malaysian construction companies can deal directly with the international markets thus, develop the Malaysian construction industry. This automatically contributes to the development of economic growth for Malaysia. There is also some involvement of MNCCs abroad on their own initiative to show the ability of Malaysian construction companies to explore international markets. When companies launch overseas operations, the psychological aspects should be given priority because they would affect the expatriates' adjustment.

The challenges on personal, work and family faced by expatriate executives living abroad must be internalized. Skills and expertise are not just the key to success. Non-technical aspects also influence the performance of the expatriates. Adjustment difficulties would lead to problems when performing tasks. Unexpected changes faced by the expatriates would have psychological impact on their living adjustment in the country. Adequate provision of training by the company on non-technical aspects is necessary to prepare the expatriates to adapt to the new environment overseas. ■

### References

- Abdul-Aziz, A.-R., and Wong, S. S. (2010). Competitive assets of Malaysian international contractors. *Journal of Financial Management of Property and Construction*, 15(2), 176-189.
- Haile, S., Jones, M. D., & Emmanuel, T. (2007). Challenges facing expatriate performance abroad. *International Journal of Business Research*, 7(5), 100-105.

# Thomson Reuters/GPR/APREA Real Estate Composite Indices: A New Listed Real Estate Index for Asia Pacific Region



**Professor Sr Dr. Ting Kien Hwa**  
Head of Centre for Real Estate Research (CORE)  
Faculty of Architecture, Planning & Surveying  
Universiti Teknologi MARA

**A** NEW SERIES OF LISTED REAL ESTATE company index, TR/GPR/APREA Composite Index, was launched on 30 January 2013 in Singapore. The index is developed by Thomson Reuters (TR), Global Property Research (GPR) and Asia Pacific Real Estate Association (APREA).

The TR/GPR/APREA Composite Index is designed to reflect the performance of the leading Asia Pacific listed property companies and is considered to be representative for the movements in the Asia Pacific property stock markets. The Composite Index is a free float weighted index based on shares of the leading Asia Pacific property companies in 11 countries in the Asia Pacific region. The countries included in the index are Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore and Thailand. The following sub-indices are:

- TR/GPR/APREA Composite Regional
- TR/GPR/APREA Composite Regional R
- TR/GPR/APREA Composite Countries Index

Each index will require a minimum number of five companies for its construction.

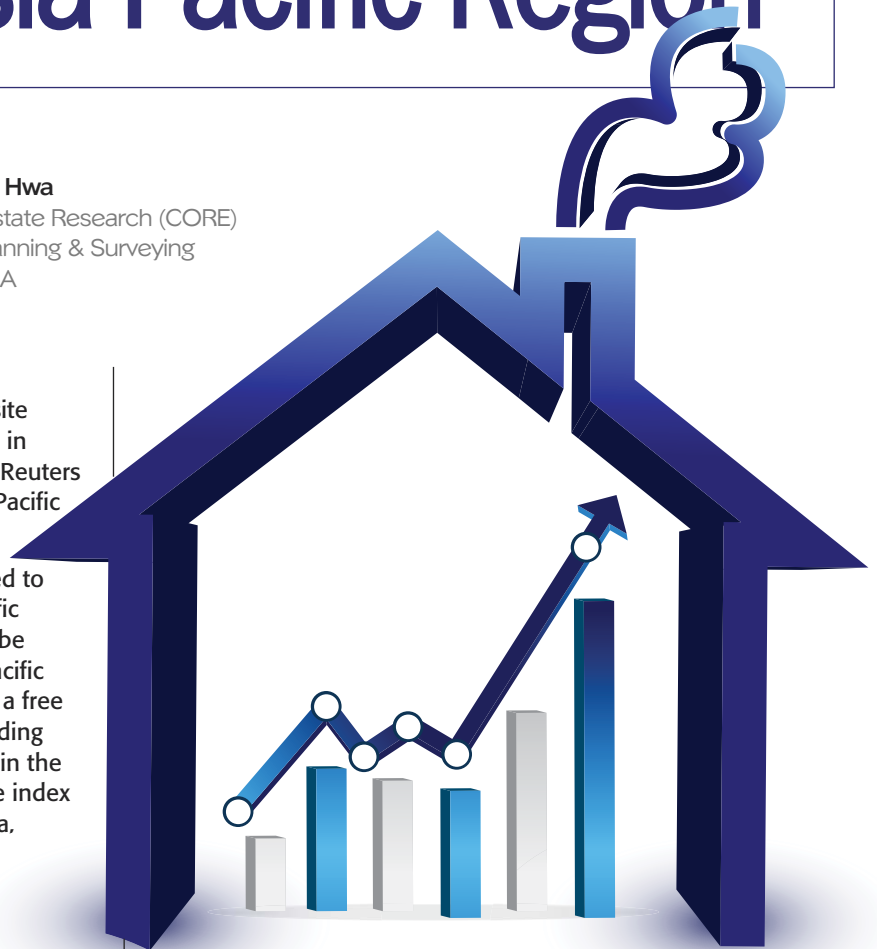
Only listed real estate development and investment companies are included in the TR/GPR/APREA Composite Index. For real estate investment companies to be included, at least 60% of operational turnover is derived from investment activities or development and investment activities combined. Operational turnover is based on the latest available financial statements of the property company. Alternatively a company may also qualify for inclusion if at least 60% of company assets qualify as property assets.

The index includes office, retail, industrial, retail, diversified, residential, hotel and healthcare property companies. A company is considered to be specialised in a particular property sector if at least 60% of

operational turnover is derived from that particular property type/sector.

The Composite index has a base value of 100.00 with the based date on 31 December 1999. The index is based on the total return and weighted by free-float market capitalisation. The free float is the number of shares outstanding available for trading in the stock exchange, excluding shares held by management, board of directors and blockholders owning more than 5% of the companies' shares outstanding.

The TR/GPR/APREA Composite Index serves to address the benchmarking needs of the investment community. It also supports APREA's vision to provide Asian real estate more visibility for both income and growth companies through indices and to give appropriate recognition to Asia which plays a significant position in global institutional investment. ■



# Reduce Stress by Learning Toleration



Wan Hussin W.M.A.  
PhD, MBA, BSc(Hons), Dip.LSurv,  
FRISM, MSP, MAALS, CPUL  
Licensed Land Surveyor under  
Act 458 [Rev. 1991]  
Malaysian Speaking Professional  
Universiti Sains Malaysia



I had breakfast with a field surveyor who expressed himself as somebody who usually let things roll off his back pretty easily. But lately, there are clients who stress him out with issues bordering on intolerable, such as time frame, work quality, even petty things like font sizes and formatting on survey plans. Of course, he got paid for all the work done and his contribution. But the pressure is sometimes too much. It is this kind of respect which is diminishing, and the feeling of uncertainty arises as he questions how to handle the decision making process for petty matters when he already has to spend lots of time getting the job done, not to mention the late payment and the harsh working conditions.

AND HE IS NOT ALONE. THERE ARE FRIENDS WHO mentioned about dealing with the many daily stressors, annoyances and energy drains. These expressions sometimes make me smile, even laugh, and I often end up giving out simple but effective tips on how to eliminate some of the 'ducks' in life.

## Getting rid of the 'ducks' in you

Yes, that's the word. It is these annoying 'ducks' that many of us always fall prey to situations that come before us. Learning the art of handling those 'ducks' in life will help as we learn how to tolerate unnecessary issues which could otherwise be a stressor that sap us of our energy. However, there are many of us who become so used to the drain that comes from tolerating issues that they do not even recognise these stressors or think about what we can do to eliminate them. Thus, learning to spot these points of tolerant is one of the many effective ways to eliminate petty things in life, which if unattended well, could bring serious situations, be it at home or at the workplace.

We need to realise that these 'ducks' are common in life. Getting accustomed to it all is easy if the know-how to eliminate toleration is learnt and practiced towards creating a less stressful lifestyle. The first step is to become aware of the toleration you have in your life, then create a list as you become aware of them, so that you can eliminate them systematically. All it needs is a simple self-brainstorming session by listing down all the tolerations that are deeply rooted in us. These tolerations can be things that we must deal with on a daily basis such as those bad habits that we have and things that we hope to achieve. Anything else that causes stress and drains our energy can be considered as toleration.

If this sounds difficult, try to separate the main categories of life, such as family, household, work, health and wellness, and friendship, just

to name a few. Try to create a list of possible related 'ducks' or tolerations under each category, or areas of your lifestyle that regularly drain you of your time and energy, or cause you stress. For example, family tolerations could include sending kids to tuition classes during weekends, a career spouse who sometimes come back late due to extra demands at work, or kids waking up late for school and not finishing their homework on time. Work tolerations could include messy workplace, disorganised email inbox, colleagues who sap your energy, unclear work orders, traffic jam to work, or even a not-so-nice lunch at the café. Health and wellness category may include back pain after a long journey, morning sickness after the previous hard day's work, and dizzy feeling trying to finish a task in hand for submission, all of which sounds familiar for an ageing (often termed as a five-series) land surveyor.

Then ask a trustworthy colleague what he thinks of your main tolerations. This helps as sometimes it takes an outsider's perspective to help you become more aware of what you are tolerating, because you may not realise that you do not have to put up with some of these little stressors in your life. Maintain the list and add up new things that crop up, either using a small notebook or a smart phone. You may assign a numbered value to each of them, ranking from one to five depending on the frustration they cause or energy they drain. As a guide, a toleration or 'duck' that barely registers can be ranked as "one" while a toleration that is so draining you can not believe you have put up with it for so long can be ranked as "five". Surprisingly, as updating the list goes on, you will become aware of new tolerations added to the list. In the process, the list can be extremely valuable for cutting down or even eliminating tolerations systematically. You often realise that you are actually adding petty things which are part and parcel of life, but on the other hand, surfacing a roadmap for where to start and learn to make changes that can actually reduce your stress levels, through self-brainstorming session.

Use a similar scale to rank how simple it would be to eliminate each of the toleration. A toleration that can be eliminated from your life within minutes can be ranked as "one",

whereas a toleration that would require considerable time, energy and effort to remove from your life may rank as "five". You may highlight the items that have low ranks in each category, wanting lesser concentration, as well as those that need more effort to sort things out.

Without complicating things too much, you may want to make notes of other key features, like tolerations you would need help in eliminating, such as work, home or relationship, as opposed to tolerations you can deal with by yourself on a daily basis, warranting inexpensive solutions. Once you have created your list of tolerations and prioritised them accordingly, it is time to eliminate these tolerations from your lifestyle in a systematic way, based on importance and urgency.

### Stress and toleration strategising

Tolerations refer to problems, situations, and people who drain you and sap you of your time, energy, or even money. Tolerations may come in many shapes and sizes, depending on who they affect and how. In the area of managing stress, the concept of toleration has been used effectively to reduce stress by changing focus on petty things and those that need more attention. Tolerations form a plan for cutting these stressors out of your life. One important characteristic of this process is to identify areas of stress to be eliminated first, and to use that information when you are making your plan of action.

One of the most effective ways of strategising toleration is to note down those stressors and find effective ways to eliminate them. If the list of stressors is expectedly or unexpectedly too long, taking steps to shorten the list is important by just eliminating those that are unrealistic, and prioritising the tolerations according to how simple they would be to eliminate, or how much frustration and losses they are currently causing, and eliminate these stressors that brings the highest payoff.

Through systematic toleration strategies, it can actually reduce the tolerations in life by tackling the easy-to-eliminate issues as soon as possible. Some of these could be fixing the messy car or the workplace,

avoiding annoying colleagues who you can live without them, or waking up earlier than usual to prepare for the kids going to school. It is the search for the extra energy booster that slowly but eventually reduces those problems off your list. It is the motivational element that will eventually shorten those items from your list as the days go by.

### Manage the stress

Handling those tolerations, according to the degree of importance, is in fact managing your stress. The most important step is to tackle the easy-to-eliminate tolerations, as soon as they appear. Most likely, you will find an energy boost to sideline those small issues off your list. On the other hand, certain stressors require more energy and concentration. The best is to focus more attention on eliminating tolerations that cost you the most in terms of time, money, energy and feelings. Obviously, the most draining stressors and tolerations drag us down the most, and eliminating such drains on our resources can make us feel better than eliminating the drains that do not affect us as much.

Cutting out some of those tolerations can easily eliminate other tolerations, which may be inter-related. For example, sending the car for regular servicing could eliminate other unwarranted delays due to breakdown, or even to save on fuel consumption. Time saved by streamlining your busy daily schedule can be devoted to creating an even more smooth-running output and happy clients. The beauty of tackling these costly tolerations is that they create their own forward momentum for better things to come. Identifying tolerations that can be eliminated or managed systematically can be a simple solution to eliminate untold stress in the future.

That is stress management! ■

*W.M.A. Wan Hussin is a Professor at the School of Civil Engineering, Universiti Sains Malaysia. He conducts several courses on stress management and delivers public lectures and brain storming sessions on management issues for various organisations. He is currently a Licensed Land Surveyor, Member of the Association of Authorised Land Surveyors (MAALS) Malaysia, Fellow of the Royal Institution of Surveyors Malaysia (FRISM), a Malaysian Speaking Professional (MSP) of the Malaysian Association of Professional Speakers, a Certified Professional Utility Locator (CPUL) and can be reached at wmbwh@gmail.com.*

# Combining Rational Thought & Creativity

## 4 Key Principles



Dr Norman Chorn  
Centre for Strategy Development



### What is Strategic Intuition?

**H**AVE YOU EVER HAD A FLASH OF insight where the solution to a difficult problem just comes to you? The answer seems to hit you suddenly and all the dots are connected. You have real clarity and you know exactly what to do.

This is what Duggan<sup>1</sup> and others have called **strategic intuition**, where the flash of insight is a powerful combination of rational thinking and creative imagination. This is how Zuckerberg conceived of Facebook, Richard Branson developed Virgin Airlines and Matt Church created Thought Leaders<sup>2</sup>.

But strategic intuition is very different to **expert intuition**. Expert intuition is where you are able to make a snap judgement because you have vast experience and recognise a familiar situation. A good example is the para-medical who is able to make instant decisions when she arrives at a scene of an accident because she has witnessed many such scenes before. Strategic intuition, on the other hand, is slow and occurs when the situation is new and unfamiliar. It occurs when you recognise the situation as new - and turn off your expert intuition. **This is an important distinction, because expert intuition is often the enemy of strategic intuition.**

### Releasing your Strategic Intuition

Releasing your own strategic intuition depends on a number of factors, as we shall see below. But an important aspect is the ability to develop the so called "**beginners mind**"<sup>3</sup> - i.e. where you deliberately push aside what you know from previous experience and open yourself up to new insights. As we know, existing paradigms offer efficient solutions to common problems, but they can restrict our willingness to see new and different solutions.

**Von Clausewitz identifies how Napoleon used the coup d'oeil (flash of insight) to conceive of many brilliant initiatives that not only defeated the enemy, but also left them completely flat-footed.**

It seems that we can learn much about releasing our own strategic intuition by examining the successful exploits of Napoleon as described by von Clausewitz<sup>4</sup> in 1832. Von Clausewitz identifies how Napoleon used the *coup d'oeil* (flash of insight) to conceive of many brilliant initiatives that not only defeated the enemy, but also left them completely flat-footed.

### Four key principles

Translating Napoleon's exploits into lessons for modern strategy, we see four clear principles:

1. Study the history and theory thoroughly
2. Immerse yourself in the situation and empty your mind
3. Wait for the flash of insight - it will come
4. Act with conviction.

#### 1. Study the history and theory

Good strategists are always well prepared. They have studied the previous case studies and understand the theory well. But they are not captured by any of the theory or case study of previous success. Napoleon was a brilliant student and graduate of the French Military Academy.

**...an important aspect is the ability to develop the so called "beginners mind"<sup>3</sup> - i.e. where you deliberately push aside what you know from previous experience and open yourself up to new insights.**

#### 2. Immerse your self in the situation and empty your mind

Become "one" with the situation and make sure you thoroughly understand the context and prevailing issues. Then practice "beginners mind" and consciously push aside any pre-conceived ideas or solutions you might have. This is where you deliberately separate any expert intuition you might have from the situation at hand. The critical factor is to recognise this as a "new" situation and

to understand that snap judgements will not suffice.

#### 3. Wait for the flash of insight

As you comb through the facts and details of the situation, your sub-conscious mind is hard at work - even though you may not realise it. Eventually, something will click and the fog will clear. You will have clarity and insight into the situation and be able to see the **decisive** point in the situation. Napoleon used to identify the decisive point in a battle that would turn the battle around and put him in a position of advantage. Recognising the decisive point in the situation is the overall purpose of strategic intuition.

#### 4. Act with conviction

Once you have "seen" the decisive point in the situation, you should act with purpose and conviction. This is the axis around which the situation will pivot, and it is your "winning" strategy. Failing to act purposefully at this stage may mean that the window of opportunity closes and your advantage is lost.

### Planning is NOT Strategy

As we see, **strategic** intuition is different to expert intuition. It depends on a recognition that the situation is different and casting aside the need to make a snap judgement. Moreover, it relies on you being able to make the distinction between **Planning** and **Strategy**.

**Planning** is where we set objectives and take actions to achieve a goal. We assume that the situation is relatively stable, and consequently, we are able to determine the objectives at the outset, before entering the situation.

**Strategy**, on the other hand, is where we seek to position and equip the organisation for the future. We recognise the uncertainty and instability in the situation, and accordingly, allow the objectives (in the form of the decisive point) to emerge as we are immersed in the situation. It is in these situations that strategic intuition will emerge. ■

*Norman conducts workshops and mentoring in Strategic Intuition - with particular reference to complex and challenging problems you may be seeking to address. Contact him on [norman.chorn@centstrat.com](mailto:norman.chorn@centstrat.com)*

### Reference

- 1 William Duggan, Strategic Intuition, Columbia University Press, 2007
- 2 Matt Church, Thought Leaders, Harper Collins, 2011
- 3 Miyamoto Misashi, A Book of Five Rings, Overlook, 1992
- 4 Carl von Clausewitz, On War, Penguin, 1968 (originally written in 1832 in classical German)

## LIST OF NEW MEMBERS January 2013

**QUANTITY SURVEYING****FELLOW**

Sr Engad Ravana Thathiah  
ER Consult, Sel

Sr Loh Kim Oen  
Loh QS Consult, Sel

**MEMBER**

Sr Jaspal Singh a/l Nachtar Singh  
Jab. Pengairan & Saliran, KL

Sr Lye Kok Kuan  
MRBC Partnership, Brunei Darussalam

Sr Suhaila bt Sulaiman  
JKR Kedah

**GRADUATE**

Asyura bt Mohd Nor  
Kas Jurukur Bahan S/B, Sel

Au Ben Ley  
Labur Bina S/B, Sel

Awang Abdullah b Abdul Razak  
Jurukur Bahan Konsultant, Sabah

Azlinda bt Abdul Wahab  
JKR, KL

Chang Kai Lun  
Econcos Consultants S/B, KL

Chin Yong Ling  
YSCA Consultancy S/B, KL

Chong Ming Lee  
Yong & Mohamad Faiz S/B, Sel

Chong Yaw Fatt  
IJM Construction S/B, Sel

Chua Wai Yee  
EFCT Konsult, KL

Chu Ming Yii  
CKP Nizaruddin Jurukur Bahan S/B (Sabah)

Fong Li Wen  
YSCA Consultancy S/B, KL

Goh Wye Li  
Perunding PCT S/B, KL

Goh Yan Qi  
Perunding NFL S/B, KL

Haznan b Mohd Saad  
Yong & Mohd Faiz S/B, PJ

How Yee Loo  
PCM Kos Perunding S/B, KL

Jenny Loo Shih Yin  
Baharuddin Ali & Low S/B, KL

Jong Soon Loong  
STS Construction S/B, KL

Kaw Fong Kian  
Baharuddin Ali & Low S/B, KL

Kee Poh Ching  
Jurukur Quantiti Kinabalu, Sabah

Khairulbariah bt Zulkefli  
Design Cost & Consultants, KL

Khor Shuin Cheng  
YSCA Consultancy S/B, KL

Lee Cen Ying  
Imperia Inst. Of Tech., Sel

Lee Thim Yiang  
Perunding PCT S/B, KL

Lee Yun Soon  
Jurukur Bahan FPS S/B, KL

Liaw Kor Cheng  
Perunding PCT S/B, KL

Liew Siew Ting  
Kump. Sepakat Konsult, KL

Liew Yen Tien  
Econcos Consultants S/B, KL

Lim Huan Fen  
EFCT Konsult, KL

Mohd Arif b Othman  
JUB Central S/B, KL

Mohd Hafizi b Mohd Nasir  
Perunding NFL S/B, KL

Mohd Hakim b Mohamad Nor  
Baharuddin Ali & Low S/B, KL

Mohd Ikhwani Khaidiet b Mohamad Isal  
Kas Jurukur Bahan S/B, Sel

Mohd Ishak b Ayub  
Perunding Kos KVC, Sabah

Mohd Syahmi b Mad Yasir  
ARR QS Consultancy, Melaka

Mohd Zharif Afzar b Kamarudin  
KA Associates, KL

Muhd Zairil Izwan b Zairi  
JUB Central S/B, KL

Nadzirah bt Zainordin  
Imperia Inst. Of Tech, Sel

Neoh Wen Wan  
Caverion (M) S/B, Pulau Pinang

Ng Wai Lon  
Yong & Mohd Faiz S/B, PJ

Noor'atikah bt Abu Bakar  
KPH Consultancy S/B, Sel

Sarina bt Abdullah  
ARR QS Consultancy, Melaka

Siti Nur Aishah bt Mohd Noor  
Imperia Inst. Of Tech, Sel

Song Sheng Ying  
Labur Bina S/B, Sel

Soon Lee Sye  
CKP Nizaruddin Jurukur Bahan S/B, Sel

Suriya bt Abdul Hadi  
Perunding Primakos S/B, Sel

Tan Chou Jin  
Baharuddin Ali & Low S/B, KL

Tan Wei Yao  
Paramount Engineering & Construction S/B,  
Kedah

Tang Cheah Wee  
Baharuddin Ali & Low S/B, KL

Wong Vai Kiong  
Langdon & Seah S/B, Sel

Wong Yu Min  
Maju Puncak Bumi S/B, Sel

Woon Peng Yew  
Perunding PCT S/B, KL

Yap Huei Wen  
Langdon & Seah S/B, Sel

Yaw Way Chen  
HKH Jurukur Bahan S/B, Pulau Pinang

Zarina bt Shariff  
Universiti Malaya, KL

**PROBATIONER**

Hoe Chin Khwan  
HKH Jurukur Bahan, Pulau Pinang

Jefferey Ngoh Kieh Soon  
Langdon & Seah S/B, Singapore

Lau Ngie Huo  
Langdon & Seah S/B, Singapore

Liew Soon Tak  
WCT Engineering Bhd (Qatar)

Loh Wai Jeng  
Langdon & Seah S/B, PJ

Tan Teck Yong  
DK-QS S/B, Sel

Tony Sim Siang Hui  
LT Jurukur Bahan S/B, Sarawak

**STUDENT**

Benson Law Hui Fong

Catherine Song Sing May

Chew Kuin Ung

Chua Shen Kang

Craig Lee Siew Yii

Cynthia Kan Hui Ching

Cynthia Lau Kho Siew

Eileen Wee

Elvis Ting Kee Hui

Esther Tiong Shi Ying

Esther Wong Siaw Wei

Goh Chee Hwang

Hoo Riong Yuan

Hu Ching Ping

Jefferson Law Yi En

Jenny Yek Siew Ying

Jin Tze Yong

Karen Wong Lee Feng

Kellin Ting Kai Ling

Kelly Ting

Kenneth Koh Kee Shung

Kevin Hii Ting Kui

Khoo Siok Fong

Lai Zhi Yin

Lau Chong Yen

Lau Lee Hsia

Lau Yi Yin

Lee Ik Ing

Lee Kah Seng

Lee Siaw Chin

Leonard Ting Zhie Rong

Lew Mee Ling

Lim Kian Howe

Lim Ming Zhong

Lincoln Ling

Ling King Siong

Ling Ying Tiing

Lu Siew Ung

Lucas Chee Siao Chieng

Michael Sim Kian Hua

Mok Chii Yeun

Muhammad Amirul b Rosliza @ Rosli

Ngu Chii En

Ngu Pick Ling

Rozeline Gonis

Sherry Kong Jen Ing

Siaw Kee Fong

Sim Shi Yiang

Soo Ann Li

Ting Kie Heng

Ting Siew Hie

Ting Toh Tuang

Vera Mah Han Yee

Vivien Lau Xue Chin

Wan Ahmad Shahiran b Wan Mohamed

Salleh

Wong Kee Hou

Wong Kiong Hung

Wong Kok Ying

Wong Woan Jin

Yip Chui Lian

**PROPERTY MANAGEMENT, VALUATION AND ESTATE AGENCY SURVEYING****FELLOW**

Datuk Sr Hj Abd Hamid b Abu Bakar  
JPPH Putrajaya

Sr Tan Kar Leong  
CH William, KL

Sr Tan Wee Cheng  
KGV Lambert, JB

Sr Rohan Padmanathan  
Jones Lang Wootton

**MEMBER**

Sr Azlina bt Md Yassin  
UTHM, Batu Pahat

Sr Benjamin Mu Yi Ken  
CH William, Sabah

Sr Masdiana bt Dahlan  
JS Valuer Property Consultants (Penang) S/B

Sr Mohd Lizam b Mohd Diah  
UTHM, Batu Pahat

Sr Noorafida bt Zam Zam  
IPC Island Property Consultants S/B,  
Seremban

Sr Siti Azzah bt Abdul Razak  
Perbadanan Putrajaya

Sr Stephanie Wong Sing Wan  
CH William, Sabah

Sr Zarina bt Shamsudin  
UTHM, Batu Pahat

**GRADUATE**

Lim Hon Chern

Ir Kew Boon Pew  
Kew & Associates, Sel

Mitorica Liew Sye Yih  
JS Valuer Property Consultants (Sabah) S/B

Rajaghantham a/l P.Ramasamy

Teng Yong Shen  
CH William Talhar & Wong S/B, KL

**PROBATIONER**

Aslam Ilman b Zulkiflee  
CH William Talhar & Wong S/B, KL

Chin Lee Yin  
Propmark Realty, KL

Christopher Leong Ken Chung

Daniel Lai Chien Yee  
Appraisal (M)S/B, KL

Ezwan Hamdi b Elias  
Maybank

Foo May Yong

Hamizi b Hamdan  
Nurr Property Consultant, KL

Hui Wai Jun  
ST Hui & Associates, KL

Kandasamy a/l Purushothanam  
RG Properties, KL

Leong Shin Hyun  
SH Leong & Co, KL

Loo Huey Ling  
Vivahome Realty, Sel

Ooi Beng Eong

Shawn Ho Tze Shiang  
Wealth Bridges S/B, Sel

Siow Chin San  
Tick Huat Paints & Hardware S/B, Seremban

Steven Quah Liang Choon  
CIMB Bank Bhd, Sel

Tam Jhia Hsin  
CH William, KL

Tan Wee Ling

Woo May Foong  
Retail Network S/B, KL

Wong Paik Tho  
Retail Network S/B, KL

Wong Weng Keong @ Jerry AP Medo S/B, Sel	Fauzeah Azmi	Nianah binti Tiong	Syarah Syazwani Arifin
<b>STUDENT</b>	Fitriyah Razali	Ng Su Teng	Tan Ai Reen
Abdul Hafiz b Abd Latib	Gan Pei Ting	Ng Way Chee	Tan Yew Choo
Abdul Rahman b Abu Bakar	Goh Jhen Shen	Ngam Loo Yee	Tan Lay Chin
Affarina Atia bt Affandi	Hafizuddin Husin	Nik Nurul Adlin Nik Yahya	Tan Shu Ping
AhmadTajjudin b Rozman	Hanis Fatimah Azmi	Noor Makiah Yusoff	Tan Siew Kuen
Ainul Farahin Sauding	Hanis Syazani Mohd Haron	Noorassyikin Amin	Tang Kai Yuan
Ainun Nadzirah Abdul Azis	Hannie Irwanie Abd Karim	Nor Aini Alang Ahmad	Teo Kai Xi
Aishah Samsudin	Haziq Fazzuddin Abu Kassim	Nor Azlina Nor Adzly Tee	Teoh Ai Vi
Alfred Goh Pui Teck	Hazirah Mohd Saion	Nor Zakiah Abdullah	Terence Lo Yung Wee
Amirah Abdul Rahman	Heng Hwa Mei	Norhanis Izzati Hassan	Tsau Kar Yen
Aqeela Mohd Pauzi	Heng Hwa Teng	Norsahida Shahrom	Tio Min Jie
Asmak Amalina Bakruarazi	Hong Bee Pin	Nur Ameera Azarin	Vincent Wong Chin Chuan
Asmaq Abdul Karim	Hong Wei Sheng	Nur Amira Syafiqah Shapee	Wan Siti Aishah Haroon
Azizah Ismail	IsabellaUlok Antok	Nur Atikah Mohd Hafsam Tan	Wee Siaw Chui
Beh Hooi Sean	Izzah Syahirah Mohd Mazny	Nur Dhaifina Borhannudin	Yan Shi Min
Bong Yi Chia	Jong Cherng Yee	Nur Faridatul Akma Abdullah	Yap Wei Wen
Cham Qiao Wei	Kam Itt Cheem	Nur Hidayah Senawi	Yee Sook Sam
Chew Lik Chee	Khairul Shazuan b Khairudin	Nur Iza Zaini	Yeo Hui Chee
Chiu Sieu Lian	Kiew Pik Sean	Nur Izzah Syamimi Md Nasin	Yeo Xiao Wei
Choi Pei Jin	Koit Zi Ying	Nur Nadiyah Mohd Noh	Yong Pei Chei
Chong Chinn Yin	Lau Yuan Hui	Nur Ratna Emilia Karton	Wie Jay Sern
Chong Juo Shiang	Lee See Hang	Nur Sabrina Mohamad Fuzi	
Chong Sheau Yen	Lee Wen Jian	Nur Syakirah Mohamad Saupi	<b>GEOMATIC AND LAND SURVEYING</b>
Choo Chee Khang	Liew Siaw Hong	Nuramalina Diyana Nazali	<b>FELLOW</b>
Abdul Hafiz b Abd Latib	Liew Wee Leng	Nuratiqah Che Lah	Sr Abu Hamid Selamat Lembaga Jurukur Tanah, KL
Abdul Rahman b Abu Bakar	Lim Chiew Teng	Nurfarahana Che Ismail	<b>MEMBER</b>
Affarina Atia bt Affandi	Lim Kah Bean	Nurhaizum Hasanah Yusoff	Sr Ahmad @ Ishak b Ibrahim Jurukur AI, Sel
AhmadTajjudin b Rozman	Lim Siao Ching	Nurhazirah Azahar	Sr Ahmad Hilmi Mohamad Idris Jurukur Perunding Services S/B, Sel
Ainul Farahin Sauding	Lim Yee Jin	Nurul Afiqah Abu Samah	Sr Eran Sadek Said b Md Sadek UiTM Shah Alam
Ainun Nadzirah Abdul Azis	Loh Yun Lu	Nurul Amirah Abdul Rahman	Sr Hazman Md Jauhar JUPEM Perak
Aishah Samsudin	Lok Mei Fang	Nurul Hidayah Abdullah	Sr Hidayatul Aishah Ku'on Abdullah JUPEM Perak
Alfred Goh Pui Teck	Low Wan Jin	Nurul Hikmah Hamidon	Sr Kamaruddzaman Kassim JUPEM Pahang
Amirah Abdul Rahman	Low Yee Kee	Nurul Nabilah Yusoff	Sr Muhd Nusser b Said Serena Smart Solutions, Sel
Aqeela Mohd Pauzi	Mas Idayu Jalaludin	Nurul Saadah Lokman	Sr Norbaini Che Othman Mohamed Jurukur Consultants, Terengganu
Asmak Amalina Bakruarazi	Melissa Jialynn Vander Slott	Nurul Shahirah Romlee	Sr Rahim b Sidek Jurukur Sentral, Kelantan
Asmaq Abdul Karim	Mohamad Fawwaz Mohamad Zaini	Ooi Weng Chow	Sr Raman a/I Supramanian Perunding Ukur Suriaa, Sel
Azizah Ismail	Mohamad Hazrai Mohd Zahar	Rabiyatul Akma Daut	Sr S. Mohan a/I B. Subramaniam Jurukur Aznan, Sel
Beh Hooi Sean	Mohamad Qaiyum Rozali	Rohani Mohammad Akhir	Sr Shafizie b Mokhtar Jurukur Perunding Services S/B, KL
Bong Yi Chia	Mohamed Fadzil Md Yusuf	Rubiah Remeli	Sr Tor Weng Song @ Rahman b Abdullah Jurukur Putra, Sel
Cham Qiao Wei	Mohd Amirul Amir Ismail	Saiyidah Nafisah Abdul Kahar	Sr Dr. Zakaria Mat Arof UiTM Perlis
Chew Lik Chee	Mohd Hafiz Mat Sidi	Shamsul Akmal Mahali	<b>GRADUATE</b>
Chiu Sieu Lian	Mohd Imran Azrai Zairuslan	Sharifah Nurul Akhilah Syed Mustorpha	Fermi b Asyran
Choi Pei Jin	Muhamad Danial 'Atif Nasiren	Siow Gyen Win	Muhammad Ariffin b Osoman Geoinfo Services S/B, KL
Chong Chinn Yin	Muhamad Hazwan A. Rahim	Siti Farahaneza Mohd Mison	Nurjannah Zaiha bt Hamzah Jurukur Ismail Talib, Sel
Chong Juo Shiang	Muhammad Asymawi Mahkar	Siti Nadiyah Zainudin	Nurul Farhah bt Abdul Hamid
Chong Sheau Yen	Muhammad Fikri Abdullah	Siti Norliana Abd Pattah	<b>STUDENT</b>
Choo Chee Khang	Muhammad Shaiful Shahrin	Siti Nur 'Aishah Abd Hamid	Abdul Razak Mohamad Apandi
Choo Kean Choong	Muhammad Syazwan Razak	Siti Rabi'atul 'Adawiyah Ahmad	Ahmad Subkiy Noor Isa
Chung Pui Feng	Muhammad Taufiq Ab Gani	Siti Sarah Mohd Asri	
Eleena Abd Wahab	Nadia Fadhilah Jaini	Soh Oi Zhen	
Eliza Sharina Fizaman Noor	Nadiyah Tukiman	Su Zhen Sheng	
Eliza Ong Yue Teng	Nadiya Adnan	Suhana Samsudin	
Ezzati bt Tarmidi	Najwa Dalila Ahmad Zaki	Suhanis Sufian	
Fatin Nor Liyana Mohd Azmi	Natasha Nadia Mohd Ridzuan		

Ainul Dzahira Ahmad Darimi	Hairul Basri	Muhammad Syafiq Zakaria	Nurliyana Hazwani Zulkifli
Akhma Zunairah Ahmad	Harith Fadhillah Soeb	Muhammad Syahid Abdull Rahim	Nurul Balqis Mohamad
Ambar Nasiha Abd Rahman	Janatul Aziera Abd Razak	Muhammad Zaki Zainal	Rashidah Idris
Amirul Rais Rozi	Khadijah Abd Khani	Mariyah Shuhada Said	Sabariah Zahari
Arhamni Robian	Khairul Shazwan Md Khalid	Najwa Nabila Mohd Pauzi	Sarimah Mohamad Noor
Ayda Adly Jamaluddin	Khairun Nas Mulyani	Nik Fatehah M Ali @ Nik Ali	Sharifah Nur Shuhaila Syed Nasir
Athma Zulaikha Ahmad Zawawi	Liyana Abdul Hadi	Nor Afizah Suratin	Siti Arifah Abdul Kader
Ambar Nasiha Abd Rahman	Mohamad Firdaus Hamid	Nor Ainn Shafika Abdul Hamid	Siti Mariam Khalid
Amirul Rais Rozi	Mohammad Amirul Izwan Abd Rahim	Nor Azlia Saad	Siti Muzlina Jaffar
Arhamni Robian	Mohammad Fiqry Latif	Nor Farehah Saharon	Siti Nazhirah Abd Rasyid
Athma Zulaikha Ahmad Zawawi	Mohammad Ikram b Mohammad Radzi	Nor Hakimah Syazwani Mohamad	Siti Nor Shafika Mohd Ruzzaman
Ayda Adly Jamaluddin	Mohammad Khirul Nazuan b Mohammad Alias	Nor Suhaida Yusof	Suzana Abu Bakar
Azmawati Ariffin	Mohammad Safwan b Mohammad Shah Bani	Norashidah Jusoh	Umarul Nazim Mohd Noh
Azmi Ahmad Zaidi	Mohd Azrul Abd Aziz	Noredayu Musa	Wan Mohd Faiz Wan Masri
Azwani Farahani Mustapha	Mohd Fauzi Hakim Mohammad Shafie	Normasera Remali	Wan Nur Adilin Wan Ramlan
Che Khairul Ikhwani b Che Kamaruzaman	Mohd Razeef Zainudin	Norsyafikah Kamaruzaman	Wan Radziatul Mardziyyah Rozali
Che Ilalhuda Che Ya	Mohd Shafiq Azfar b Mohd Nazeri	Nur Ayunie Ibrahim	Zuliana Zolkefli
Ezza Syahida Zulkaflee	Mohd Syahmi Mohd Diah	Nur Ezyanie Mohd Ruslan	Zul Ezri Zulkaflee
Fairuz bt Ramli	Mohd Syazwan Mohd Fathi	Nur Farhana Mohd Yusoff	
Fathiah Mohamed Zain	Muhammad Ali Safwan	Nur Farisah Hamzah	
Fatin Amirah Yahya	Muhammad Anis Ismail	Nur Fitrah Md Zaini	
Fatin Haziera Abdul	Muhammad Kamil Firdaus Mohd Suwandi	Nur Hilwani Abdul Razak	
Fatin Nur Fazliyana Nor Halim	Muhammad Nasryul Syamil Almo'man	Nur Sariy Silmi Che Pauzi	
Fakhrur Razi Mat Raai	Muhammad Nur Azizi Mohd Azri	Nur Syamimi Md Rahim	
Farasuriati Ariffin	Muhammad Omar Ilias	Nur Syarina Sabarudin	
Hafizah Md Tayep		Nuratikah Saidin	
		Nurjannah Syahrial	

**QS JUB UTARA SDN. BHD.** (224397-P)

BQSM Permit No. : 1993/FC00007

Chartered Quantity Surveyors : Juru Ukur Bahan Bertauliah  
 Construction Cost : Penasihat Ekonomi Pembinaan  
 Consultant  
 Project Managers : Pengurus Projek

**PENANG OFFICE**  
 56D, 2nd & 3rd Floor, Perak Plaza  
 Jalan Perak, 10150 Penang, Malaysia  
 Tel: 04-2285441 Fax: 04-226 6528  
 Email: jubutara@gmail.com



**JS VALUERS PROPERTY CONSULTANTS SDN BHD**  
 Registered Valuers - Property Manager & Consultants  
 Real Estate Agents - Compensation & Rating Valuers

Unit No. B-11-15, Block B, Megan Avenue II, 12 Jalan Yap Kwan Seng, 50450 Kuala Lumpur  
 Tel: 03-21624133 Fax: 03-21624188  
 Email: admin@jsvaluers.com.my Website: www.jsvaluers.com.my

**OFFICES AT**

**KOTA KINABALU, SABAH**

Unit No. B1123, 11<sup>th</sup> Floor  
 Wisma Merdeka Phase II  
 Jalan Tun Razak  
 88000 Kota Kinabalu, Sabah  
 Tel: 088-254877 (5 lines), 216502 Fax: 088-256812  
 Email: kotakinabalu@jsvaluers.com.my

**IPOH, PERAK**

JS's House @ 11, Jalan Labrooy  
 30100 Ipoh  
 Perak  
 Tel: 05-5062698, 5063098 Fax: 05-5062098  
 Email: ipoh@jsvaluers.com.my

**SANDAKAN, SABAH**

1<sup>st</sup> Floor, Lot 11, Block 19  
 Bandar Indah  
 Mile 4, Jalan Utara  
 90000 Sandakan, Sabah  
 Tel: 089-217013, 229117 Fax: 089-220614  
 Email: sandakan@jsvaluers.com.my

**MIRI, SARAWAK**

Lot 760, 1<sup>st</sup> Floor  
 Jalan Merpati  
 98008 Miri, Sarawak  
 Tel: 085-418101, 428101 Fax: 085-413101  
 Email: miri@jsvaluers.com.my

**TAWAU, SABAH**

Lot 5, Block 31, 2<sup>nd</sup> Floor  
 Fajar Complex  
 91000 Tawau, Sabah  
 Tel: 089-765621, 765622 Fax: 089-765623  
 Email: tawau@jsvaluers.com.my

**MELAKA**

No. 669A, Jalan Melaka Raya 8  
 Taman Melaka Raya  
 75000 Melaka  
 Tel: 06-2833338 Fax: 06-2868400  
 Email: melaka@jsvaluers.com.my

**PENANG**

Room 105, 1<sup>st</sup> Floor  
 (Formerly Southern Bank Building)  
 No.21, Lebuh Pantai  
 10300 Penang  
 Tel: 04-2625003, 2624985 Fax: 04-2634525  
 Email: penang@jsvaluers.com.my

**BATU PAHAT, JOHORE**

32A-1B, 2<sup>nd</sup> Floor  
 Jalan Rahmat  
 83000 Batu Pahat, Johore  
 Tel: 07-4317327, 4323191 Fax: 07-4317327  
 Email: batupahat@jsvaluers.com.my

**SUBANG JAYA, SELANGOR**

No. 52, (1<sup>st</sup> Floor)  
 Jalan SS15/4C, Subang Jaya, 47500 Selangor  
 Tel: 03-56369199 (3 lines) Fax: 03-56369193  
 Email: selangor@jsvaluers.com.my

**RESEARCH & CONSULTANCY**

Unit No. B-11-15, Block B,  
 Megan Avenue II,  
 12 Jalan Yap Kwan Seng,  
 50450 Kuala Lumpur,  
 Tel: 03-21624133 Fax: 03-21624188  
 Email: consultancy@jsvaluers.com.my

# With Best Compliments

from



**Pakatan  
International**

Md. Isahak Dan Rakan-Rakan Sdn Bhd

پاکتھان انٹرنیشنل

(Company No.: 028967-W), LBM Permit No. 1993/FC00013.

## Head Office

G22A Jalan Pandan Prima 2,  
Dataran Pandan Prima,  
55100 Kuala Lumpur  
Tel: (603) 9287 4949  
Fax: (603) 92877552  
E-mail: piqs@streamyx.com  
Web: www.pakatan.net.my

## Kuching

Lot 7022, 1st Floor  
Section 64, KTLD, Jalan Pending  
93450 Kuching Sarawak  
Tel: (6082) 330223  
Fax: (6082) 330221

## Penang

70, Off Jalan Mahsuri  
11950 Bandar Bayan Baru, Pulau Pinang  
Tel: (604) 642 0255  
Fax: (604) 642 0262  
E-mail: pakatan\_png@yahoo.com

## Kota Kinabalu

Lot 3-3, Blok A, 3rd Floor  
Ruang Plaza Lagenda  
Heritage Plaza, Jalan Lintas Luyang  
88830 Kota Kinabalu, Sabah  
Tel: (6088) 716696



ISO 9001:2000  
ID NO. 1940



AIQS



RICS

## Raine&Horne

Raine & Horne International Zaki + Partners Sdn. Bhd.

### Head Office

Perpetual 99, Jalan Raja Muda Abdul Aziz,  
50300 Kuala Lumpur  
Tel: 03-2698 0911  
Fax: 03-26911959  
Email: rhizpkl@streamyx.com  
http://www.raineandhome.com.my

- Valuers
- Market & Feasibility Researches
- Property Investment Advisers
- Estate Agents
- Rating Valuation Consultants
- Plant, Machinery & Equipment Valuers
- Property and Project Managers

### Branches

<b>Penang</b>	04-263 8093	<b>Kelang</b>	03-3342 0193	<b>Petaling Jaya</b>	03-7880 6542
<b>Seremban</b>	06-763 9510	<b>Johor Bahru</b>	07-386 3791	<b>Kuching</b>	082-235 236
<b>Ipoh</b>	05-253 2804	<b>Subang Jaya</b>	03-5631 9688	<b>Miri</b>	08-5433 701
<b>Melaka</b>	06-284 8322	<b>Kuantan</b>	09-515 7100	<b>Kota Kinabalu</b>	088-266 520



► Representative officers throughout Asia, Australia, New Zealand, Europe, America & Africa



# BAHARUDDIN ALI & LOW SDN BHD

(R.O.C. No. 63558-U) LJBM No.: 1993/FC00010

**Jurukur-Jurukur Bahan Berkanun & Ekonomis Pembinaan**  
**Chartered Quantity Surveyors & Construction Cost Consultants**

### Head Office

217 & 219, Jalan Perkasa Satu,  
Taman Maluri, Cheras,  
55100 Kuala Lumpur

Tel: (603) 9285 3744

Fax: (603) 9285 5452/6231

Email: balow@balow.com.my

Website: www.balow.com.my

### Branch Office

72B, Jalan Abiad,  
Taman Tebrau Jaya,  
80400 Johor Bahru,  
Johor Darul Takzim

Tel: (607) 333 8480

Fax: (607) 333 9614

Email: balowjb@balow.com.my

Website: www.balow.com.my



RICS



SIRIM  
CERTIFIED TO MS ISO 9001  
Registration No. AR 1503



## YONG DAN MOHAMAD FAIZ SDN. BHD.

(13239-K)

**QUANTITY SURVEYORS AND  
CONSTRUCTION COST CONSULTANTS**

No. 18-1 Jalan PJS 8/12, Dataran Mentari, 46150 Petaling Jaya, Selangor

Tel: 03-56329999 (Hunting Line) Fax: 56363723 / 56367723

E-mail: ymfsb@unifi.my

Lembaga Jurukur Bahan Malaysia Permit No. 1993/FC00009

YONG DAN MOHAMMAD FAIZ (SABAH)

Lot 23 Block C, 2nd Floor Plaza Grand Millennium,

Jalan Pintas Penampang,

89500 Penampang, Sabah.

Tel: 088-733 611 & 088-733 622

Fax: 088-733 699 Email: ymfsabah@yahoo.com



In Association With Rider Levett Bucknall

Singapore, Hong Kong, Jakarta, Bangkok, Vietnam, China, Phillipines,  
Australia, New Zealand, Great Britain, Europe, Africa, Middle East, India, U.S.A, Canada

## UKUR BAHAN KONSULT

QUANTITY SURVEYORS & BUILDING ECONOMISTS

**NO. 16-A, JALAN PERSIARAN ZAABA**

**TAMAN TUN DR. ISMAIL**

**60000 KUALA LUMPUR**

Tel : 603-7729 8100 (4 Lines)

Fax : 603-7727 1636

E-mail : ubkqs@tm.net.my

ubkqssb@gmail.com



# INVITATION FOR ARTICLE CONTRIBUTION

## The Malaysian Surveyor Journal

ISSN: 2232-1292 (On-line)

**The Malaysian Surveyor** is a high quality peer review journal published quarterly online. The publication aims at bringing together researchers, academicians, professionals, practitioners and students to impart and share knowledge in the form of empirical and theoretical articles and research papers. It provides an international forum for the dissemination of professional knowledge and practices, original research results, new ideas, practical experience of the surveying profession, advancements and innovation in the surveying technology and surveyors' contribution toward the property market and building industry. We welcome original article contribution to The Malaysian Surveyor.

### **Peer Review Process**

Manuscripts are subject to review by the Editorial Board and reviewers.

### **General Guidelines for Submissions**

Article submissions should not exceed 10 pages, including all figures and tables (excludes the references). Abstract should be no more than 500 words. Articles in Bahasa Malaysia need to include an abstract in English.

### **Kindly email article to:**

*editor@rism.org.my*

### **For more information, visit the official website of the journal**

**at** <http://www.rism.org.my/ContentPages/Journal.aspx>

#### **ROYAL INSTITUTION OF SURVEYORS MALAYSIA**

3rd Floor, Bangunan Juruukur, 64 – 66, Jalan 52/4, 46200 Petaling Jaya, Selangor, Malaysia

Tel: 603-7954 8358 / 7955 1773 / 7956 9728 Fax: 603-7955 0253

Website: [www.rism.org.my](http://www.rism.org.my) E-mail: [secretariat@rism.org.my](mailto:secretariat@rism.org.my), [editor@rism.org.my](mailto:editor@rism.org.my)



**Royal Institution of Surveyors Malaysia**

3rd Floor, Bangunan Juruukur, No. 64-66, Jalan 52/4, 46200 Petaling Jaya, Selangor Darul Ehsan

t: +603 7954 8358 (hunting line) / 7956 9728 / 7955 1773

f: +603 7955 0253 e: [editor@rism.org.my](mailto:editor@rism.org.my) w: [www.rism.org.my](http://www.rism.org.my)