



# “Liberalisation of Engineering Services – The Wings for Engineers to Soar”

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It seemed like only yesterday that I was addressing you in this same auditorium in conjunction with IEM's 55th Annual General Meeting. First and foremost, I wish to take this opportunity to express my sincere gratitude to the IEM Council for re-electing me to the office of the President of IEM for 2015-2016. Once again, I am honoured by the trust and confidence you have placed in me and I shall strive to carry out this responsibility with utmost care and diligence.

I am grateful to the IEM Executive Committee and Council for their support over the past 12 months. During this period I've had the opportunity to meet with many IEM members, at both the headquarters and the branches. At every instance, I was overwhelmed by your co-operation, kind understanding and encouragement. For this, I wish to thank each and every one of you for your unceasing support.

This year is the 56th Anniversary of our Institution which has grown from a humble beginning in 1959 with 60 members to more than 36,000 members today. We have also gained recognition locally and internationally as a respected professional body. Recognising that engineers are prime movers of national development, government agencies, statutory bodies and local authorities have sought the advice and opinion of IEM on technical matters during the planning stage, at both the Federal and State levels. IEM will continue to play an active, constructive and meaningful role in assisting the Government towards achieving Vision 2020.

## My Fellow Engineers,

The contribution of the service industry to our national GDP is on the upward trend and is envisaged to increase to 61% this year as compared to 53% in 2010. It is expected to rise further to 68% by 2020. In moving towards a developed nation with high income status, liberalisation of our national economy is inevitable in order to attract foreign direct investments, as according to the Economic Transformation Programme. On

this note, the topic of my Presidential Address this morning will be "Liberalisation of Engineering Services – The Wings For Engineers To Soar."

## DEFINITION OF LIBERALISATION OF SERVICES

Before we proceed, it may be pertinent to ask the question: "What is liberalisation of services?".

Liberalisation of services can be defined as a process whereby measures are taken to expand our market access to foreign services providers or to diminish discrimination against them vis-à-vis the domestic suppliers. Liberalisation is therefore a relaxation of government restrictions, usually in areas related to social and economic policies. It creates a more favourable investment environment characterised by the ease of doing business; this will certainly benefit the national economy in the long run.

## MALAYSIA'S COMMITMENT TO LIBERALISATION

Our Government is committed to liberalisation and creating the appropriate environment for cross border trade and services. Malaysia, as signatory to both the General Agreement on Trade in Services (GATS) and the ASEAN Framework Agreement on Services (AFAS) in 1995, is obliged to liberalise its business and professional services progressively. Similarly, ASEAN member countries will have to open their markets to each other.

The liberalisation in the services sector is currently being undertaken through the following type of agreements:

- i. Multilateral Agreement – World Trade Organisation (WTO) through progressive liberalisation (General Agreement on Trade in Services (GATS))
- ii. Regional Free Trade Agreement – ASEAN through the ASEAN Framework Agreement on Services (AFAS)
- iii. Various other Bilateral and Regional Free Trade Agreements

A number of important services sub-sectors have already been opened to foreign participation, either through binding

commitments multilaterally, bilaterally or unilaterally through autonomous liberalisation. Under the General Agreement on Trade in Services (GATS), Malaysia has already taken steps to expedite the liberalisation of both financial and non-financial service sectors.

When the ASEAN Framework Agreement on Services (AFAS) was signed during the Fifth ASEAN Summit on 15 December, 1995, its aim was to enhance the co-operation in the services sector amongst ASEAN members by eliminating intra-regional trade restrictions and expanding the scope of liberalisation in services beyond those already undertaken under GATS. According to the AFAS timeline, 2015 is the final year for ASEAN member countries to ensure full liberalisation of their Business and Professional Services.

Malaysia is also committed to the implementation of the ASEAN Economic Community (AEC) framework, which includes free movement of professionals and skilled labour. As part of its overall development strategy, Malaysia subscribes to the principle of progressive liberalisation in the services sector. In October 2011, the Government announced the intention to liberalise the architectural and engineering sub-services, amongst others.

The liberalisation process is co-ordinated, monitored and guided by the Malaysian Services Development Council (MSDC), which is chaired by the Minister of International Trade and Industry.

### **LIBERALISATION OF ENGINEERING SERVICES – PROS AND CONS**

Liberalisation of engineering services presents new opportunities as well as challenges to the engineering fraternity, with respect to both professional and socio-economic dimensions.

There have been concerns expressed by certain quarters that liberalisation of the engineering services sector will result in foreign service-providers crowding out our own domestic providers. Some also feel that liberalisation may force certain small and medium local firms out of business totally as a result of their inefficiency, unproductiveness and inability to compete on the economy of scale. There is also a perceived fear of potential outflow of money from Malaysia with foreign providers and shareholders repatriating the profits. Other fears include the possibility of an increased risk of financial instability due to increased exposure to global economic events and the risk of brain drain once foreign firms gain a foothold in our country.

To all of these critics and pessimists, I would like to quote the wisdom of Sir Winston Churchill, who had once said:

*“A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty”.*

The benefits of liberalising the engineering services are immense. During an exclusive interview conducted by IEM in 2013, Y.Bhg. Datuk Dr Rebecca Fatima Sta Maria, the Secretary General of MITI, stated that:

*“Growth of professional services such as engineering is critical as they have high potential to add value to the economy, besides having a significant multiplier effect on the economy and potential to improve productivity. Liberalisation offers opportunities for transfer of capital, expertise and technology to domestic firms. It also provides opportunities for domestic firms to joint venture with foreign companies to expand their business overseas.”*

It cannot be denied that through the Economic Transformation Programme, started in 2011, where liberalisation of services is one of the major initiatives, the GDP per capita has risen substantially. According to the World Bank Report, Malaysia's GDP per capita in 2006 was US\$5,553, rising to US\$5,984 in 2010, a difference of US\$431. In 2014 our GDP per capita was US\$6,990, a difference of US\$1,066, double that of the preceding period. This supports that notion that liberalisation can and will uplift our nation's economy and propel the nation forward.

The move to liberalise will enhance the delivery, quality and productivity of local engineering services to a level that is comparable with other advanced countries. It also encourages healthy competition and increases their competitive edge. With the entry of foreign services providers, local firms will be forced to take a relook at their current practices. They will have to upgrade and improve overall business environment through the introduction of international

best management practices, advanced technical skills and innovative cum state-of-art technology.

So, as ground-shattering as the effects may seem, the government's agenda to liberalise the services industry should be welcomed and seen as an opportunity instead of a challenge. In order to cushion any adverse impact, the Government, through MITI, has come out with various funding mechanisms to enhance the capacity development of our domestic engineering services industry. There will also be a need to consider joint ventures either between local firms or with foreign firms in order to expand the domestic and international market shares.

### **AMENDMENTS TO THE REGISTRATION OF ENGINEERS ACT (2014)**

Currently the domestic professional engineering services sector is protected with some restrictions on foreign professional services mainly because of the current perception that the engineering services sector lacks the capacity to compete on a bigger scale. For example, the Registration of Engineers Act (2007) only allows citizen and permanent residents of Malaysia to register as Graduate Engineer or Professional Engineer, thus restricting foreign professional engineering firms to provide engineering consulting services here.

However, GATS stipulates that measures relating to qualification requirements and procedures, technical standards and licensing requirements should not constitute unnecessary barriers to trade in services. The Board of Engineers, Malaysia (BEM) has taken the necessary steps to amend the Registration of Engineers Act (2007) to liberalise the professional engineering services sector with the aim of removing the restriction on foreign professional engineers.

In December 2014, Parliament passed amendments to three Bills, namely the Registration of Engineers (Amendment) Act 2014, the Architects (Amendment) Act 2014 and the Quantity Surveyors (Amendment) Act 2014, to liberalise professional services related to engineering, architecture and quantity surveying respectively. While the Registration of Engineers (Amendment) Act 2014 was finally gazetted on 24 February 2015, the actual date of its implementation is to be decided by the Minister of Works.

While liberalisation promotes economic growth and enhanced productivity, certain safeguard measures must be introduced to protect the nation against the risk of sub-standard or unethical services of foreign engineers and foreign engineering firms.

In line with this, a two-tier registration has been introduced. The first tier is Professional Engineer and a new second tier is Professional Engineer with Practising Certificate (PC). To move from the first tier to the second tier, the Professional Engineer will have to pass a Professional Competency Examination (PCE).

When a graduate engineer has obtained the necessary experience and passed a professional assessment examination conducted by the BEM or is a Corporate Member of IEM, he will be eligible for registration as a Professional Engineer (PE) under the first tier registration.

PCE is a second tier examination introduced under the new Registration of Engineer (Amendment) Act 2014 for

both local and foreign engineers who wish to practice as a Submitting Person. A Professional Engineer who has passed the PCE, will be known as a PE with Practising Certificate, and is considered eligible to run an engineering consultancy practice and submit plans for approval by the relevant authorities.

In brief, the PCE is a test of the engineers' professional competency in engineering knowledge and the understanding of Malaysia's laws and regulations, rules and standards, which are designed to ensure public's health, safety and welfare. All practising Professional Engineers are also required to adhere to the Professional Code of Ethics and Conduct, failing which they will be subject to penalties as stated in the Registration of Engineers Act (Amendment) 2014.

To further safeguard the quality of services, both PE and PE with PC registrations are subjected to annual renewal where they need to fulfil the Continuous Professional Development (CPD) requirements set by BEM.

Under the Registration of Engineers (Amendment) Act 2014, the Board of Engineers, Malaysia (BEM) will register professional engineers of any nationality and engineering firm, as long as they have the required and recognised qualifications.

For engineering consultancy practices, the amended act allows for the following: (1) Sole proprietorship and partnerships, 100% foreign equity with all partners as Professional Engineers with Practising Certificate; (2) Body corporate, total foreign equity may be up to 100%, beginning with 30% equity open to all and 70% for Professional Engineers with Practising Certificate.

For multi-disciplinary practices providing professional engineering services, architectural consultancy services and/or quantity surveying services, foreign equity may be up to 100%, beginning with 30% equity open to all and 70% equity for professional engineers, architects and quantity surveyors, whereas the day-to-day affairs of the body corporate shall be under the control of a Professional Engineer with Practising Certificate.

### **THE WAY FORWARD: IEM'S INITIATIVES**

To face the possible challenges of liberalisation, there is an urgent need to increase the performance and competitiveness of our local engineering services, especially those who want to venture into the global market. To this end, IEM will focus on the following 3 major initiatives:

#### **1. STRENGTHENING CAPACITY BUILDING PROGRAMMES**

Concern was raised at a national forum on benchmarking the quality of engineers organised by IEM in 2012, on the quality and trainability of fresh graduate engineers produced by local institutions of higher learning (IHLs). This concern has been incorporated into the Position Paper on "Benchmarking The Quality Of Engineers", which was prepared by IEM and submitted to the Ministry of Education recently. The Position Paper showed that the increasingly poor quality of incoming undergraduate students as well as the unbalanced priorities of academia practice at local IHLs might have contributed to the problem, despite the fact that the curriculum at all local universities met the requirements of the Washington Accord.

The further strengthening of professional services is in line with the Government's objective to develop the engineering industry:

- Towards more knowledge-intensive and higher-value-added sector
- To create synergistic linkages between sectors that would further contribute to other sectors of the economy and
- To generate high income jobs, which are linked to higher labour productivity.

In terms of strengthening capacity building programmes, IEM intends to fortify its role in every stage of the engineer's development, from graduation to the attainment of Professional Engineer with Practising Certificate status, apart from the current on-going continuous professional development programmes. This will enable professional engineers to obtain their CPD points and equip themselves with the necessary skills, competencies and abilities needed to meet the impact of liberalisation and to venture overseas if necessary. Towards this end, IEM will undertake the three programmes as described below.

### **i. Fundamentals of Engineering Examination (FEE)**

One of the initiatives is the introduction of the Fundamentals of Engineering Examination (FEE) for final-year engineering students and fresh graduate engineers to ensure that the required standards pertaining to engineering fundamentals have been achieved to meet industrial demand.

The FEE provides potential employers with a preliminary screening mechanism, giving them an additional level of evaluation to select the right engineering graduate for their companies. Employers would therefore save time and resources as the process automatically shortlists the eligible candidates. In essence, the FEE serves as a benchmark to ensure that such engineering graduates has fulfilled the required standard of engineering fundamentals, thus increasing their employability and marketability not only locally but potentially in overseas markets as well.

### **ii. Improvement of the Professional Interview (PI) Competency Model**

It is envisaged that more and more graduate engineers will choose to upgrade themselves to PE and PE with PC status to meet the challenges and opportunities that come with service liberalisation.

IEM is currently in the process of reviewing the Professional Interview (PI) process for further improvement, modelled on the UK Standard for Professional Engineering Competence. To this end, IEM is looking into improving the PI process by introducing the Assessment Rubrics which has threshold (scoring scales) for marking system of the PI candidate's attainment of competency. The Assessment Rubrics provides a quantitative basis for assessment, thereby improving the consistency as well as minimising the subjectivity by different interviewers.

IEM must also increase the number of highly professional competency engineers available to serve as interviewers to conduct the PI examinations. We will provide training for the PI interviewers to ensure that they are competent and have sufficient knowledge and experience to carry out the PI.

IEM shall continue to organise PI workshops to prepare PI candidates for their Professional Engineers status. The Mentor-Mentee and the Log Book programmes will continue to assist candidates especially those who do not have a supervising Professional Engineer in his/her organisation.

### **iii. Training for Professional Competency Examination (PCE)**

In line with the latest amendment to Registration of Engineers Act (2014) and the introduction of the Professional Competency Examination (PCE), IEM will also provide the necessary training for Professional Engineers who wish to go one step further to become Professional Engineers with Practising Certificates (PC). Through its Training Centre and Academy, IEM will play a greater role in preparing engineers in terms of capacity building for all disciplines.

## **2. FACILITATING BUSINESS NETWORKING**

In terms of providing engineering services, Malaysia has a clear competitive edge over some of its ASEAN counterparts. However, local engineers may lack the information and technique to market themselves abroad.

With liberalisation, it is more urgent now than ever that IEM plays a more prominent role in facilitating business and professional networking to ensure smooth expansion of our engineering services.

### **i. Through National Organisations**

Through its various committees, IEM will continue its current initiatives to facilitate business networking for its members. One such initiative is the revival of the IEM Business Club, previously known as the "Pro-ETI Bureau", which was established to prepare export readiness amongst IEM members. The Business Club will explore engineering business potentials within Malaysia and abroad as well as facilitate business networking for its members. It will disseminate information on trade visits, business dialogues and networking sessions through flyers, email blasts and website announcements. For the benefit of IEM members, I propose that the Club be given sufficient support and attention to make it more active and relevant.

The Ministry of International Trade and Industry (MITI) is driving the government's efforts to accelerate the services sector liberalisation initiative. In delivering the services liberalisation agenda, the role of MITI as the coordinator of the liberalisation initiative depends very much on the support and contribution of other stakeholder Ministries, industry associations and professional bodies such as IEM.

IEM is willing to assist MITI in this respect. To complement the initiative, IEM will play an active role in MITI's outreach and export programmes that provide information on overseas market opportunities, particularly within ASEAN and the Asia-Pacific region. IEM and MITI must work together in co-organising programmes to disseminate information about the incentives provided by MITI to Malaysian engineers, aimed at strengthening their competitiveness, improved efficiency and productivity as well as providing the means to venture into foreign markets.

IEM will also collaborate with other organisations such as the Association of Consulting Engineers Malaysia (ACEM), the ASEAN Business Advisory Council, the Construction Industry Development Board Malaysia (CIDB), the Malaysian Service Providers' Confederation (MSPC) and the various Chambers of Commerce to carry out necessary market research, promotion, business match making and capacity building for our engineers.

### **ii. Through AFEO**

This year, as the chair of ASEAN, Malaysia will carry the hopes and aspirations of more than 600 million people in the region by working towards the final stage of establishing an ASEAN Economic Community (AEC) by the end of 2015. In this regard, ASEAN should give priority to harmonising, simplifying and enhancing the transparency of rules and regulations in the areas of business registration, investment and customs procedures.

As ASEAN chairman, Malaysia should also urge member economies to strengthen the process of information dissemination and consultation with businesses on AEC initiatives. In particular, ASEAN should redouble its efforts to reach out to local small firms and allay their fears that the ASEAN economic integration will be a threat to their businesses as well as advise them on the opportunities available from AEC.

As AFEO secretariat, IEM will conduct Business Opportunities Networking Session (BONS) for ASEAN engineers during the annual Conference of AFEO (CAFEO). Member nations are constantly looking at the wider benefits of liberalisation and to work and do businesses with each other. I urge all IEM members to attend the annual CAFEO to take advantage of the BONS to look for business partnerships. This will be an avenue where matchmaking of local engineering firms with suitable foreign partners can materialise.

The ASEAN Engineering Register (AER) was established in 1999 as an ASEAN Federation of Engineering Organisations (AFEO) initiative to facilitate the mobility of engineering services within ASEAN countries. I wish to remind all IEM members to register with the AER as it is a good platform for establishing networks with fellow engineers from all ASEAN member countries.

### **3. ESTABLISHING AN ENGINEERING SERVICES DATABASE**

To assist members who wish to ride the tide of liberalisation by expanding their businesses or venturing overseas, IEM will establish an Engineering Services Database (ESD) which can be accessed via the IEM Web Portal. The ESD will be open to all members who intent to seek information on all matters related to engineering services within the country and abroad. The ESD has to cater to the unique requirements of all IEM members from various disciplines and must be constantly updated.

The Engineering Services Database must also provide information pertaining to available grants, incentives and opportunities provided by the Government and other bodies, for engineers to participate in trade missions, marketing programmes and business ventures.

The ESD will be expanded to cover all such information for each and every ASEAN member country in order to meet the growing and diverse needs of the engineers. Information such as rules and regulations, as well as financial and funding mechanism to conduct trans-border engineering services in each of the ASEAN member country, will be made available via necessary links established under this database.

### **CONCLUSION**

Malaysia is committed to the liberalisation of the engineering services by 2015 under the ASEAN Framework Agreement on Services (AFAS). The process of liberalisation in ASEAN is gaining momentum and I urge all IEM members, especially entrepreneurs to move forward and to take advantage of the many opportunities available.

According to Gary Ryan Blair, one of world's top strategic thinkers,

"You cannot afford to wait for perfect conditions. Goal setting is often a matter of balancing timing against available resources. Opportunities are easily lost while waiting for perfect conditions."

With the Registration of Engineers (Amendment) Act 2014 finally gazetted in February 2015, the restrictions on foreign professional engineers' registration have been lifted.

In order to position ourselves and brace for the impact of liberalisation, IEM will endeavour to carry out three major initiatives:

1. Strengthening of IEM capacity building programmes
2. Facilitating business networking and
3. Establishing a credible engineering services database.

The benefits of the liberalisation of engineering services far outweigh the perceived fears; the long-term increase in direct foreign investments and technology transfer will transform our economy into one that's developed and with a high income status.

It is up to us to realign and strengthen ourselves as well as seize the opportunities to grow and expand our businesses, both locally and abroad. IEM will continue to assist in whatever possible way necessary and to provide the Wings For Engineers To Soar in the globalised and liberalised world.

With that, ladies and gentlemen, I thank you. ■