AMENDMENTS TO THE REGISTRATION OF ENGINEERS ACT 1967

What is the purpose What is the point

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Chairman of Engineers Act Committee
Board of Engineers Malaysia (BEM)

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BOARD OF ENGINEERS MALAYSIA (BEM)



The Registration of Engineers Act

The history

The Registration of Engineers Act 1967

- An Act of Parliament passed in 1967 to regulate the "practice of engineering"
- The Board of Engineers
 Malaysia was formed in 1972
 when it came into force.
- The "Engineers' Act" is the most important legal document governing all "Engineers" and the provision of "professional engineering services".



However how many registered engineers or those who intend to be registered have read this piece of legislation

OVERVIEW OF PREVIOUS AMENDMENTS

	REGISTRATION OF ENGINEERS ACT 1967 (ACT 138)	REMARKS	
	1967*	The draft bill passed by Parliament	
	1972	The Act came into force	
	1973		
LIST OF	1974	Introduction of a "body corporate" to practise as consulting engineer with 100% shares & Board of Directors are Professional Engineers	
AMENDMENTS	1987	Malaysian citizenship/PR requirements & temporary registration of foreign engineers	
	2002	Introduction of "multi-disciplinary practice" & Introduction of "Accredited Checkers"	
	2007	Introduction of "Disciplinary Committee"	
TOTAL NO. OF AMENDMENTS	6		

The current amendments is to "undo" the amendments in 1974 & 1987

What does it mean to be Registered under the Engineers Act 1967?

SIGNING OF FORM A – Graduate Engineers

"I agree to abide by the Registration of Engineers Regulations 1990, including the Code of Professional Conduct."

SIGNING OF FORM B1 – Professional Engineers

"I agree to abide by the Registration of Engineers Regulations 1990, including the Code of Professional Conduct."

STATUTORY DECLARATION

The above two declarations in Form A & B1 are Statutory Declaration and each form has a **WARNING** at the end on **PENALTY**

The registered engineer accepts a specific code of conduct and ethical behaviour. Failure to comply will result in

Who is the Board of Engineer Malaysia

The Board exists because of the Act or is it vice-versa

What is the Difference Between BEM, ACEM and IEM?

BOARD OF ENGINEERS MALAYSIA (BEM)

The Board of Engineers Malaysia (BEM) is a statutory body constituted under the <u>Registration of Engineers Act 1967</u>. Its primary role is to regulate the practise of engineering under the Act. It registrars 15,000 Professional Engineers and 55,000 Graduate Engineers.



ASSOCIATION OF CONSULTING ENGINEERS MALAYSIA (ACEM)

A professional trade organisation registered under the Registrar of Companies comprising of 700 members who are Directors, CEOs, Chairmans or Owners of Engineering Consulting Practises employing 20,000 people in this knowledge-based industry.



INSITIUTION OF ENGINEERS MALAYSIA (IEM)

A professional & learned body registered under the Registrar of Society to promote science & profession of engineering in any of its disciplines, to facilitate the exchange of information & ideas related to engineering, and with a membership comprising of 32,000, inclusive of 12,000 students.



BOARD OF ENGINEERS MALAYSIA (BEM)

All members of the Board are appointed by the Minister of Works

BEM

Permanent Staff

President

Secretary & Registrar

14 members who shall be Professional Engineers 1 member from Board of Architect

1 member from Board of Quantity Surveyor

Many functions of the Board is undertaken by the Standing Committees under the Board.

Working Groups under a Standing Committee are sometime formed to address specific issues in depth.

Members of Standing Committee & Working Groups are appointed by the Board

Standing Committees of BEM

Examination & Qualification

Quality

Application

Accredited Checkers

Management

Engineering Accreditation Council

Scale of Fees

Training & Education

Engineers Act

Information Technology

National Monitoring

Publications

Professional Practice

The accreditation of the undergraduate engineering degree is under the purview of the BEM's Engineering Accreditation Council

The Professional Assessment Examination (PAE) is under the purview of BEM's Examination & Qualification Committee

What is the purpose of the Act?

To protect

The Fundamental Issue for an Act's Existence

The registration of Engineers Act does not state the *raison d'etre* of its existence. It was not written in any official documents of BEM.

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Why do engineers need such an Act?
Was the purpose to "keep track" the nos. of engineers as Malaysia develops?
Is it to look after the profession of engineering?
Was it to ensure that engineers are protected from unscrupulous Clients?
Or is it to ensure that engineers are "fairly" paid for their services?
Can it be the engineering must be done by registered Engineers & no one-else?
..... etc. etc.
Or a sense of idealism to safeguard & protect the public?
..... etc. etc.
..... etc. etc.
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The Act has not clearly explained this fundamental issue of its existence.

Or have we lost sight why an Act should be enacted or exist

What is in the Legislation of Other Countries

United Kingdom & Australia (execept Qsld)	There is no Engineers Act		
Singapore	The Professional Engineers Board too, does not state its purpose. However it has issued a policy statement;		
	"The mission of the Professional Engineers Board is to <u>safeguard life</u> , <u>property and welfare of the public</u> by setting and maintaining high standards for registering professional engineers and by regulating and advancing the practice of professional engineering."		
Queensland, Australia	The Professional Engineers Act state the following objectives;		
	 (a) to protect the public by ensuring professional engineering services are provided by a registered professional engineer in a professional and competent way and; (b) to maintain public confidence in the standard of services provided by registered professional engineers; and (c) to uphold the standards of practice of registered professional engineers 		
Canada, Council of	In its "Issues Policies" it has stated;		
Professional Engineers	Level 1 Policy Statement: In Canada, the protection of the public requires that the practice of engineering be regulated by the engineering profession. The public shall not be confused or misled by the misuse of the words "engineer" and "engineering".		

Working Group of BEM Recommendations

The issue of regulating the profession was discussed in August 2005 and a number of recommendations were made as follows;

- (a) that current and future registration of Professional Engineer be made a one-off permanent registration, without need for annual renewal, and this category of registration carries all entitlements of a Professional Engineer
- (b) that the revamped Act introduces a yearly renewable Practice Certificate for those Professional Engineers who want to practice.

The above early concepts would have created of a <u>two-tier registration of professional engineers</u>;

Tier 1: Professional Engineers will still keep the title "Ir."

Tier 2: Professional Engineers with the title "Ir." with Practice

Certificate renewable yearly based on Continuous

Professional Development (CPD)

Part of the above recommendations in 2005 are now part of the amended Engineers Act

BOARD OF ENGINEERS

Graduate Engineer



Engineering Technologist



1st tier of registration

Professional Engineer



2nd tier of registration

Professional Engineer with Practicing Certificate

Licence → Practicing Cert

Mandatory → Professional

Competency Examinations

Reason for 2-Tier registration:

- Approx. 85% of all Professional Engineers (P.Eng.) are registered under Civil, Mechanical & Electrical.
- Only a small fraction of this 85% (or approx. 2,000 to 3,000) are 'practising' or wish to be the 'Submitting Person'.
- Rest are employed in Contracting, Maintenance, Employees of Consultants, Government, Academia, Sales, etc.
- BEM issue "license" to P.Eng. → 'Submitting Person' under the Building Laws

Street, Drainage and Building Act 1974 (Act 133) Part I, 3. Interpretation

"principal submitting person" → means a qualified person who submits building plans to local authority for approval in accordance with this Act or any bylaws made thereunder and includes any other qualified person who takes over the duties and responsibilities of or acts for the first mentioned qualified person;

"qualified person" → means a Professional Architect, Professional Engineer or building draughtsman registered under any written law relating to the registration thereof;

Street, Drainage and Building Act 1974 (Act 133) Part I, 3. Interpretation

"submitting person" → means a qualified person who submits plans other than building plans to the local authority or relevant statutory authority in accordance with this Act or any by-laws made thereunder and includes any other qualified person who takes over the duties and responsibilities of or acts for the first mentioned qualified person;

With the amendments the "principal submitting person", "qualified person" or "submitting person" shall only mean "professional engineers with a practising certificate in force" which have the entitlement as stated in the Engineers Act.

Submitting Persons should take note.

Reason for 2-Tier registration:

- The activities of P.Eng. acting as 'Submitting Person' → has a direct and critical impact on public safety and interest.
- They would need to be examined on their competency to be a 'Submitting Person'.
- Those not involved as 'Submitting Person' need not sit for this exam (Professional Competency Exam) but can still retain their professional status and the title of "Ir." through a "two-tier registration" system.

BEM WORKING GROUP REVIEWED PURPOSE OF THE ACT (A fundamental issue of an Act's existence)

The Engineers Act was enacted in 1967 to protect the public by legislative control so that the practice of engineering, which has a bearing on <u>public safety</u>, health and <u>welfare</u>, can only be carried out by <u>licensed professional engineers</u>.

To set regulations pertaining to the practice of engineering; qualifications for licensing and code of professional conduct for Registered Engineers.

To maintain public confidence in the standard of <u>engineering services</u> provided by <u>licensed professional engineers</u>.



Bukit Antarabangsa



Jaya Supermarket

The above recommendations in 2007 are now embodied in the amended Engineers Act

Is the Engineers' Act Over-regulating the Engineering Industry?

That may stifle Malaysia's growth or do it need to be regulated

BEM Regulates Everything on Engineering

The Engineers Act states that;

"No person shall, unless he is a Professional Engineer, practise, carry on business or take up employment which requires him to carry out or perform professional engineering services," and

"professional engineering services means engineering services and advice in connection with any feasibility study, planning, survey, design, construction, commissioning, operation, maintenance and management of engineering works or projects and includes any other engineering services approved by the Board"

As a result the Board can act on almost any person whose work has anything that can be construed by the Board as engineering.

The Board of Engineer registers engineer in over 90 engineering disciplines; from aeronautical, agriculture, automotive, bioengineering, chemical, civil, structural, electrical, electronics, mechanical, environmental, geotechnical, highway, hydraulics, industrial, material, mechatronics, microelectronics, mining, nuclear, petroleum, natural gas, transport, water etc. etc.

Over-regulation can stifle the engineering industry

Is the Act Stifling the Engineering Industry?

Repeal the Registration of Engineers Act. The UK, Australia & India for e.g. do not need to have an Engineers Act. The public in these countries are protected by other laws (and the justice system) in the country which is sufficient to safeguard & protect public interest.

Without any ACT it is an open market that does not restrict anyone calling themselves "Engineers". Anybody in these countries can call themselves "Engineers". In fact the tradesman are registered e.g. Plumbers and not Engineers. Yet the system functions.

Self-regulation and peer recognition appears to be working well. The Chartered Engineer status (equivalent to a P.E.) from the UK Institutions is highly regarded. For example M.Istruct Eng. is automatically recognise in Hong Kong & China by the local authorities.

The theory for open market is that consumers benefits i.e. it encourages competition & lower the costs of the services to be provided to the public.

Why not in Malaysia? Is the public ready to accept self-regulation by Engineers? Is our current Laws (and the justice system) sufficient to protect the public?

The Engineers Act was in response to a building failure four decades ago. After more than 40 years of its existence; is Malaysia mature enough for self-regulation?

And yet other countries such as Canada, USA & New Zealand consider that an Engineers Act is still

Finding the Right Balance between *Laissez-faire* and Over-regulation

Governments are responsible for protecting the public interest and the collective good. To accomplish these crucial roles, they create legislation & regulations to ensure that the public interest will be served.

Because of the important role engineers play, governments have set certain limits for the profession, defining standards & expectations for the qualification & ethical behaviour of professional engineers. To govern the profession of engineering in Canada

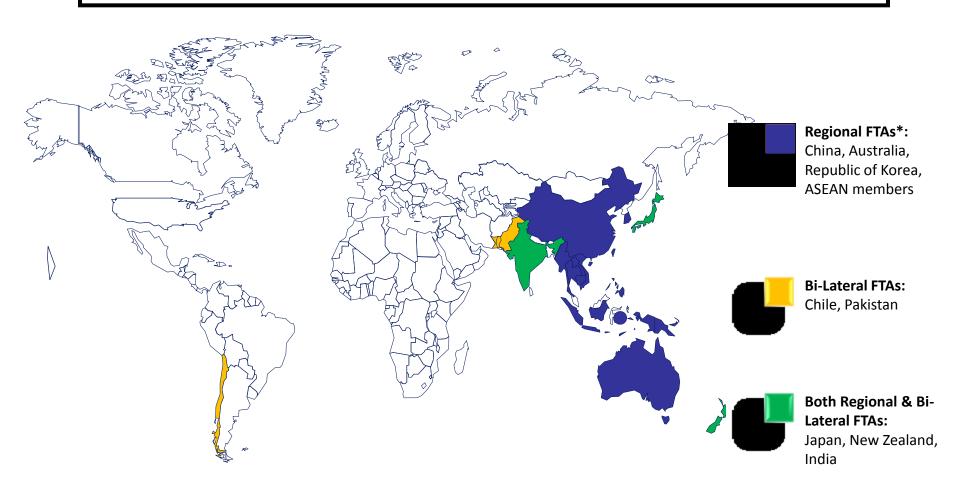
- (1) Defines the range of activities which may be considered "engineering" including the scope of practice for engineers, and which <u>professional activities are so</u> <u>critical to public safety and the public good</u> that only a licensed engineer can undertake them;
- (2) Creates or recognizes provincial or territorial engineering licensing bodies, describing how they are to be governed and mandating them to carry out tasks like licensing and regulating the profession;
- (3) Outlines the regulations pertaining to the profession of engineering, such as who can use the term "engineer", what academic qualifications are required to be a professional engineer and how professional misconduct should be handled.

"Canadian Council of Professional Engineers"

Then came along the issue of liberalization

Primarily Driven by the Government's Commitments in Free International Trade....

MALAYSIA'S CURRENT COMMITMENTS IN INTERNATIONAL TRADE



^{*} Under ASEAN membership

Malaysia's liberalization efforts are predominantly focused within Asia Pacific and nearby regions...

MALAYSIA'S INTERNATIONAL TRADE AGREEMENTS

MULTILATERAL

REGIONAL

BILATERAL

Global Trade Organizations

World Trade Organization (1957)

Global Free Trade Agreements

General Agreement on Trade in Services (Jan 1995)

Regional Free Trade Agreements

AFTA (Jan 1992) AFAS (Dec 1995) TPP (Under negotiations) EU (Under negotiations)

Liberalization Framework

AFAS - Progressive liberalization of selective sectors (Dec 1995)

Bilateral Free Trade Agreements

- ASEAN-China (Jul 2003)
- •ASEAN Japan (Oct 2003)
- •ASEAN-Korea (Dec 2005)
- ASEAN-Australia/NZ (Jan 2010)
- •ASEAN India (Jan 2010)
- •Etc.

Bilateral Free Trade Agreements

- Malaysia-Japan (Dec 2005)
- •Malaysia-Pakistan (Jan 2008)
- Malaysia-New Zealand (Oct 2009)
- Malaysia Chile (Nov 2010)
- Malaysia Aust (Under negotiations)
- Malaysia-USA (Under negotiations)
- etc

For the Services sector these have been identified by the Government under

IMP3 and NKEA (Strategic Reform Initiatives)....

MALAYSIA'S COMMITMENTS IN ASEAN FOR SERVICES

(Asean Framework Agreement on Services Timeline)

	IMP3 & NKEA PROMOTED SERVICES SECTOR				
	PRIORITY SECTORS		NON-PRIORITY SECTORS		
SERVICE SECTOR	(1) ICT, (2) Tourism, (3) Healthcare	(1) Logistics	(1) Business & Professional Services, (2) Distributive Trade, (3) Construction, (4) Education, (5) Oil, Gas & Energy		
END DATE FOR LIBERLISATION	2010	2013	2015		
FOREIGN EQUITY PARTICIPATION	- 49% by 2006 - 51% by 2008 - 70% by 2010	- 49% by 2008 - 51% by 2010 - 70% by 2013	- 30% by 2006 - 49% by 2008 - 51% by 2010 - 70% by 2015 * Construction not less than 51% by 2006		

PROFESSIONAL SERVICES INDUSTRY STRUCTURE

PROFESSIONAL SERVICES

Central Product Classification (CPC)

REGULATED SECTORS

(Governed by Acts of Parliament)

Legal (AG) – CPC 86190

Accounting (MOF) – CPC 862

Taxation (MOF) - CPC 863

Architectural (MOW) - CPC 8671

Engineering (MOW) – CPC 8672

Urban Planning (MOHLG) – CPC 8674

Quantity Surveying (MOW) – None yet

UNREGULATED SECTORS

(Not governed by any Acts of Parliament)

Integrated Engineering (MOW) – CPC 8673

Landscape architecture (MOHLG) CPC 8674

The professional services sector consists of various sub-segments that play a crucial role in economic growth...

MALAYSIA'S CURRENT COMMITMENTS

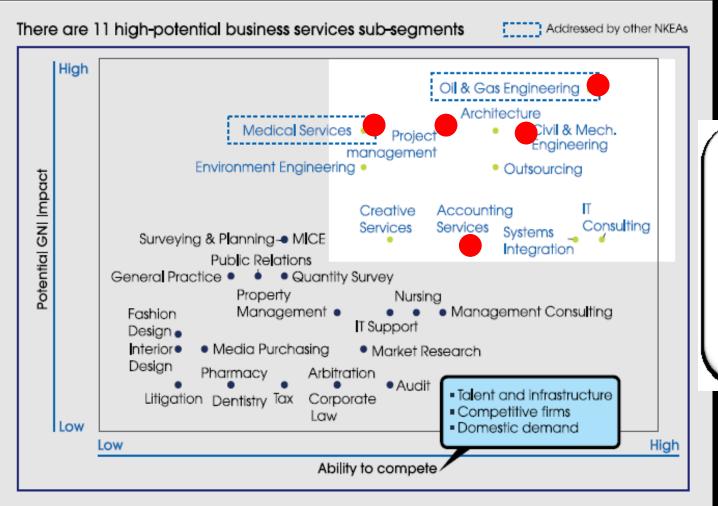
	PROFESSIONAL SERVICES SECTOR (Foreign Equity)
AFAS Threshold for Equity (Asean Framework Agreement on Services)	2008: 49% 2010: 51% 2015: 70%
AFAS 8 th Package	Multi-disciplinary Practice : 30% open to anybody/persons (Architectural, Engineering & Quantity Surveying) Single-disciplinary Practice Architectural (CPC 8671) : 0% Engineering (CPC 8672) : 0% Integrated Engr (CPC 8673) : Unregulated Quantity Surveying(None yet) : 0%
Cabinet Decision 14 November 2008	2012: 100%
Budget 2012 Announcement by YAB Prime Minister 7 October 2011	Architectural : 100% by 2012 Engineering : 100% by 2012

Till to-date the professional acts have not been amended to reflect Malaysia's commitments

For the Professional Services the Government has conducted two recent studies by EPU and PEMANDU(ETP) which reached similar conclusions

Why liberalize and a case for change ...

PROFESSIONAL SERVICES GROWTH AREAS



HIGH IMPACT

- Civil & Mech. Engr
- Oil & Gas Engr
- Environmental Engr
- Architecture
- Information Tech.
- •etc.

Sourced from ETP Roadmap & EPU study reached similar conclusions

One of the high growth sectors is accredited professional services sector that comprise engineering, architecture, medical ...

PROFESSIONAL SERVICES INDUSTRY IN A NUTSHELL

CURRENT STATE OF THE INDUSTRY

- 1 Sector lacks capacity to compete on a bigger scale
- Professional services sector are predominantly made up of small firms

- **2** Restrictions on foreign professional services firms
- There are many restrictions against foreign firms practicing in Malaysia

- Restrictions on foreign professionals
- Foreign
 professionals are restricted to practice in many ways

Amendments to the Professional Acts must focus on safeguarding & the protection of public safety & interest...

THE BALANCING ACT

CONS

- Foreign providers crowd out domestic providers
- Potential outflow of money from Malaysia - with foreign providers and shareholders repatriating profits
- Increased risk of financial instability due to increased exposure to global economic events
- Risk of brain drain
- Risk of environmental degradation



PROS

- Opportunity for Malaysia to compete internationally, -contributing to GDP growth and generating foreign exchange
- Improves the overall business environment
- 1. Introduction of international best practices, better skills and technology
- 2. Entry of foreign service providers can lead to better services for domestic consumers
- 3. Improve the performance and competitiveness of domestic service providers
- 4. Attract foreign direct investment into the country

Finding the balance between liberalization and protectionism...

For Consulting Engineers the Market is Worldwide

Global construction output in 2010 was about USD \$6 trillion

Global GDP in 2008 was about USD \$61 trillion and construction output is 10% of the GDP which makes construction an important industry.

The <u>professional engineering services demand is USD \$270 billion</u> in 2010 and has risen to <u>USD \$330 billion in 2013</u> which is mainly in the following areas;

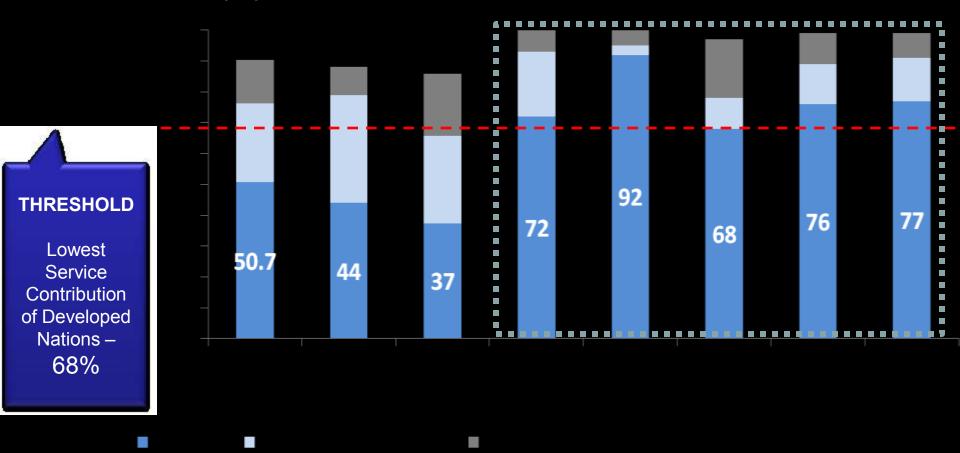
Transport	54%
Industry & Commercial buildings & facilities	20%
Land development	14%
Drainage, water & waste	12%

The global market is all about **Quality**, Integrity, Sustainability, Innovation and Capacity Building

Source: FIDIC Federation International of Consulting Engineers

END RESULT - SERVICE SECTOR BENCHMARKING

Sectoral share (%) of GDP



Sourced from Global Competitiveness Report 2010 – 2011

Sources: The World Bank; Economist Intelligence Unit. Note: Data are for 2008 or the most recent year available.

Contribution of services to GDP in Malaysia is low compared to the developed nations; we need to increase this by....

For amendments to the Professional Acts the following Modes of access to be considered

Mode 1 Cross-border trade

Mode 2 Consumption abroad

Mode 3 Commercial presence

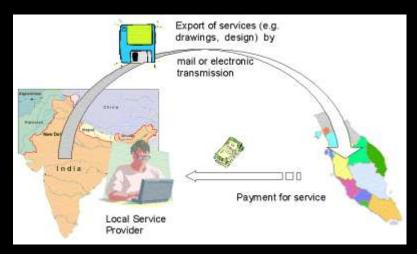
Mode 4 Movement of natural persons

The Supply of Professional Services

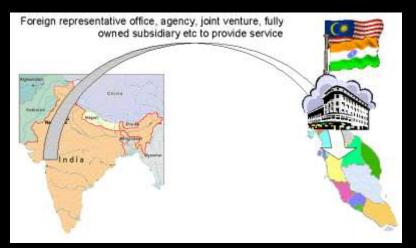
Modes of Access

Mode 1 – Cross Border Trade

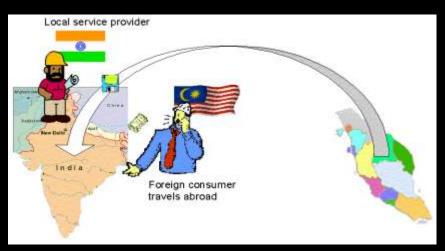
Many design services/payment are electronically transmitted



Mode 3 - Commercial Presence
Currently not possible under the Professional Acts

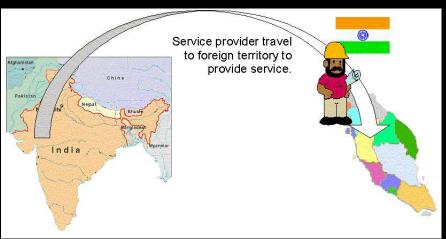


Mode 2 – Consumption Abroad Many Clients already appoint foreign firms



Mode 4 – Presence of Natural Person

Currently not possible under the Professional Acts (Except thro' temporary registration)



GENERAL REQUIREMENTS CONSIDERED IN AMENDING THE PROFESSIONAL ACTS

GATS stipulates that measures relating to qualification requirements and procedures, technical standards and licensing requirements should not constitute unnecessary barriers to trade in services.

Rules & procedures should be;

- Based on objective & transparent criteria, such as competence and the ability to supply the service.
- Not more burdensome than necessary to ensure the <u>quality of</u> <u>service</u>.
- In the case of licensing procedure not in themselves <u>a</u> restriction on the supply.

Note: Certification, licensing etc. of service suppliers may be based on MRA or may be accorded autonomously.

What needs to be done for the Registration of Engineers Act

Taking the next step...

CURRENT SECTIONS IN THE PROFESSIONAL ACTS TO BE AMENDED IN VIEW OF LIBERALIZATION

Professional services involved movement of natural persons and commercial presence will require the Acts to be amended namely in two areas;

Registration of Professional Engineers

Sections of the ACT to be amended to automatically recognize the qualifications, experience and registration of a professional irrespective of citizenship status.

- Section 7 Restrictions on unregistered persons etc.
- Section 8 Only Professionals may submit plans, drawings etc.
- Section 10 Qualifications for registration
- Section 10A Registration of Temporary Professionals

Registration of Firms/Companies

Sections of the ACT to be amended in the registration of Companies to be less restrictive especially with regards to shareholdings and ownership.

- Section 7A Single Disciplinary Practice (SDP)
- Section 7B Multi-disciplinary Practice (MDP)

PUBLICATION OF THE ACT (Amendments 2015)

REGISTRATION OF ENGINEERS ACT 1967

(Incorporating amendments up to 2015)



LEMBAGA JURUTERA MALAYSIA BOARD OF ENGINEERS MALAYSIA The Act (Amendments 2015) comprises:

Preamble

Part I - Preliminary

Part II - Board of Engineers

Part III - Registration of Engineers

Part IIIA- Disciplinary Committee

Part IV - Cancellation, Removal, Reinstatement, etc

Part V - General

PART I - PRELIMINARY

Section 2. Interpretation (New definitions)

"Professional Engineer with a Practising Certificate" means a person registered under section 10D;

"Engineering Technologist" means a person registered under section 10C;

"Inspector of Works" means a person registered under section 10E;

"registered Person" means a registered Engineer, Engineering Technologist or Inspector of Works;

PART I - PRELIMINARY

Section 2. Interpretation (Definition deleted)

registered-undersesuon-1-0/A:

PART I - PRELIMINARY

Section 2. Interpretation (New definitions)

The Engineers Act states that;

"professional engineering services means engineering services and advice in connection with any feasibility study, planning, survey, design, construction, commissioning, operation, maintenance and management of engineering works or projects and includes any other engineering services approved by the Board"

"Engineering works" means all works which include any publicly or privately owned public utilities, buildings, machines, equipment, processes, works or projects that requires the application of engineering principles and data;

PART II - BOARD OF ENGINEERS

Section 3(2). Establishment of Board of Engineers (New re-definition)

The Board shall consist of the following members who shall be Malaysian citizens and who are appointed by the Minister;

- (a) A President who shall be a Professional Engineer or a <u>Professional Engineer with Practising Certificate</u>
- (b) Not more than fourteen members who shall be Professional Engineers and Professional Engineers with Practising Certificate

At least 50% or 8 members of the Board shall be Professional Engineers with a Practising Certificate in force.

PART II - FUNCTIONS OF THE BOARD

Section 4.(1)(ed)(i) – Re-definition

The functions of the Board shall be:

the

Professional Assessment Examination examinations the

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PART II – FUNCTIONS OF THE BOARD

Section 4.(1)(ed)(ii) — New sub-section

The functions of the Board shall be:

the

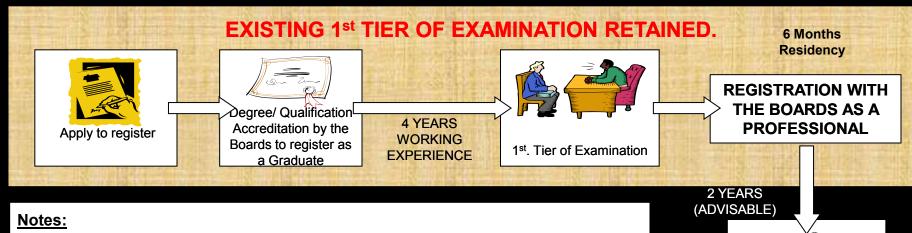
Professional Competency Examination
examinations or to cause examinations to be
conducted by an institution recognized by the
Board admission to the
profession issuing a Practising Certificate to
Professional Engineers

THE PROFESSIONAL COMPETENCY EXAMINATION

The Professional Competency Examination (PCE) that is being developed → Construction/Building Industry

- The PCE → for Professional Engineers (P.Eng.) in engineering disciplines of Civil, Mechanical and Electrical → 'Submitting Person' under the Building Laws ← BEM issue "license".
- BEM will be developing PCE for other engineering disciplines eg. Chemical, Oil & Gas, Environmental, Aeronautical, Marine, etc in the future.

AMENDMENTS TO THE REA Professional Competency Examination



Registration with the BEM as Graduate Engineer or Engineering Technologist is straight-forward provided that conditions such as the basic qualifications are met (eg. Engineering degrees recognised under the Washington Accord or the Sydney Accord).

Registration as a Professional with BEM after passing the 1st. tier examination. However if foreign professionals can demonstrate the same applies to their home countries the Boards may consider them to be registered.

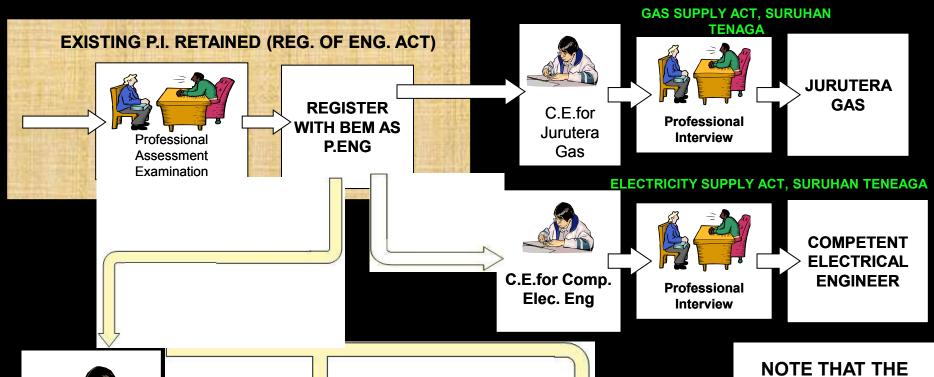
To 'practise' and supply professional engineering services BEM will issue licenses upon passing the Professional Competency Exams i.e. the 2nd. tier of registration. This is compulsory for all professional engineers wishing to supply professional engineering services. Such competency examinations are common in developed countries.



LICENSED TO SUBMIT PLANS UNDER 'S.D.B. ACT'

..... AND FOR ENGINEERS

there are other Competency Examinations



Professional Competency Examination PRACTICING
CERTIFICATE FOR
SUBMITTING PERSON
UNDER 'S.D.B. ACT'
(Building Industry)

PRACTICING CERTIFICATES
FOR OTHER ENGINEERING
DISCIPLINES

NOTE THAT THE SPAN ACT NOW REQUIRES THE ENGINEER OR ARCHITECT TO BE REGISTERED WITH THEM.

Amendments to Section 10 of the REA

Which will allow registration of natural persons.....

PART III - REGISTRATION OF ENGINEERS

Section 10.(4) – Re-definition

Subject to this Act, only a citizen or a permanent resident of Malaysia may qualify for registration as a Graduate Engineer or Professional Engineer and no person shall be entitled to be registered as a Professional Engineer and Professional **Engineer with a Practising Certificate in force** unless he is at the time of application for registration, and has been for a period of not less than six months prior to the date of application, residing in Malaysia.

PART III – REGISTRATION OF ENGINEERS Engineering Technologist

Section 10C. – New sub-section

10C(1) A person who holds any qualifications which is recognized by the Board shall be entitled on application to be registered as an Engineering Technologist

10C(2) A person who is registered as an Engineering Technologist under subsection (1) shall be entitled upon fulfilling the requirement as a Graduate Engineer under subsection 10(1) on application to be registered as a Graduate Engineer

PART III – REGISTRATION OF ENGINEERS Graduate Engineers

Section 10.(1)(a) - Retained

Subject to this Act, a person who holds -

- (a) the qualifications required for Graduate
 Membership of the Institution of Engineers
 (Malaysia) and which are recognised by the Board;
 or
- (b) any qualification in engineering which is recognised by the Board,

shall be entitled on application to be registered as a Graduate Engineer.

PART III – REGISTRATION OF ENGINEERS Professional Engineers

Section 10.(2)(a)(ii) - New sub-section

To register as a Professional Engineer

- (a) any person –
- (i) who is registered as Graduate Engineer and has obtained the practical experience under paragraph (1)(b)
- (ii) who -
 - (A) has passed a professional examination conducted by the Board;
 - (B) holds a professional qualification which the Board considers to be equivalent to the professional assessment examination conducted by the Board; or
 - (C) is a corporate member of the Institution of Engineers (Malaysia); and
- (iii) who has complied with all the requirements of the Board;

PART III – REGISTRATION OF ENGINEERS Prof. Engineers with Pract. Certificate

Section 10D. - New Section

A person shall be entitled on application to be registered as a Professional Engineer with Practising Certificate if —

- (a) the person is a registered Professional Engineer;
- (b) the person has passed a Professional Competency Examination conducted by the Board; and
- (c) the person has complied with all the requirements of the Board;

PART III – REGISTRATION OF ENGINEERS Inspector of Works

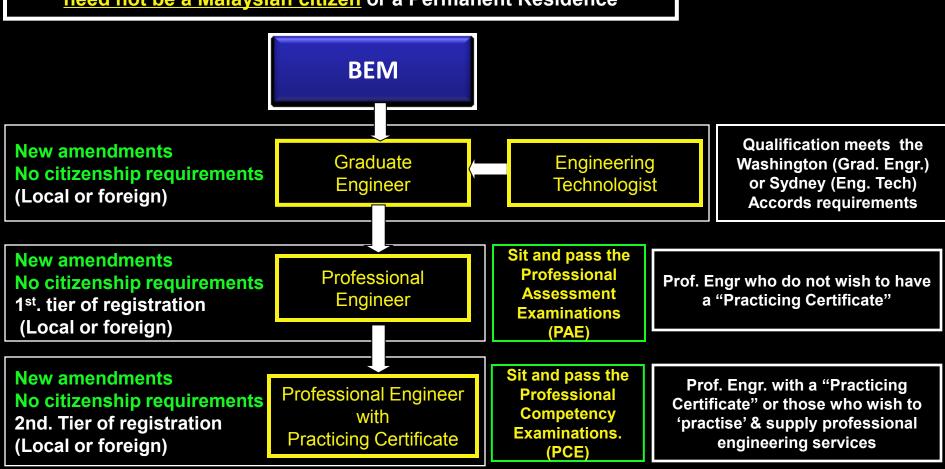
Section 10E. - New Section

A person who holds any qualification which is recognized by the Board shall be entitled on application to be registered as an **Inspector of Works**.

SUMMARY OF THE AMENDMENTS TO THE REA

Registration of Natural Persons (Mode 4)

Section 10(4) of the Act amended for registration with the Board one need not be a Malaysian citizen or a Permanent Residence



This amendment "undo" the amendment to the Act in 1987

Amendments to Section 7A & 7B of the REA

Which will allow commercial presence.....

PART III – REGISTRATION OF ENGINEERS Engineering Consultancy Practice

Section 7A.(3)(a) - Revised

The Board shall register as Engineering Consultancy practice ... if –

- (a) in the case of the sole proprietorship, the sole proprietor is a with a Professional Engineer with a Practising Certificate;
- (b) in the case of the partnership, all the partners are Professional Engineers <u>each with a Practising</u>

 <u>Certificate; or</u>

PART III - REGISTRATION OF ENGINEERS **Engineering Consultancy Practice**

Section 7A.(3)(c) - Revised

EXISTING ACT – Section 7A(3)(c)		AMENDED ACT – Section 7A(3)(c)
The Board shall register as an Engineering Consultancy practice if –		The Board shall register as an Engineering Consultancy practice if –
(i)	it has a board of directors who are professional engineers;	(i) it has a board of directors who shall be subject to such conditions and qualifications as may be prescribed by the Board;
(ii)	has shares held by members of the board of directors mentioned in paragraph (i) solely or with any other persons who are Professional Engineers; and	(ii) its shareholdings shall be as prescribed by the Board; and
(iii)	has a minimum paid-up capital which shall be of an amount to prescribed	(iii) has a minimum paid-up capital which shall be of an amount to be prescribed by the Board

PART III – REGISTRATION OF ENGINEERS Engineering Consultancy Practice

Section 7A.(3)(c)(iv) - New sub-section

- (iv) the day to day affairs of the body corporate shall be under the control and management of a person who -
 - (A) is a Professional Engineer with a Practising Certificate;
 - (B) is authorized under a resolution of the board of directors of the body corporate to make all final engineering decisions on behalf of the body corporate in respect of the requirements under this Act or any other law relating to the supply of professional engineering services by the body corporate

PART III – REGISTRATION OF ENGINEERS Multi-disciplinary Practice

Section 7B(1) - Amended section

Where a body corporate carries on a practice of a combination of services; providing professional engineering services, architectural consultancy services or quantity surveying services, the Board may, subject to such conditions or restrictions as it may deem fit to impose, register that part of the practice providing professional engineering services.

PART III – REGISTRATION OF ENGINEERS Multi-disciplinary Practice

Section 7B.(2) - Revised

EXISTING ACT – Section 7B(2)

The body corporate that applies for registration under subsection (1) must be incorporated under the Companies Act 1965 and –

- (a) has a board of directors comprising Professional Engineers, Professional Architects and/or registered Quantity Surveyors;
- (b) has shares held by the persons mentioned in paragraph (a) and any of the following persons and/or bodies corporate where – etc. etc.
- (c) has a minimum paid-up capital which shall be of an amount as prescribed

AMENDED ACT – Section 7B(2)

The body corporate that applies for registration under subsection (1) must be incorporated under the Companies Act 1965 and –

- (a) it has a board of directors who shall be subject to such conditions and qualifications as may be prescribed by the Board;
- (b) <u>its shareholdings shall be as</u> prescribe by the Board; and

(c) It has a minimum paid-up capital which shall be of an amount to be prescribed by the Board

PART III – REGISTRATION OF ENGINEERS Multi-disciplinary Practice

Section 7B.(2)(d) - New sub-section

- (iv) the day to day affairs of the body corporate shall be under the control and management of a person who -
 - (A) is a Professional Engineer with a Practising Certificate;
 - (B) is authorized under a resolution of the board of directors of the body corporate to make all final engineering decisions on behalf of the body corporate in respect of the requirements under this Act or any other law relating to the supply of professional engineering services by the body corporate

AMENDMENTS TO THE ACT IN SUMMARY Commercial Presence (Mode 3)

As the BEM can register professional engineers of any nationality, the firms under which they provide the services may have 100% foreign equity

HOW PROFESSIONAL SERVICE IS PROVIDED	REGISTRATION WITH THE BOARD OF ENGINEERS MALAYSIA
INDIVIDUAL ENGINEERS	Engineers of any nationality can be registered with the Board.
SINGLE DISCIPLINARY PRACTICE Sole Proprietorship Partnership Body Corporate	100% foreign equity allowed with 30 % equity open to all and 70% for Professional Engineers with Practicing Certificate for body corporate (Prescribed in Regulations)
MULTI-DISCIPLINARY PRACTICE Body Corporate	100% foreign equity allowed with 30% equity open to all and 70% equity for Prof. Eng/Arch/QS (Existing Act already allow)
MANAGEMENT OF THE FIRM OF A BODY CORPORATE	At least 2/3s of the Directors in the Board of Directors must be Professional Engineers with Practicing Certificates (Prescribed in Regulations)

AMENDMENTS TO THE ACT IN SUMMARY Commercial Presence (Mode 3)

Local or foreign engineers can register with BEM under Section 10 & hence can set-up a business entity registered with BEM.

Registration with Boards as a Business Entity

Engineering Consultancy Practice (Section 7A)

Multi disciplinary practice registered under Section 7B to follow the same format for equity and Board of Directors under Section 7A.

Sole Proprietorship

Must be Professional Engineer (local or foreign) with Practising Certificate (P.C.)

Partnership

Partners must be Prof. Engineer (local or foreign) with Practising Certificate (P.C.)

Body Corporate

70% equity for local or foreign P.E. with P.C.

30% equity by any person/bodies

Equity prescribed in Regulations

Management of the Firm Board of Directors

At least 2/3s of Directors must be P.E. with Practising Certificate (local or foreign) Remaining 1/3 can be anybody/person and must named a P.E. with P.C. in charge

Composition of Board of Directors prescribed in Regulations

EQUITY REQUIREMENTS

SECTION 7A(3)(c)(ii) & **REGULATION 34A(1)(b) & (c)**

Single Discipline

1% to 29% for anybody or persons

100% for P.E. with PC

99% to 71% for P.E. with PC

Max. 30% for anybody or persons

70% for P.E. with PC

SECTION 7B(2)(b), (3) & REGULATION 34A(2)(b),(c) & (d)

Multi-discipline

anybody or persons

90% for P.E. with PC, Architects & Quantity Surveyors

Min. 10% for P.E. with PC

1% to 29% for

89% to 61% for P.E. with PC, Architects & Quantity Surveyors

Min. 10% for P.E. with PC

Max. 30% for anybody or persons

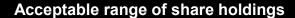
60% for P.E. with PC. Architects & Quantity Surveyors

Min. 10% for P.E. with PC











COMPOSITION OF BOARD OF DIRECTORS

SECTION 7A(3)(c)(i) & REGULATION 34B(1)(a), (b) & (c)

Single Discipline

All Directors are P.E. with PC

Max. 1/3 of **Directors** can be anybody or persons

2/3's of **Directors are** P.E. with PC

SECTION 7B(2)(a) & REGULATION 34B(2)(a),(b) & (c)

Multi-discipline

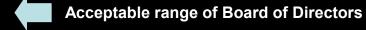
All Directors are for P.E. with PC. Architects & Quantity Surveyors

Min. 1no. for P.E. with PC

Max. 1/3 of **Directors can** be anybody or persons

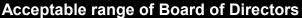
2/3's of **Directors are** P.E. with PC, Architects & Quantity Surveyors

Min. 1 no. for P.E. with PC









Exclusive entitlements of Registered Persons

Amendments to Section 7 & 8.....

PART III – REGISTRATION OF ENGINEERS Inspector of Works, Engineering Technologist & Graduate Engineers

Section 7(2). - New Section

Not withstanding subsections (1) and (1A) –

- (a) a Graduate Engineer may, subject to section 8, take-up employment which requires him to perform professional engineering services;
- (aa) an Engineering Technologist may, subject to section 8, take-up employment which requires him to perform professional engineering services;
- (ab) an Inspector of Works may, subject to section 8, shall register with the Board to take-up employment which requires him to assist the Professional Engineer in the supervision of engineering works;

PART III – REGISTRATION OF ENGINEERS

Professional Engineer & Professional Engineer with Pract. Cert.

Section 7.(1)(a) - amended section

No person shall, unless he is a Professional Engineer -

practise, carry on business or

PART III - REGISTRATION OF ENGINEERS

Professional Engineer & Professional Engineer with Pract. Cert.

Section 7.(1A)(a) - new section

A person shall not, unless he is a Professional Engineer with a Practising Certificate -

(a) practise, carry on business or take up employment which requires him to carry out or perform professional engineering services for designated engineering works subject to the provisions in Section 8;

PART III – REGISTRATION OF ENGINEERS Engineering Technologist & Graduate Engineers

Section 7(1B). - New Section

A person shall not, unless he is a Graduate Engineer or Engineering Technologist be entitled to describe himself or hold himself out under any name, style or title using the abbreviation "Grad. Eng." or "Eng. Tech." after his name or in any way in association with his name.

PART III – REGISTRATION OF ENGINEERS

Professional Engineer & Professional Engineer with Pract. Cert.

Section 7.(1)(aa) — Section retained

No person shall, unless he is a Professional Engineer -

- (a) be entitled to describe himself or hold himself out under any name, style or title
 - (i) bearing the words "Professional Engineer"
 - (ii) bearing any other word whatsoever in any language which may be reasonably construed to imply he is a Professional Engineer; or
 - (iii) using the abbreviation "Ir." before his name or the abbreviation "P.Eng." after his name

PART III – REGISTRATION OF ENGINEERS

Professional Engineer with Pract. Cert.

Section 8.(1) – Amended section

Except as otherwise provided under any other written law, no person or body, other than a **Professional Engineer with a Practising Certificate** who is residing and practising in Malaysia or an ECP providing professional engineering services in Malaysia shall be entitled to submit plans, engineering surveys, drawings, schemes, proposals, reports, designs or studies to any person or authority in Malaysia.

PART III – REGISTRATION OF ENGINEERS

Professional Engineer

Section 8A. - New section

Subject to this Act, any person who is a Professional Engineer shall be entitled to submit plans or drawings where such plans or drawings are in connection with equipment, plant or specialised product invented or sold by him or his employer. For the purpose of this section the expression "employer" shall not include a client.

ENTITLEMENTS OF REGISTERED PERSONS UNDER THE ENGINEERS ACT

ENTITLEMENTS	SECTION	ENGINEERING TECHNOLOGIST	GRADUATE ENGINEER	PROF. ENGR.	PROF. ENGR. (with Practice Cert.)
(a) Practise or carry on business which requires him to carry out or perform professional engineering services	Sect. 7(1)(a)	NO	NO	NO	YES
(b) Take up employment which requires him to carry out or perform professional engineering services	Sect. 7(1)(a)	YES	YES	YES	YES
(c) Use title "Professional Engineer" or the equivalent thereto in any other language	Sect. 7(1)(aa)	NO but use Eng. Tech.	NO but use Grad. Eng.	YES	YES
(d) Use "Ir." & "P. Eng" before or after the name	Sect. 7(1)(aa) (ii)	NO	NO	YES	YES
(e) Display sign, card or other device implying he is a Professional Engineer	Sect. 7(1)(b)	NO	NO	YES	YES
(f) Entitled to recover in any court any fee, charge, remuneration or other form of consideration for any professional engineering services rendered	Sect. 7(1)(c)	NO	NO	NO	YES

ENTITLEMENTS OF REGISTERED PERSONS UNDER THE ENGINEERS ACT (Cont' d)

ENTITLEMENTS	SECTION	ENGINEERING TECHNOLOGIST	GRADUATE ENGINEER	PROF. ENGR.	PROF. ENGR. (with Practice Cert.)
(g) Entitle to use prescribed P.E. stamp	Sect. 7(1)(c)	NO	NO	YES	YES
(h) Entitled to use prescribed Practice Certificate	Sect. 7(1)(A)(i)	NO	NO	NO	YES
(i) Entitled to submit plans, engineering surveys, drawings, schemes, proposal, reports, designs or studies (only if he is residing in Malaysia)	Sect. 8(1)	NO	NO	NO	YES
(j) Entitled to (i) only in relation to the branch of engineering he is registered in	Sect. 8(2)	NO	NO	NO	YES
(k) Not prohibited to make valuations of any structure, plant, machinery & equipment, and making valuations for mining purposes, in connection with his professional practice	Sect. 8(3)	Prohibited	Prohibited	Prohibited	Not prohibited
(I) The right to be heard before the Board makes order of punishment under Section 15(1A)	Sect. 15(2)	YES	YES	YES	YES

Liberalization does not mean deregulation

That is why safeguard measures are ...

SAFEGUARD MEASURES ARE NECESSARY

THE RISKS OF LIBERLISATION

To safeguard local and national policies so that are not negatively affected

To protect the public against hazards of sub-standard services by foreign imports

To ensure that liberalisation promotes economic growth as originally intended

To ensure that local professionals can withstand any destabilizing and debilitating effects from the entry of foreign professionals.

To prepare capacity building programmes for local professionals

Safeguard measures in developed countries are even more comprehensive when compared to developing countries ...

Developed Countries Introduce Competency Examinations When they Liberalize as a "Safeguard" Measure

<u>Paper from Engineers Australia to Department of Foreign Affairs & Trade on the Australia – Malaysia Free Trade</u> Agreement October 2004

"There is <u>no specific nationality, citizenship or residency requirements</u> for registration by the National Engineering Registration Board or membership of Engineers Australia to practice as a professional engineer in Australia. <u>However applicants must demonstrate</u> <u>awareness of national and local standards, rules and practices; and be assessed as meeting the National Competency Standards for Professional Engineers."</u>

<u>Victoria – Building Act 1993</u> Requires building practitioners to be registered with the Building Practitioners Board which uses the test for competency.

Foreign Engineers to be Permitted to Practice in Taiwan, Jan. 14 2009

A <u>foreign engineer</u> who has been licensed to practice in Taiwan will be able to conduct professional engineering work and signing of engineering documents jointly with local engineers or independently and undertake other professional activities <u>and all documents and drawings related to work undertaken in Taiwan must use Chinese as the primary language</u>.

SAFEGUARD MEASURES IN SUMMARY

TO ENSURE THE QUALITY OF THE SERVICE & PROTECT PUBLIC INTEREST

1st. Safeguard Measure

Board register Graduates provided that their under graduate degree meets the standards set

2nd. Safeguard Measure

Board registers Professionals provided they have obtained the required technical competence or obtained it through an accredited programme overseas

3rd. Safeguard Measure

Before the issue of a 'license' the Professional must demonstrate competence in understanding the national & local standards, rules, regulations & laws

4th. Safeguard Measure

The 'license' is renewable every year subject to the Professional have undergone Continuous Professional Development programmes accredited by the Board

BOARD OF ENGINEERS

Basic undergraduate degree meets Boards' requirements

Pass the 1st. tier of examination (PAE)

Pass the 2nd. tier of examination i.e. the Competency Exams (PCE)

Issued a 'license' to supply services which is renewable every year. The license is not perpetual

Note: CPD also applies at the 1st. tier of registration

Competency Examinations for Engineers in Malaysia?

Is there a need or is the present Professional Engineers already "competent" ...

A Return to the Basics of P. Eng. Registration

The following issues require an URGENT reassessment of the current basis of Professional Engineer registration:

SEVERAL major construction failures within 24 months.

AWARENESS of 'duty of care' under torts.

SELF-REGULATION under Certificate of Completion & Compliance (C.C.C.) replacing the CFO.

COMMITMENT to liberalization under FTAs & the hazards to the public of substandard

A PROFESSIONAL COMPETENCY EXAM TO COMPLEMENT CURRENT PROFESSIONAL ASSESSMENT EXAM IS NECESSARY TO ADDRESS THE ISSUES OF:

- * **UPHOLDING** standards of professionalism.
- * MINIMUM standards of proficiency & competency in the building industry.
- * SAFEGUARD measure to protect the public against sub-standard foreign (and local) engineering service providers due liberalization

STATEMENTS FROM PUBLIC FIGURES HAVE BEEN UNFORGIVING

The Minister of Work's Y.B. Dato' Shaziman statement to the public after the collapse of the roof at Kuala Trengganu stadium and the Jaya Supermarket collapse during demolition works

Quote "Bangunan lama pun roboh, bangunan baru pun roboh dan bangunan nak diroboh pun roboh" Unquote should be in the annals of engineering.

Even Tan Sri Lee Lam Thye in his statement to the press has this to say after many incidents in the construction industry

Quote "it raises many questions concerning the professional conduct of the various parties involved in construction" and "there must be a moral reawakening in the building industry". Unquote

Are these construction failures avoidable or are they "An Act of God"?

PUBLIC OUTRAGE WAS SELF-EVIDENT ON THE CAUSE OF THE COLLAPSE !!!



Due to Ultraman wannabes?

Or due to Ultraman himself?



Cynicism was the order of the day

..... AND DURING THE DEMOLITION THE ROOF COLLAPSE AGAIN

Akibat pergaduhan pada runtuhan pertama

Ultraman bertanggungjawab membersihkan stadium



WITHER PROFESSIONALISM

The Collapse of Professionalism

New Straits Times 4th. June 2009

The Professional Engineer



Where is Professionalism Heading?

New Straits Times

4th. June 2009

Quote ".... we also loose a little more of the trust that we still have for the expertise and ethics of the architects and engineers. It is time for the professional associations and the statutory bodies to step up and act on any failure to carry out their duties with due care and diligence in accordance with the laws and ethics that govern their professions." Unquote

Existing Professional Engineers should take note

The requirements to obtain the Practising Certificate ...

AMENDMENTS TO THE ENGINEERS' ACT TO ADDRESS THE COMPETENCY OF PROFESSIONAL ENGINEERS

1ST. TIER OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ASSESSMENT EXAMINATION (PAE) (Existing examination)

The PAE in a nutshell;

"This examination tests a candidate on what he knows and not what he does not know".

2ND. TIER OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL COMPETENCY EXAMINATION (PCE)

The PCE is a new examination system to test the competency of professional engineers

"This examination tests a candidate on what he does not know and for which he ought to know".

EXISTING PROFESSIONAL ENGINEERS

Trial Examinations was conducted on existing P.E.s & only two(2) P.E.s pass out of 47.

- (1) If the Professional Competency Examination is to test a P.E. on what he does not know for which he ought to know can he then pass the examination ???
- (2) The Act and Regulations have come into force on the 31st. July 2015, do you then need to sit and pass the P.C.E. ??? Today is 22nd. October 2015.
- (3) To know the answers stay on and listen to the subsequent speakers

A SUMMARY OF THE PROFESSIONAL ENGINEER'S **LIABILITIES**

The Professional **Engineer**

Civil Law & Torts

Duty of care to the public



Public



BEM



Registration of Engineers Act

Breach of registration/ethics

Street, Drainage and Building Act

Breach of Regulations



Local Authorities



Fiduciary interest & duty of care to Client



Client

TIME LINE

THE AMENDMENTS TO THE REGISTRATION OF ENGINEERS ACT

- On the 20th. November 2014, the Minister of Works tabled the Bill to Dewan Rakyat of Parliament for 1st. Reading.
- On the 27th. November 2014, the Minister of Works tabled the Bill to Parliament for 2nd. Reading where it was debated at the Dewan. It was approved by Dewan Rakyat on the same date.
- On the 17/18th. December 2014, the Minister of Works tabled the Bill to Dewan Negara of Parliament for and it was approved on the same date after the debate.
- The Act has obtained Royal Accent on 14th February 2015 and subsequently gazetted on 28th February 2015.
- The Ministry of Works has appointed the DATE OF OPERATION AS 31ST.
 <u>JULY 2015</u> for the Act and Regulations.