LIBERALIZATION what does it all mean?

IS IT A TIME FOR CHANGE FOR THE ENGINEERING INDUSTRY & THE LAWS THAT GOVERNED IT?
Towards achieving a high income nation status by 2020 ...

Board of Engineers Malaysia (BEM)
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Primarily to ‘plug’ the ‘loopholes’ as the profession evolved …..

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Primarily driven by the Government’s commitments in International Free Trade Agreements (FTA) …..

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Or slowing down and needs to be changed & fixed …..

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PART 7 FOR AMENDMENTS TO THE ENGINEERS’ ACT THE MODE OF ACCESS MUST BE CONSIDERED
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PART 8 WHAT NEEDS TO BE DONE FOR THE REGISTRATION OF ENGINEERS ACT
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That is why “safeguard” measures are …..

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Which mimics the developed countries measures …..
The Professional Acts have previously been amended several times since 1967

Primarily to ‘plug’ the ‘loopholes’ as the Profession evolved…
# Overview of Previous Amendments

<table>
<thead>
<tr>
<th>LIST OF AMENDMENTS</th>
<th>REGISTRATION OF ENGINEERS ACT 1967 (ACT 138)</th>
<th>ARCHITECTS ACT 1967 (ACT 117)</th>
<th>QUANTITY SURVEYORS ACT 1967 (ACT 487)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
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<td>2007</td>
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<tr>
<td>TOTAL NO. OF AMENDMENTS</td>
<td>6</td>
<td>9</td>
<td>8</td>
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</tbody>
</table>
The Amendments to the Registration of Engineers Act

Primarily Driven by the Government’s Commitments in International Free Trade Agreements (FTA) …….
The Free Trade Agreements (FTA) Focused on the Liberalization of Goods & Supply of Services

Liberalisation

Goods
- Reduction in tariffs
- Disbandment of Non-Tariff Barriers
- Cross-border trade
- Consumption abroad

Services
- Commercial presence (FDI)
- Movement of natural persons

Source: Pemandu
Malaysia’s liberalization efforts are predominantly focused within Asia Pacific and nearby regions...
MALAYSIA’S INTERNATIONAL FREE TRADE AGREEMENTS

MULTILATERAL

Global Trade Organizations

Global Free Trade Agreements
- General Agreement on Trade in Services (Jan 1995)

REGIONAL

Regional Free Trade Agreements
- AFTA (Jan 1992)
- AFAS (Dec 1995)
- TPP (Under negotiations)
- EU (Under negotiations)

Liberalization Framework
- AFAS - Progressive liberalisation of selective sectors (Dec 1995)

BILATERAL

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)

Bilateral Free Trade Agreements
- Malaysia-Japan (Dec 2005)
- Malaysia-Pakistan (Jan 2008)
- Malaysia-New Zealand (Oct 2009)
- Malaysia – Chile (Nov 2010)
- Malaysia – Aust (May 2012)
- Malaysia-USA (Under negotiations)
Liberalization is relaxation of government restrictions, usually in areas of social or economic policy.

**WHAT?**
Liberalization

**HOW?**
Reduce government involvement in business and the removal of barriers to doing business.

**WHY?**
Create a more favorable investment environment characterized by ease of conducting business.

Liberalization benefits the economy by creating a conducive business environment...
Therefore, Malaysia should adopt a concerted execution of building capacity, easing regulations and opening doors...

**Reform of Regulations**
- *Removal of barriers to doing business*
  - RESULT: More favorable operating environment and investment climate

**Liberalisation of Entry Conditions**
- *Liberalisation of Entry, Ownership and Operations*
  - Result: Attract foreign players into Malaysia and allow domestic players better access to international markets

- *Relax the extent of procedures to operate business*
  - RESULT: Fosters growth by enabling quick execution of business decisions

**Capacity Building**
- *Supporting local players to enhance their long term competitiveness*
  - RESULT: To ensure that local players are ready to compete with foreign players

- *Leverage established mechanisms like Talent Corporation*
  - RESULT: Establish stronger inter-agency linkages

Source: Pemandu
Is Malaysia’s Economy Progressing Towards a Developed Nation Status?

Or slowing down and needs to be changed & fixed....
Contribution of services to GDP in Malaysia is low compared to the developed nations; we need to increase this by....

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.
Despite the increased investment, output growth of the services sector is slowing......
Malaysia’s competitiveness has also decreased over 3 years...


<table>
<thead>
<tr>
<th>Country</th>
<th>Rank 2010-2011</th>
<th>Rank 2009-2010</th>
<th>Score 2010-2011</th>
<th>Score 2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>3</td>
<td>3</td>
<td>5.48</td>
<td>5.55</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>2</td>
<td>5.43</td>
<td>5.59</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>11</td>
<td>11</td>
<td>5.30</td>
<td>5.22</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>12</td>
<td>13</td>
<td>5.25</td>
<td>5.19</td>
</tr>
<tr>
<td>Australia</td>
<td>16</td>
<td>15</td>
<td>5.11</td>
<td>5.19</td>
</tr>
<tr>
<td><strong>Malaysia</strong></td>
<td><strong>26</strong></td>
<td><strong>24</strong></td>
<td><strong>4.88</strong></td>
<td><strong>4.87</strong></td>
</tr>
<tr>
<td>Thailand</td>
<td>38</td>
<td>36</td>
<td>4.51</td>
<td>4.56</td>
</tr>
<tr>
<td>Indonesia</td>
<td>44</td>
<td>54</td>
<td>4.43</td>
<td>4.26</td>
</tr>
</tbody>
</table>

Rankings based on 12 pillars of competitiveness:
1) Institutions; 2) Infrastructure; 3) Macroeconomic stability; 4) Health and primary education; 5) Higher education and training; 6) Goods market efficiency; 7) Labor market efficiency; 8) Financial market sophistication; 9) Technological readiness; 10) Market size; 11) Business sophistication; and 12) Innovation


Malaysia's competitiveness has also decreased over 3 years...
We have not improved significantly & is stuck …..
How Do We Get Back on Track

To transform the Malaysian economy…
Competition Act 2010 aims to protect economic development and consumer interest through preventing anti-competitive practices and abuse of a dominant position.

Open markets to foreign investment, encouraging competition.

Improves access to international markets allowing Malaysian firms to export overseas.

Liberalization of Services

Implements Standards

Improves quality of Malaysian services, allowing Malaysian firms to procure locally and export overseas e.g. BEM accredits engineering degrees to meet the Washington Accord Agreement.

Competition Law

Competition Act 2010 aims to protect economic development and consumer interest through preventing anti-competitive practices and abuse of a dominant position.

Overall increase in Competitiveness
Steps need to be taken to tap the potential of the services sector to achieve a high-income nation status.…

WHAT NEEDS TO BE DONE – SIZE OF THE PRICE

Growth rate of 6% p.a. over next 10 years

PROCEDURES

- Relax or remove entry barriers
- Simplify and streamline processing
- Review regulatory framework
- Establish clear and fair standards
- Capacity building

CURRENT GNI per capita (2009)
RM23,700 or USD6,700

PROJECTED GNI per capita (2020)
RM48,000 or USD15,000

MIDDLE-INCOME NATION

HIGH-INCOME NATION
For the Services sector these have been identified by the Government

Under the IMP3 and NKEA (Strategic Reform Initiatives)....
<table>
<thead>
<tr>
<th>SERVICE SECTOR</th>
<th>IMP3 &amp; NKEA PROMOTED SERVICES SECTOR</th>
<th>NON-PRIORITY SECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIORITY SECTORS</td>
<td>(1) ICT, (2) Tourism, (3) Healthcare</td>
<td>(1) Logistics</td>
</tr>
<tr>
<td>END DATE FOR LIBERALISATION</td>
<td>2010</td>
<td>2013</td>
</tr>
</tbody>
</table>

* Construction not less than 51% by 2006
The professional services sector consists of various sub-segments that play a crucial role in economic growth...
**MALAYSIA’S ASEAN COMMITMENTS**

<table>
<thead>
<tr>
<th>PROFESSIONAL SERVICES SECTOR (Foreign Equity)</th>
<th>AFAS Threshold for Equity (Asean Framework Agreement on Services)</th>
</tr>
</thead>
</table>
|                                             | 2008 : 49%  
2010 : 51%  
2015 : 70% |
| AFAS 8th Package                            | Multi-disciplinary Practice (MDP) : 30% open to anybody/persons (Architectural, Engineering & Quantity Surveying) |
|                                             | Single-disciplinary Practice (SDP) |
|                                             | Architectural (CPC 8671) : 0% |
|                                             | Engineering (CPC 8672) : 0% |
|                                             | Integrated Engr (CPC 8673) : Unregulated |
|                                             | Quantity Surveying (None yet) : 0% |
| Cabinet Decision                            | 2012 : 100% |
| 14 November 2008                            | |
| 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 fully amended to reflect Malaysia’s commitments and SDP firms have not been offered in any agreements....
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....
Prioritization of the sectors was based on NKEA performance.
Professional services is the second fastest growing services sector with an historical growth rate of 7.9% annually...
One of the high growth sectors is accredited professional services sector that comprise of engineering, architecture, medical …
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 professional engineering services demand worldwide is USD $270 billion in 2010 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 – International Federation of Consulting Engineers

Can Malaysian Engineers get a slice of the pie….
Forecasts on the Professional Engineering Services Industry

- Firms are becoming more international and their workforces more multinational and mobile
- Developing countries is embracing knowledge intensive professional services by leveraging technology and offering low-cost solutions that hitherto would have been provided by well-established design and engineering consultants
- International market place for consulting engineering is becoming more competitive as new players enter the market
- Fees earned in international markets over the next three years see significant growth in the Middle East, China, the Indian sub-continent, South East Asia and Africa.

Source: FIDIC – International Federation of Consulting Engineers

Malaysian Engineers have a competitive edge of being highly technical and relatively “cheap” but ....
PROFESSIONAL SERVICES INDUSTRY OF MALAYSIA

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

3. 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 interest & but at the same time ...
What about other countries?

- Australia a similar country to Malaysia in population and has the lowest contribution to GDP from the service sector for an OECD country.
- Australia is not in the top 10 of exporters of engineering consultancy services when compared to the USA, UK, Netherlands or Canada.
- The professional engineering industry is similar to Malaysia being dominated by many small firms.
- Revenues from professional engineering services amount to Aust$18 billion per year contributing to 1.85% of Australia’s GDP.
- Of which Aust$700 million is earned from export overseas.
- Employment in Australia in the engineering consultancy industry has risen by 58% since 2001/02.

Source: ACEA – Association of Consulting Engineers Australia

And yet there is no Engineers’ or Architects’ Act to “protect” the professional …
For amendments to the Engineers’ Act, the Mode of Access must 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 2 – Consumption Abroad
Many Clients already appoint foreign firms

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

Mode 4 – Presence of Natural Person
Currently not possible under the Professional Acts (Except thro’ temporary registration)
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 quality of service.
• In the case of licensing procedure not in themselves a 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 bold step…
Professional engineering services involved movement of natural persons and commercial presence will require the Acts to be amended namely in two areas:

**Registration of Professionals Engineers**
Sections of the ACT to be amended to recognize the qualifications, experience and registration of an engineer irrespective of citizenship status.

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

**Registration of Firms/Companies**
Sections of the ACT to be amended in the registration of Companies to be less restrictive especially with regards to equity and directorship.

- Section 7A Single Disciplinary Practice (SDP)
- Section 7B Multi-disciplinary Practice (MDP)
AMENDMENTS TO THE ACT IN SUMMARY
Registration of Natural Persons (Mode 4)

Deletion of citizenship requirements in Section 10(4) of the Act allows BEM to register Graduate and Professional Engineers of any nationality.

- **New amendments**
  - No citizenship reqs. for registration

  - **1st. tier of Prof. Engr.**
    - Local or foreign Graduate Engineer
    - Qualification meets the Washington Accord reqds.
    - Sit and pass the Professional Assessment Examinations

  - **2nd. tier of Prof. Engr.**
    - Local or foreign Professional Engineer with Practicing Certificate
    - Mandatory reqd. to sit and pass the Professional Competency Examinations

- **1st. tier of registration of Prof. Engr.** who do not wish to have a “Practicing Certificate”
- **2nd. tier of registration of Prof. Engr.** include a ‘Licensing’ scheme for those who wish to ‘practise’ & supply professional engineering services
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.

<table>
<thead>
<tr>
<th>HOW PROFESSIONAL SERVICE IS PROVIDED</th>
<th>REGISTRATION WITH THE BOARD OF ENGINEERS MALAYSIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDIVIDUAL ENGINEERS</strong></td>
<td>Engineers of any nationality can be registered with the Board.</td>
</tr>
<tr>
<td><strong>SINGLE DISCIPLINARY PRACTICE</strong></td>
<td>100% foreign equity allowed with 30% equity open to all and 70% for Professional Engineers with Practicing Certificate for body corporate</td>
</tr>
<tr>
<td>Sole Proprietorship</td>
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<tr>
<td>Partnership</td>
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<tr>
<td>Body Corporate</td>
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<tr>
<td><strong>MULTI-DISCIPLINARY PRACTICE</strong></td>
<td>100% foreign equity allowed with 30% equity open to all and 70% equity for Prof. Eng/Arch/QS (Existing Act already allow)</td>
</tr>
<tr>
<td>Body Corporate</td>
<td></td>
</tr>
<tr>
<td><strong>MANAGEMENT OF THE FIRM OR BODY CORPORATE</strong></td>
<td>At least 2/3s of the Directors in the Board of Directors must be Professional Engineers with Practicing Certificates</td>
</tr>
</tbody>
</table>
AMENDMENTS TO THE ACT IN SUMMARY
Commercial Presence (Mode 3)

Registration with Boards as a Business Entity

Sole Proprietorship

Partnership

Body Corporate

Management of the Firm
Board of Directors

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

Engineering Consultancy Practice (Section 7A)

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

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

70% equity for local or foreign P.E. with P.C.
30% equity by any person/bodies

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

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

Equity prescribed in Regulations

Composition of Board of Directors prescribed in Regulations
## AMENDMENTS TO THE ENGINEERS ACT
Temporary Registration & Others

<table>
<thead>
<tr>
<th>Temporary Registration of Foreign Professionals</th>
<th>SUMMARY OF OTHER MAJOR AMENDMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 10A deleted since engineers of any nationality can be registered</td>
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<tr>
<th>Qualified Person Under the Building Acts</th>
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<tr>
<td>Local or foreign Professional Engineers with Practicing Certificate</td>
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<table>
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<tr>
<th>Time Required for Registration</th>
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<tbody>
<tr>
<td>To register as a Graduate Engineer the basic qualifications shall meet the Washington Accord requirements</td>
<td></td>
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<tr>
<td>Takes 3-4 years to be registered as a Professional Engineer after passing Professional Assessment Examination (PAE)</td>
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<tr>
<td>Additional 1-2 years to obtain a Practicing Certificate on passing the Professional Competency Examination (PCE)</td>
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<tr>
<th>Continuous Professional Development</th>
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<tr>
<td>Annual 50 hours CPD mandatory with stringent check by BEM for P.E. with Practicing Certificate</td>
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<tr>
<th>Composition of the Board</th>
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<tr>
<td>Minimum 50% must be P.E. with Practicing Certificate</td>
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<tr>
<th>Registration of Other Persons Related to Engineering</th>
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<tr>
<td>Registration of Engineering Technologist and Inspector of Works</td>
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<table>
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<tr>
<th>Name of Act</th>
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<tbody>
<tr>
<td>Remain as the “Registration of Engineers Act”</td>
<td></td>
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</tbody>
</table>
Liberalization does not mean deregulation

That is why safeguard measures are ...
Finding the right balance between liberalization and protectionism...

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
What are the Risks in Liberalizing the Professional Engineering Services ?

- Flooding of local market with cheaper foreigners. **Is it ‘safe’ to allow foreign engineers to become the ‘Submitting Person’ under SDB Act & UBBL?**

- Lower foreign standards with competitive prices may lead to lower local standards. By adopting the lower foreign standards, it will create hazards through the importation of these services. **Can foreign engineers from less developed countries provide the service that safeguard public interest?**

- **Can local Engineering Consultancy Practices be able to compete with foreign firms from developed countries?** And if not may create unemployment amongst local professionals.

- Engineering Consultancy Practise can be owned by non-engineers. **Is Malaysia ready for this?**

- In a ‘free market’ the consumers may not be sufficiently be protected where standards and quality may be compromised
What are the Benefits & Opportunities?

1. Consumers benefits from wider choices and cheaper services, i.e. it encourages competition and lower the cost of services to be provided.
2. Mutual recognition agreements implies reciprocity. Allowing access to our markets imply access to their markets.
3. Malaysian engineers are more competitive than that from developed countries, leading to increase opportunity for exports of professional services.
4. Increase the competitiveness of Malaysian Engineers and align them to international practices.
5. Expertise not locally available can be imported to enhance local capabilities i.e. technology transfer from foreign experts.
6. Multi-national companies can set-up professional services bringing in FDI and make Malaysia as the regional headquarters for professional services and attract talent.
7. Malaysian firms can grow and allow their shares to be traded e.g. the medical profession is the most liberalize profession and has grown
8. High tech and emerging services industries (e.g. green technology, aeronautical technology etc.) can be fully developed when the professional services is liberalized with the inflows of foreign capital into Malaysia, which is important for the country to be a knowledge-based economy.
SAFEGUARD MEASURES ARE NECESSARY

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 liberalization promotes economic growth as originally intended

To minimize the affect on local professionals so that they can withstand the effects from the entry of foreign professionals.

THE RISKS OF LIBERALIZATION

Safeguard measures in developed countries are even more comprehensive when compared to developing countries ...
Board of Engineers has developed a ‘safeguard’ measure
Which mimics the developed countries measures …
“There is no specific nationality, citizenship or residency requirements for registration by the National Engineering Registration Board or membership of Engineers Australia to practice as a professional engineer in Australia. However applicants must demonstrate awareness of national and local standards, rules and practices; and be assessed as meeting the National Competency Standards for Professional Engineers.”

“Other than in Queensland, the engineering profession operates under a self-regulatory system and Engineers Australia offers grades of membership and Chartered Engineer titles, to identify those practitioners who have met certain competency levels. The National Engineering Registration Board overseas a national, voluntary, non-statutory register that maintain standards to the grade of Chartered Professional Engineer but operates separately to membership of Engineers Australia. This register is called up in some places of the State and Territory legislation to identify the competency of engineers in certain areas of practice, particularly in the building and construction industry.

“Most States and Territories in Australia have registration and/or licensing regime for engineering practitioners in the building and construction industry, with differing education and experience requirements”.

Paper from Engineers Australia to Department of Foreign Affairs & Trade on the Australia – Malaysia Free Trade Agreement October 2004
Foreign Engineers to be Permitted to Practice in Taiwan,
Jan. 14 2009

In order to improve the quality of Taiwan’s engineering profession and promote the internationalization of Taiwan’s engineering qualifications, Executive Yuan has recently approved a draft revision of the Professional Engineers Act, making provision under Article 56 for certified engineers from countries with which Taiwan has concluded a MRA to obtain accredited engineer certification by means of oral test or review and then apply to practise as professional engineers in Taiwan.

The Public Construction Commission in line with Taiwan’s membership of the WTO and the APEC Engineer agreement scheme ……………………………………………. … foreign engineers with which Taiwan has concluded an MRA will be permitted to participate in Taiwan’s engineering examinations ….. and on passing will be issued accredited engineer certification and may apply for a license to practice engineering in Taiwan.

A foreign engineer 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 ……. and all documents and drawings related to work undertaken in Taiwan must use Chinese as the primary language.
<table>
<thead>
<tr>
<th>PAPER 2(Syllabus) Specific for each discipline</th>
<th>TIME ALLOCATED – 4 hrs.</th>
<th>FORMAT – Answer 1 Compulsory Question &amp; 4 out of 6 Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIVIL SYLLABUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URA Planning control handbook</td>
<td>Piped services (Hot &amp; Cold Water)</td>
<td>Code of Practice CP 2 (Lifts) up to CP97 (illumination)</td>
</tr>
<tr>
<td>SCDF Fire Codes/Practices</td>
<td>ACMV</td>
<td>Power supplies &amp; Tariffs</td>
</tr>
<tr>
<td>LTS, rapid transit, railway zones, streets, etc.</td>
<td>Fire Services</td>
<td>Protection for safety, cables, earthing</td>
</tr>
<tr>
<td>PUB, CP drainage, sewage</td>
<td>Energy Conservation</td>
<td>Generators, Fire Alarms</td>
</tr>
<tr>
<td>Nparks, Guidelines</td>
<td>Relevant CP’s Standards</td>
<td>Emergency Voice System</td>
</tr>
<tr>
<td>BCA, Buildable Design, NPQS</td>
<td>All relevant S’pore CP’s and Standards</td>
<td>Testing &amp; Commissioning</td>
</tr>
<tr>
<td>Civil eng’g CP &amp; Standards</td>
<td></td>
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</tbody>
</table>
BEM to conduct the Professional Competency Examination under the amendments to the Act

Stake-holders Committee

Professional Competency Examination Council

Board of Moderators

Administrative & Secretariat

Syllabus & Exam Paper Committees

Paper 1
Common Paper

Paper 2C
Civil & Structural

Paper 2M
Mechanical

Paper 2E
Electrical
THE PROFESSIONAL COMPETENCY EXAMINATION (PCE) IN A NUTSHELL

EXISTING 1st TIER OF EXAMINATION RETAINED.

Apply to register
Degree/ Qualification
Accreditation by the
Boards to register as
a Graduate
4 YEARS WORKING
EXPERIENCE
1st. Tier of Examination
REGISTRATION WITH
BEM AS A PROF.
ENGR.

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

Registration as a Professional with BEM after passing the 1st. tier examination. However if the foreign professionals can demonstrate the same applies to their home countries BEM may consider them to be registered without sitting the 1st. tier of examination or at least undergo the interview process.

To ‘practise’ and supply professional 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 services.
专业评估考试

现有的PAE保留（工程法）

注册与BEM作为P.Eng

C.E. for Jurutera Gas

专业面试

燃气供应法，苏鲁汗Tenaga

C.E. for Comp. Elec. Eng

专业面试

电力供应法，苏鲁汗Tenega

专业竞争力考试

执业证书授予提交人

‘S.D.B.法’（建筑行业）

执业证书

其他工程学科的执业证书

注意：SPN法现在要求工程师需要在他们那里注册。
SAFEGUARD MEASURES IN SUMMARY

TO ENSURE THE QUALITY OF THE SERVICE & PROTECT PUBLIC INTEREST

1st. Safeguard Measure
Boards register Graduate Engineers provided that their undergraduate degree meets the Washington Accord

2nd. Safeguard Measure
Board registers Professional Engineers 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 Engineer 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 Engineer 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

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

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

Annual Continuous Professional Development (CPD) is compulsory for renewable of Prof. Engr. status and Prof. Engr. with Practising Certificate

Note: CPD also applies at the 1st. tier of registration
WHAT OTHER SAFEGUARD MEASURES ARE NECESSARY

WHAT BOARD OF ENGINEERS CAN DO

Ensure the quality of local & foreign engineers by registration and issuance of a “license” for those wishing to supply professional engineering services

Ensure that the supply of professional engineering services shall be through firms/companies registered with the Board.

Undertake disciplinary actions against registered engineers and firms/companies

WHAT BOARD OF ENGINEERS IS UNABLE TO DO

No “policing” powers towards unregistered individuals or firms/companies providing professional engineering services. Board depends on other Government departments.

WHAT OTHER GOVERNMENT DEPARTMENTS & PUBLIC CAN ASSIST

Ensure that only “licensed” professional engineers supply professional engineering services through a registered firm/company with BEM.

Ensure that all professional engineering services are undertaken in Malaysia.

Ensure that foreign engineers have a valid work permit.

In cases whereby BEM initiate an investigation against an engineer under the Act; foreign engineers should be available to assist the Board during the investigation.
IS THE ENGINEERING PROFESSION SO LIBERAL COMPARED TO OTHER PROFESSIONS?

Surprisingly No !!!!!!!!!!!!!!!!!!

The most liberal profession is the medical profession can we say the most “ethical” profession of all that deals directly with “life & death” situation.

The “Private Healthcare Facilities & Services Act 1998”

Section 6. Approval and licence may be issued to a sole proprietor, partnership or body corporate.

(1) Approval to establish or maintain, or a license to operate or provide may only be issued to
(a) a sole proprietor who is a registered medical practitioner;
(b) a partnership which consists of at least one partner who is a registered medical practitioner; or
(c) a body corporate whose Board of Directors consists of at least one person who is a registered medical practitioner

And equity is open any person or bodies …….
Conclusion ... Liberalization to Achieve Real Growth

One of the Growth Propellers

Professional Engineering Services

Contribute To Targeted GNI Per capita By (2020) RM48,000 or USD15,000

End Objective

To become the regional hub for niche area in professional engineering services

To untapped potential of professional engineering services as a key enabler of business

To promote high-tech engineering services

LIBERALIZATION TO DRIVE REAL GROWTH RATE OF 6% P.A. OVER NEXT 10 YEARS

Or do Malaysia has an alternative choice at all? ......
And on to the details of the amendment ..... 

THANK YOU