

MOBILITY OF APEC ENGINEERS - THE OPPORTUNITY IN BELT & ROAD INITIATIVE

FRIENDSHIP HOTEL, BEIJING, CHINA
21ST NOVEMBER 2018

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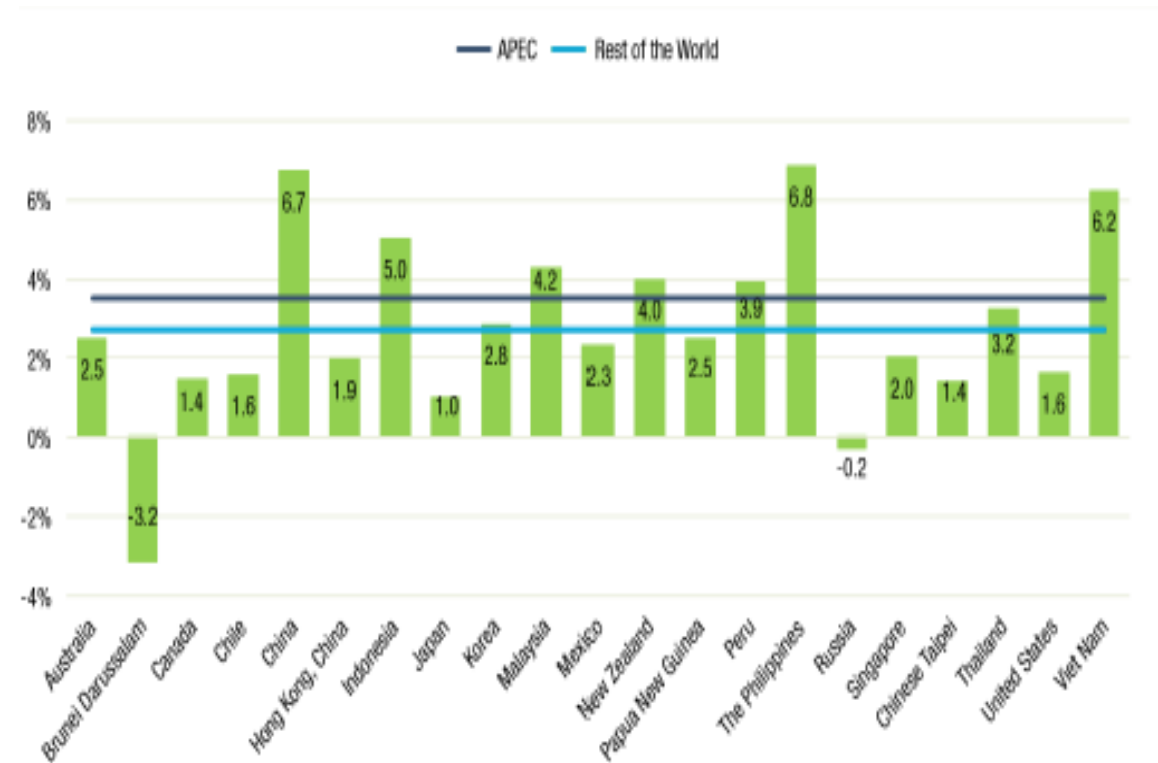
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Asia-Pacific
Economic Cooperation

GDP GROWTH OUTLOOK FOR ASIA

- **OECD:** GDP growth in Emerging Asia is expected to remain robust over the medium-term on the back of resilient domestic demand, steady investment and trade recovery. It is expected to post 6.3% growth on average between 2018 and 2022. Southeast Asia's growth should also remain strong at 5.2 % over the same period.
- **ADB:** Developing Asia is forecast to expand by 6.0% in 2018, and by 5.9% in 2019. Excluding Asia's high-income newly industrialized economies, growth should reach 6.5% in 2018 and 6.4% in 2019.



BUSINESS OPPORTUNITIES IN ASIA PACIFIC

- Belt and Road Initiative: China Plans \$1 Trillion New 'Silk Road' , It envisions new roads, high-speed rail, power plants, pipelines, ports and airports and telecommunications links that would boost commerce between China and 60 countries in Asia, Europe, the Middle East and North Africa.
- The Central Asian Regional Economic Cooperation (CAREC) Program is an ADB supported initiative focused on financing infrastructure projects and improving the region' s policy environment in the priority areas of transport, energy, trade policy, and trade facilitation.
- The Greater Mekong Sub-region (GMS) Program focuses of the GMS Program is to improve connectivity in the subregion through strengthening linkages in transport, energy, and telecommunications.
- Many others cross border infrastructure projects.....



CHALLENGES IN PROFESSIONAL SERVICES IN ASIA PACIFIC

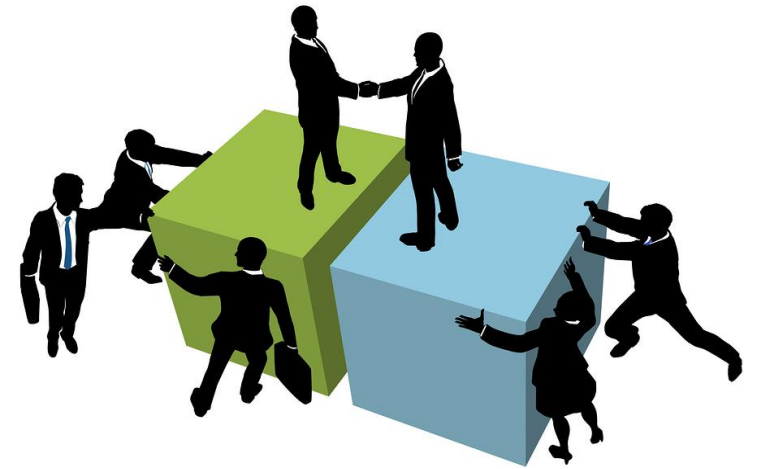
- Cultural Differences
- Different in Languages
- Differences in Professional Qualification
- Local Regulatory Requirement
- Difference in Code of Practices
- Differences in Competency level
- Geopolitical Risk

Solutions ??



GOVERNMENT POLICY IN FACILITATING PROFESSIONAL SERVICES

- DO NOT REINVENTING THE WHEEL – facilitate Mobility of Professional
 - Leverage on experiences
 - Transfer of Technology
 - Capacity Building
- International Bench-Marking on Qualification and Competency Standards
 - Rising qualification standard of the professional
 - Adopting processes on international competency level
- Standardization of local challenges, i.e. Language, Code of Practice etc.
- Facilitate APEC Engineers as Platform for Engineering Services. Recognized by APEC Organization and CPTPP Agreement
- Facilitate VISA entry, “Green Card” for professional, enhance value of the “APEC Card” to facilitate mobility



INTERNATIONAL BENCH-MARKING

Qualification Accreditation



Washington Accord



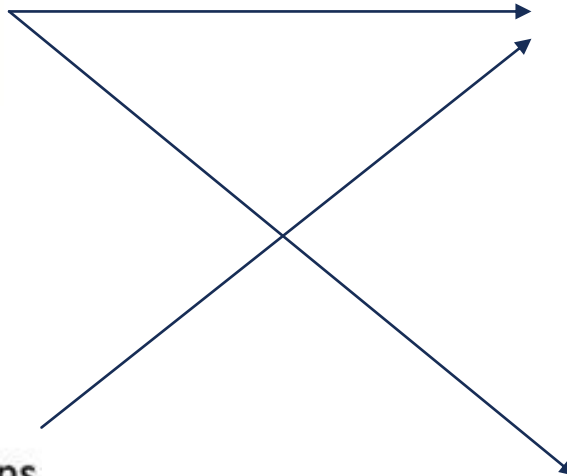
Federation of Engineering Institutions
of Asia and the Pacific (FEIAP)

Competency Agreement



Asia-Pacific
Economic Cooperation
APEC Engineer Registry

**IPEA
AGREEMENT**



TERMS OF AGREEMENT

- **Provide an individualised Benchmark Competence Standard and assessment framework** as a basis for recognising substantial equivalence of governance, standards and quality assurance systems.
- **Substantial equivalence - a pre-requisite for attaining and maintaining Authorised Membership of an agreement.**
- **Rules, Procedures and Guidelines are defined and are common for all of the competence agreements.**



GOVERNANCE DOCUMENT

- **Sets the Benchmark Competence Standard**, that provides the assessment hurdle for candidates seeking admission to the International Register via the local jurisdiction.
- **Standards for APEC Engineer, IPEA require the candidate to demonstrate:**
 - a minimum overall level of academic achievement/structured engineering education;
 - the professional engineering competence for independent practice in the appropriate occupational category;
 - a minimum period of seven years practical experience since graduation;
 - a minimum period of two years in responsible charge of significant engineering work.



CODES OF ETHICAL CONDUCT

Covers:

- misrepresentation of qualifications and titles,
- accepting responsibility and working only within one' s domain of competence,
- personal rights as well as legal and cultural values,
- conflicts of interest, confidentiality, not accepting inducements, and contribution to public debate.

As well as:

- maintaining competence,
- providing impartial analysis and judgement to employers,
- avoiding health and safety dangers, and
- minimising environmental impact.



APEC ENGINEER' S COMPETENCY PROFILES

- Comprehend and apply universal knowledge
- Comprehend and apply local knowledge
- Problem analysis
- Design and development of solutions
- Evaluation
- Protection of society
- Legal and regulatory
- Ethics
- Manage engineering activities
- Communication
- Lifelong learning
- Judgement
- Responsibility for decisions



PIVOTAL DOCUMENT – “APPROVED ASSESSMENT STATEMENT”

Sets out the manner in which a jurisdictional section of the relevant international register will be developed and implemented.

- Underpins the requirements for Authorised Membership of the agreements.
- Created as part of the submission for provisional entry to an agreement.
- Critical component of the submission for all steps of international review.
- Documents the assessment methods and quality systems that ensure candidates seeking admission to the International Register will fully satisfy the Schedule 1 - Benchmark Competence Standard.



OBLIGATION OF AUTHORIZED MEMBER

- **Setting a localised standard of competence.**
- **Maintaining a list of all those persons on their jurisdictional register or registers who:**
 - satisfy the benchmark competence standard,
 - have agreed to be bound by a Code of Ethics that is consistent with the IEA template.
- **Limiting the extent of further assessment to the minimum reasonable necessary when processing local registration applications from persons appearing on any other section of the international register.**
- **Advising all other Authorized Members via the Secretariat of any changes that are made to the original jurisdictional Assessment Statement.**
- **Advising all other Authorized Member of plans to substantially change jurisdictional criteria, policies, protocols or procedures.**
- **Provision of annual reports submitted to the meeting of agreement members - as prescribed in Section C6.2.**

BENEFITS OF STANDARDIZATION AND RECOGNITION OF PROFESSIONAL SERVICES

- Promote Best Practices, expediate grow process in economies
- Technology Transfer short cut the learning process
- Product Stewardships benefit the environment, safety and health
- Promote Product Lifecycle process through supply chains
- Facilitate Integration of Asia Pacific market, expediate the economy growth in the region, especially added advantage in promoting mobility of Engineers for the Belt and Road Initiative.



Q & A

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