



# INTERNATIONAL PASSPORT TO PRACTICE

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The move to establish international registers of engineers who are considered competent to practise across jurisdictions could revolutionize international practice. In the new system, registration is expected to become the seal of approval engineers will need to work overseas.

Over the past two years, significant progress has been made in the development of decentralized, international registers of competent, experienced engineers. Although these initiatives are still at an early stage, eventually the agreements flowing from the creation of international registers will have a major impact on the trade of engineering services among many developed and, ultimately, less-developed countries.

The establishment of such registers and

the resulting mobility of engineers is based on the fundamental assumptions that substantial equivalence in the competence of experienced engineers can be determined, and artificial barriers restricting their full right of practice in signatory countries can be eliminated. International registers of engineers are aimed at facilitating the mobility of practising engineers among the signatory economies, while ensuring transparency and local acceptance.

Here's how an international registry sys-

tem works: A common set of criteria is established, which each participating country or economy accepts. Then each economy creates a monitoring committee to determine how engineers in its jurisdiction will be registered. This process is described in an assessment statement. A coordinating committee, comprising one voting member from each participating country's monitoring committee, decides whether to accept assessment statements and authorize the operation of a register in a partic-

ular jurisdiction. The coordinating committee also monitors adherence to the criteria and consistent application of the criteria by each monitoring committee, and facilitates the maintenance and development of authoritative and reliable registers of engineers.

## The APEC Engineer Register

From 1996 to 2000, the Human Resources Development working group of the Asia Pacific Economic Cooperation (APEC) sponsored the APEC Engineer Project, to facilitate the recognition of engineering qualifications among APEC economies. The final stage of the project ended in November 2000, with the launch of the APEC Engineer Register.

The Canadian Council of Professional Engineers (CCPE) has represented the Canadian engineering profession at multilateral forums where a common set of principles was agreed to, on which discussions and, eventually, agreements could be built. Based on the criteria developed for the Engineers Mobility Forum, the NAFTA mutual recognition agreement and some bilateral agreements, the APEC Engineer Register has defined a common set of criteria to recognize, among all participating jurisdictions, a competent experienced engineer. The criteria engineers must meet to be included on the register are:

- ◆ academic achievement in accordance with the terms of the Washington Accord (an agreement among eight countries' accrediting agencies, including Canada's, recognizing that their criteria, policies and procedures for accrediting engineering education programs are substantially equivalent);
- ◆ assessment within their own economy that they are eligible for independent practice;
- ◆ a minimum of seven years of practical engineering experience since graduation;
- ◆ at least two years in responsible charge of significant engineering work;
- ◆ maintenance of continuing professional development at a satisfactory level.

Thirteen APEC economies participated in the development of the criteria and the various stages of the project. These cri-

teria have been accepted by the participating economies, including CCPE on behalf of Canada.

Seven economies are now authorized to operate an APEC Engineer register in their jurisdictions (Australia, Canada, New Zealand, Hong Kong, Japan, Korea and Malaysia). Some registers are now operational, and the next step is for participating countries to negotiate mutual recognition or mutual exemption agreements, using the APEC Engineer Register as the basis. Once signed, these agreements will allow each country to have different regulatory and registration systems for engineers, while agreeing on criteria for mutually recognizing the equivalence of engineering qualifications in participating jurisdictions.

As part of this project, CCPE conducted a pilot project with the Association of Professional Engineers and Geoscientists of British Columbia, in which licensed civil and structural engineers were invited to apply to be an "APEC Engineer" and to be listed in the register at no initial cost. The initial level of interest in the pilot project was not high, which is not surprising given that participating engineers couldn't expect immediate benefits. But the pilot did attract well-qualified experienced engineers, many of whom were already practising internationally.

The pilot project was meant to be the first step in implementing the registration procedure across Canada. In parallel, the 12 other APEC countries involved have also committed to completing this process, once their assessment statements have been approved by the APEC Engineer coordinating committee.

Registration will be open to all P.Engs in Canada who meet the required criteria, whether they are graduates of Canadian engineering programs or not. The basis for CCPE's assessment statement is the academic preparation provided by engineering education programs accredited by the Canadian Engineering Accreditation Board (a standing committee of CCPE). However, no distinction will be made for foreign-trained engineers who have met the academic requirements of licensure through the technical exam route.

## Current status

CCPE's board of directors have approved the Canadian Engineering International Board (CEIB) as the monitoring committee for Canada's register. The CEIB is

a standing committee of CCPE that promotes worldwide recognition of Canadian engineering standards and education systems, and facilitates increased international mobility for Canadian engineers. It also works closely with both foreign and Canadian engineering organizations to ensure that public safety and the rigorous qualifications required of applicants seeking licensure as professional engineers in Canada are maintained in the international push for global free trade.

In December, CCPE held a meeting to brief the executive directors of provincial/territorial engineering associations on the APEC Engineer Register. It has offered to make similar presentations to each association's elected council and relevant committees.

Early this year, the CEIB will be preparing a proposed plan and protocol for the operation of the register in Canada, which will outline the roles of CCPE and provincial/territorial associations. The proposal will be circulated to all of CCPE's member associations for consultation. ◆

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## What international engineer registers mean for Canada



**A**s mutual recognition agreements develop from the APEC Engineer Register and similar proposed systems, it's anticipated that it may become mandatory for engineers to be listed in international registers in order to practise internationally. For engineers, being registered will be like having an ISO-approved label to do business worldwide. It's therefore important to ask ourselves how Canadian engineers, and particularly Canada's regulatory system for the engineering profession, will cope with such a challenge.

In Canada, the practice of engineering is regulated by provincial and territorial licensing bodies, which use distinct sets of criteria to assess the competence of foreign-trained engineers (and sometimes those trained in Canada). This system presents great difficulties for two reasons:

✿ even if an international agreement appears to be advantageous to Canadian engineers and the Canadian Council of Professional Engineers (CCPE) has approved it, CCPE cannot commit any of the provincial/territorial engineering associations to endorse it, creating challenges in terms of implementation; and

✿ when an international register of engineers, such as the APEC Engineer Register, is launched, all Canadian licensing bodies must agree to participate in order for a national register of engineers to be created. Otherwise, there will be no Canadian counterpart to other countries' national registers of engineers.

It's important to recognize that mobility of experienced engineers among Canadian jurisdictions was achieved only two years ago, with the ratification of the Inter-Association Mobility Agreement. And despite the achievement of this milestone, the agreement contains a notwithstanding clause reserving the right of an association to review the qualifications of any applicant from another Canadian jurisdiction.

Are we ready, in Canada, for international trade of engineering services, based upon acceptance of other societies' ways of regulating the practice of engineering? It appears that the answer may be "no," since we have not been able to easily accept a national set of standards, even though there is a national education accreditation system and no fundamental distinction in engineering practice among provincial/territorial jurisdictions. We still have a certain number of artificial barriers

that must be removed, and we have to extend that notion to international engineering training, services and acceptance.

### Looking into the future

If barriers to the international recognition of engineering qualifications persist in Canada, they will likely affect our capacity to be an important player on the international stage five or 10 years from now. When multilateral registers of engineers become operational, it's certain that being registered will be a requirement to practise in signatory countries. Therefore, Canadian engineers will have the requirement, the right and the desire to be listed in these registers. But if Canada is unable to treat foreign-trained engineers who wish to practise in Canada the same way signatory countries have agreed to treat Canadian engineers working overseas, we might end up in a difficult position in terms of our ability to negotiate.

Such a situation could force Canada's regulatory engineering associations to create immediately a national register of engineers,

in which all engineers who meet the accepted criteria would be asked to participate. In the meantime, it's hoped that we will find a way to fulfill our commitment toward the other signatory countries.

Although our "Canadian" system has worked well in the past, and our licensed professional engineers are respected internationally, this may not be enough to guarantee international mobility in the future. We will still have the mandate to protect the public and ensure high professional standards, but we will need to be open-minded about the ability of other countries to evaluate the competence of engineers. CCPE will only enter into international agreements in situations where we are confident of that ability. In turn, engineering licensing bodies need to recognize that rather than lowering professional standards, these agreements can go a long way toward creating international standards for engineering competence.

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