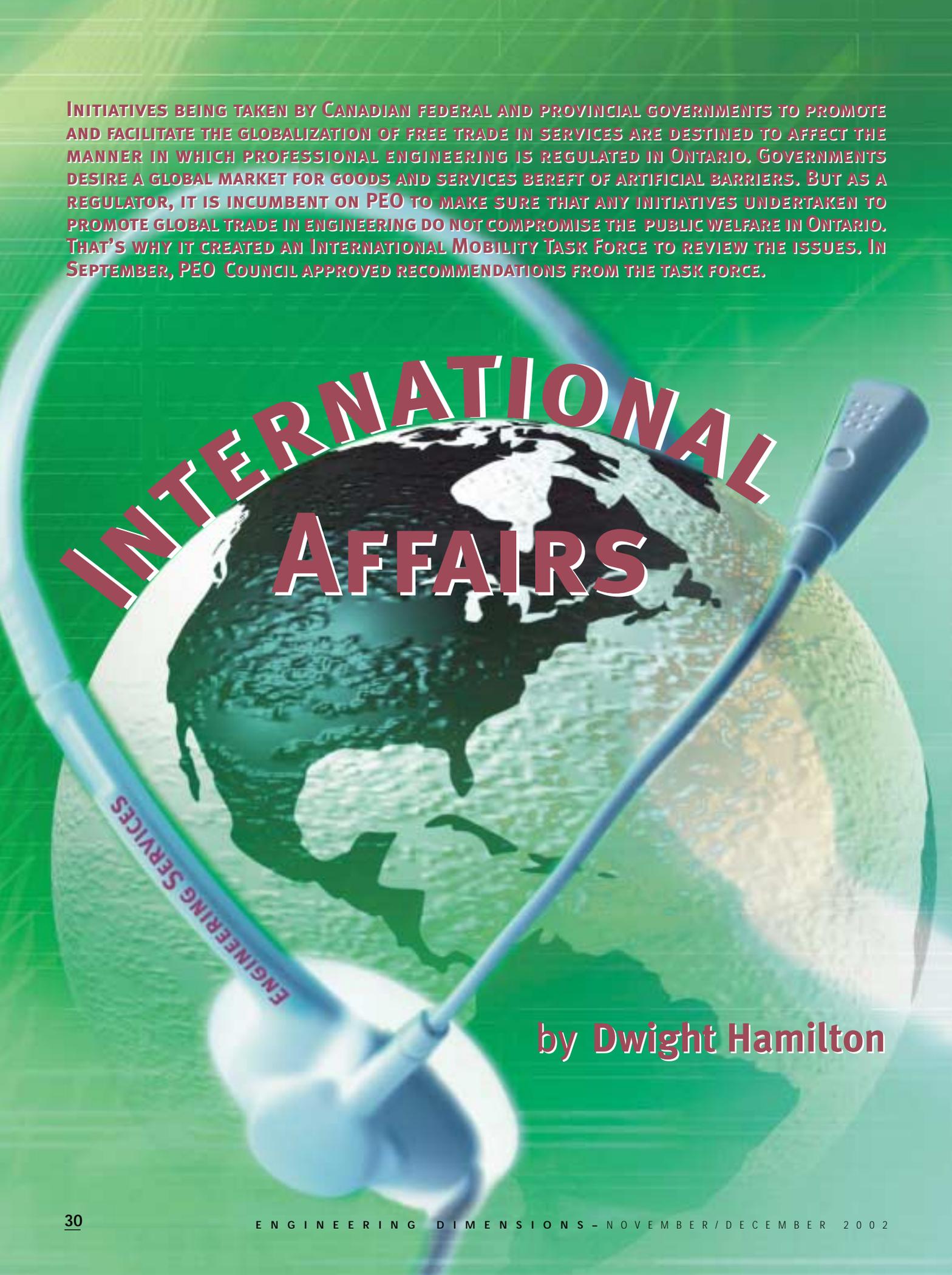


INITIATIVES BEING TAKEN BY CANADIAN FEDERAL AND PROVINCIAL GOVERNMENTS TO PROMOTE AND FACILITATE THE GLOBALIZATION OF FREE TRADE IN SERVICES ARE DESTINED TO AFFECT THE MANNER IN WHICH PROFESSIONAL ENGINEERING IS REGULATED IN ONTARIO. GOVERNMENTS DESIRE A GLOBAL MARKET FOR GOODS AND SERVICES BEREFIT OF ARTIFICIAL BARRIERS. BUT AS A REGULATOR, IT IS INCUMBENT ON PEO TO MAKE SURE THAT ANY INITIATIVES UNDERTAKEN TO PROMOTE GLOBAL TRADE IN ENGINEERING DO NOT COMPROMISE THE PUBLIC WELFARE IN ONTARIO. THAT'S WHY IT CREATED AN INTERNATIONAL MOBILITY TASK FORCE TO REVIEW THE ISSUES. IN SEPTEMBER, PEO COUNCIL APPROVED RECOMMENDATIONS FROM THE TASK FORCE.

INTERNATIONAL AFFAIRS

A globe of the Earth is the central focus, showing the Americas. A blue microphone is positioned on the right side, pointing towards the globe. A blue cable loops around the globe from the bottom left to the top right. The words 'ENGINEERING SERVICES' are printed in white on the cable. The background is a green gradient with a grid pattern.

by Dwight Hamilton

For some years now, engineering organizations and governments outside Canada have sought ways to improve the international mobility of their engineering graduates. But engineering qualifications and practice are regulated differently throughout the world. Canada has one of the most stringent regulatory systems in the world, comprising universal practitioner licensing by provincial bodies, based on defined education and experience requirements and an exam on engineering law, ethics, professional liability and practice, and the regulation of licensed practitioners' practice.

Historically, the Canadian engineering profession has responded to the challenge of enhancing international mobility while maintaining regulatory standards via the Canadian Council of Professional Engineers (CCPE), the federation of the provincial/territorial licensing bodies. On behalf of its constituent members, CCPE has negotiated various mutual recognition agreements (MRAs) relating to the recognition of educational qualifications for licensing, which have made the assessment of education obtained outside Canada less onerous for provincial regulators, while still enabling them to assign technical examinations to applicants covered by an MRA, if necessary. CCPE has signed agreements covering graduates after 1980 of engineering programs accredited by the United States-based Accreditation Board for Engineering and Technology Inc. (ABET) and graduates after 1989 of accredited programs in the U.K., Ireland, Australia, New Zealand, South Africa and Hong Kong. The later agreement is known as the Washington Accord and also includes those covered by the 1980 agreement with the U.S.

CHANGING INTERNATIONAL CLIMATE

More recently, however, the pressure on the Canadian engineering profession has changed. The establishment of a North American free trade zone via NAFTA has led governments to push for reciprocal trade in professional services—including engineering. As a result, the nature of CCPE's international initiatives and negotiations has also changed to focus on seek-

ing agreements at a "full professional level" instead of at a level of academic equivalence between jurisdictions. One such agreement was signed with the Commission des Titres d'Ingenieur (CTI) of France, which recognizes that the two countries engineering education programs are substantially equal, but also suggests that French graduate engineers can attain professional engineer status in Canada without needing further qualifications for licensure. In return, Canadian professional engineers who are graduates of engineering programs accredited by the Canadian Engineering Accreditation Board (CEAB) would qualify for inclusion on a French registry of engineers.

PEO declined to sign on to the CCPE/CTI agreement in 1999, because of its focus on graduates of CEAB-accredited programs (about one-third of Ontario professional engineers are not graduates of CEAB programs), and began to realize that it needed to develop comprehensive policies to guide negotiations with other jurisdictions. Thus, it formed the International Mobility Task Force in March 2001, with a mandate to review existing MRAs and international initiatives for conflict with PEO's role, and to "develop guiding principles that Council could adopt to help ensure that international agreements negotiated with foreign jurisdictions by or on behalf of PEO do not conflict with its legislated objectives or regulatory functions." For a list of the task force's approved recommendations, see "Setting the rules," p.32.

ONLY IN CANADA

The task force found that here in Canada, engineering work is more broadly regulated than in almost any other jurisdiction. With some exceptions, only licensed engineers can by law practise professional engineering. And with the Canadian P.Eng. licence comes an obligation to follow a code of ethics and comply with all applicable laws, regulations, codes and standards that apply to an engineer's area of practice—whether providing service to the public or working within industry. Professional engineering in Canada is self-regulated under provincial/territorial laws.

Regarding a legislated right to practise combined with a right to title, the task force found the closest parallel to the Canadian regulatory model is in the U.S. The rules for obtaining a licence are similar to those here, comprising a combination of education and experience requirements. American professional engineers are also expected to subscribe to a code of ethics. Unlike Canada, U.S.-licensed engineers must also have passed two, eight-hour technical exams; the first, on fundamentals, enables them to become an engineer-in-training, while the second practice-specific exam is generally written after a four-year internship as the final step toward the PE licence. All states have their own engineering licensing acts, which differ slightly. Licences are issued by state licensing boards that are government departments. Also unlike Canada, which has an Interprovincial Mobility Agreement to facilitate licensing in more than one province (see p. 39), reciprocity for PEs between states is uneven.

The main difference in the two systems, however, is scope. The practice of engineering within U.S. industry is unregulated, while engineering services provided to the public require the practitioner to have a PE licence. It's been estimated that only about 20 per cent of American engineers are licensed.

In most of the world's other jurisdictions, an exclusive right to practise engineering is not conferred to individuals by law. Institutes in some maintain registers of engineers based on education, training and competence, but practice is not restricted to those on the list (although inclusion on the list may be a requirement for a particular job). Formal rights to title do exist in some countries, the Chartered Engineer (C.Eng.) designation in the United Kingdom being one example.

Given these differences, the task force came to the conclusion that MRAs at a full professional level that do not relax licensing criteria may be impossible to achieve. "We have a more severe responsibility than most of our trading partners, except the U.S., in the sense that we are protecting the public with a licence to practise professional engineering," says Max Perera, P.Eng., a member of the task

force. "Our prospective trade partners have, at best, only a right to title. Therefore, it is possible that we would be putting Ontario's public at risk if, by virtue of these international agreements, if we were to commit to let anybody with a right to title practise in Ontario without further validating their qualifications."

NAFTA

One of NAFTA's goals is to encourage professional regulatory agencies to negotiate MRAs covering licensing and certification, and CCPE drafted the NAFTA-Mutual Recognition Document (NAFTA-MRD) with American and Mexican representatives in 1995. This MRA has yet

to be implemented, because in addition to Mexico, every U.S. state and Canadian province must ratify the agreement. If it were implemented, the agreement would enable professional engineers with an accredited degree and 12 years experience (eight following licensure) to receive a temporary licence, renewable annually for three years, without having to write licensing examinations in a signatory jurisdiction. Professional engineers from an unaccredited program would require 16 years experience, 12 following licensing.

When a PEO task force recommended in 1997 that the NAFTA-MRD be ratified, it was conditional on a requirement for a local P.Eng. partner, a requirement that later recognition agreements, such as the one with France, do not incorporate. "In the course of working with the collaborator, it is hoped that they acquire an understanding and knowledge of our regulations, standards and by-laws," says Perera. "Especially in the civil field, some of the standards are very specific to Canada, mainly due to the extremes of temperature here. In building construction, we must make sure, even in the case of electrical circuitry, that it can withstand the range."

PEO's International Mobility Task Force Chair Norbert Becker, PhD, P.Eng., concurs, and believes it's important that collaboration work both ways: "We think it's unwise for an Ontario engineer to parachute a practice into New York or any other state on the presumption that codes and standards are either the same, or that they can interpret them. We feel that it's responsible for us to collaborate with local practitioners on the other side for the same good reason," he says.

To date, all Canadian provinces have ratified the NAFTA-MRD, but not so down south. Although Texas and Mexican authorities have indicated they would ratify the agreement based on CCPE's newly created Operational Procedures

Document (OPD), getting over 50 U.S. state boards to agree on reciprocity is a tall order, especially when local politics is taken into consideration. David Lapp, P.Eng., CCPE director, professional and international affairs, says the OPD has been distributed to provincial regulators for comment. "It interprets the articles of the Mutual Recognition Document, including the process behind the experience assessment. We're consulting with provincial associations and hopefully they will agree this is a way to proceed in implementing it," he says.

Meanwhile, in lieu of a functioning NAFTA-MRD, some provinces have been attempting to negotiate bilateral agreements with bordering American jurisdictions: Ontario and Michigan, New Brunswick and Maine, Alberta and Idaho, British Columbia and Washington, the Yukon and Alaska. So far, none of these attempts has resulted in full reciprocity, and it is unclear how interprovincial mobility might be affected if they did.

THE PROBLEM WITH REGISTERS

An initiative causing considerable confusion in the international community is the Asia Pacific Economic Cooperation forum's (APEC) engineer register. Under this scheme, all APEC countries, including Canada, maintain lists of recognized practitioners, which are essentially directories that require a fee for inclusion. While inclusions on such lists is no doubt a useful marketing tool for the engineers on them, they are not international mobility, or reciprocity, agreements between all the signatory nations. So far, British Columbia, Alberta,



Setting the rules

Here are the approved recommendations of the International Mobility Task Force, which will set the direction of PEO's future international affairs. The full report of the International Mobility Task Force is available from the Publication section of PEO's website at www.peo.on.ca.

- PEO should not enter into any international agreement that would diminish its ability to fulfill its regulatory functions or put it in conflict with any provisions of the *Professional Engineers Act*.
- PEO should formally adopt the guiding principles for international mobility agreements [set out in Chapter 6 of the report].
- PEO should reject any CCPE initiative for blanket "reciprocity at the professional level" that would exempt foreign practitioners from satisfying any or all of PEO's admission requirements.
- PEO should promote the use of the "Temporary Licence" provision in the *Professional Engineers Act* as the appropriate mechanism for the implementation of any NAFTA agreement. The Temporary Licence provision is intended for this purpose, has been proven effective,



New Brunswick, Prince Edward Island and the Northwest Territories are cooperating with CCPE in developing the register. PEO has declined to participate in what it considers to be a member service or advocacy issue.

Also problematic for PEO is the Engineer's Mobility Forum formed in 1997 from the signatories to the Washington Accord. The intent here is to develop a mechanism for recognizing engineers at the professional level. Observers from the European Federation of Engineering Associations are also participating in the talks. With much the same criteria as the APEC register, the Engineer's Mobility Forum is also aimed at furthering member interests, in PEO's opinion.

THE GREAT DEBATE

One recommendation of the International Mobility Task Force that PEO Council declined to support was that PEO reconsider its earlier decision to do away with the Canadian citizenship or permanent resident requirement for licensing. At present, citizenship or permanent residency is required in Ontario, but it is not a universal requirement across Canada. On one side is the argument that PEO must ensure that no artificial barriers for licensing exist. "Residency and citizenship add nothing to a regulatory scheme," says Councillor David Sims, Q.C., a proponent of the position that eventually won the day. "Either an applicant for licensure is, or is not, competent to be licensed. In fact, residency and citizenship only serve as a basis for excluding applicants or for giving a form of [temporary] licensure," he says.

On the other side of the coin are the concerns that if the citizenship/residency stipulation is scrapped, it will lead to a domino effect that would relax licensing criteria. "Americans and Mexicans can get a TN Visa by just showing up at the border," notes Perera. This enables them to fulfill the licensing requirement for 12 months of Canadian experience fairly easily, even if they aren't permanent residents. "But citizens from other countries could tell us they can't comply with the Canadian experience requirement because they need a special work permit or ministerial visa. I'm afraid that there will be pressure on us to drop the local experience requirement in a misguided aim of trying to ensure fairness and consistency," he says.

WHERE ARE WE HEADED?

For its part, CCPE has agreed to stop seeking MRAs at a professional level (with the exception of the NAFTA-MRD), and to partner with the federal government on international activities only with the concurrence of its constituent members. PEO's position, as set out in the International Mobility Task Force report is that any international agreement must not impair PEO's ability to regulate the profession and that trade negotiations need to take into account its regulatory mandate. "We're a construct of the Ontario legislature with a very clear mandate—it doesn't include bartering a title or licence in return for consideration in an offshore jurisdiction," says Becker.

But it's also imperative that that this position be applied in a way that furthers Ontario's economic prosperity. Recent talks between PEO and the Ontario Ministry of Economic Development and Trade regarding federal government discussions on trade in professional services with the World Trade Organization (WTO) have resulted in PEO reviewing and accepting WTO's, as a good basis for future agreements. Norman Williams, PhD, P.Eng., PEO deputy registrar, admissions, says he believes the proposed guidelines for developing reciprocal agreements "are consistent with PEO's expectations."

And how are Canadian professional engineers coping in an international arena without mobility treaties? Not too badly it seems, according to Ken Bontius, P.Eng., of Hatch Mott MacDonald. "We have a huge presence in the U.S. now. To do [international practice] properly, you form an alliance with a company there or you just go out and buy them. A lot of it comes down to knowing markets and clients, just like here. If you're in a niche market, it doesn't matter whether you're from Canada or Turkey, they want you." Bontius feels demand for Canadian engineers is easy to understand: "I've always thought Canadians have a good work ethic, a strong technical base and a good balance with project management." ❖

and provides the safeguards necessary to protect the public interest and welfare.

- PEO should not support CCPE's initiatives to establish and participate in international registers for engineers. These are advocacy, not regulatory, issues and might well be misunderstood by foreign registrants as an entitlement to somehow practise in Ontario.
- PEO should discourage CCPE from engaging in initial assessments for immigrant applicants to Canada, because they pose hardships both on the foreign-trained applicants and PEO.
- PEO should monitor the international mobility initiatives of CCPE and other provincial, national and international bodies via its directors and other representatives to CCPE.
- PEO Council should use the existing temporary licence to facilitate access of foreign engineering practitioners to the practice of professional engineering in Ontario.
- CCPE should be accountable to the constituent member associations/ordre for its activities that have the potential to impact directly or indirectly on the regulation of the practice of professional engineering in Canada.