

Report of the International Mobility Task Force

I. ACKNOWLEDGEMENTS

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II. GLOSSARY OF ACRONYMS

ABET Accreditation Board of Engineering and Technology, Inc. in the U.S.
ARC Academic Requirements Committee, a PEO legislated committee
ACDE TF Admissions, Complaints, Discipline and Enforcement Task Force (1998-99)
ACEC American Consulting Engineers Council
APEGBC Association of Professional Engineers and Geoscientists of the Province of British Columbia
APEGGA Association of Professional Engineers, Geologists and Geophysicists of Alberta
APEC Asia-Pacific Economic Cooperation
CCPE Canadian Council of Professional Engineers
CEAB Canadian Engineering Accreditation Board
CEO Consulting Engineers of Ontario
CEIB Canadian Engineering International Board
C of A Certificate of Authorization
COMPII Comité Mexicano para la Práctica Internacional de la Ingeniería
CTI Commission des titres d'ingénieurs (France)
EEA TF Evolution of Engineering Admission Task Force (2000-2001)
EI Engineer-Intern
EIT Engineer-in-Training
ERC Experience Requirements Committee, a PEO legislated committee
EU European Union
FE Fundamentals of Engineering; the Part I Examination of the U.S.NCEES
GATS General Agreement on Tariffs and Services
HKIE Hong Kong Institution of Engineers
IAC International Affairs Committee; the predecessor of the CEIB
ICE Institution of Civil Engineers in the U.K.
IMA International Mobility Agreement
ing. Ingénieur
M.I.Mech.E. Member of Institute of Mechanical Engineers in the U.K.
MRA Mutual Recognition Agreement
MSPE Michigan Society of Professional Engineers
NAFTA North American Free Trade Agreement
NCEES National Council of Examiners for Engineering and Surveying in the U.S.
NSPE National Society of Professional Engineers in the U.S.
OSPE Ontario Society of Professional Engineers; a member services organization
PE Principles and Practice of Engineering; the Part II Examination of the U.S. NCEES
P.E. Professional Engineer (U.S.)
P.Eng. Professional Engineer (Canada)
PEO Professional Engineers Ontario
PNWER Pacific Northwest Economic Region
PPE Professional Practice and Ethics (Examination)
U.K. United Kingdom

U.S. United States of America
USCIEP United States Council on International Engineering Practice
WTO World Trade Organization

III. EXECUTIVE SUMMARY

The globalization of free trade in goods and services is destined to affect PEO's ability to regulate the practice of professional engineering in Ontario. PEO Council has promoted initiatives which facilitate recognition of substantially equivalent engineering degrees and has also signed the NAFTA – Mutual Recognition Document. However, it refused to approve the Mutual Recognition Agreement that CCPE signed with France in 1999 which provides mechanisms for the reciprocity of engineering title/designation and thus, for reciprocal practice as a professional engineer.

The International Mobility Task Force was created by PEO Council in March 2001. It was mandated to develop guiding principles that PEO Council can 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 its regulatory functions. By formally adopting such guiding principles, PEO Council can also demonstrate that its policies and decisions with regard to international agreements are made in a consistent and transparent manner.

The appointed members of this PEO Task Force included Professional Engineers with broad international experience, senior PEO staff charged with the responsibility of administering its regulatory functions and representatives of stakeholder groups (CCPE, OSPE and CEO). Any Task Force members who dissented with the findings of the majority were invited to submit written briefs that would be appended to the Task Force report, for the information of PEO Council.

This report has been prepared to provide PEO Council with an overview of how the practice of engineering is regulated outside Canada; the extent to which such regulations pose barriers to international free trade in engineering services; the purpose and scope of the initiatives being taken by CCPE and its constituent associations/order to negotiate agreements with foreign jurisdictions; and how these agreements align with the statutory objectives and regulatory duties imposed on PEO by our provincial legislature.

The principal findings of the International Mobility Task Force are summarized below:

1. Professional engineering is regulated more broadly and formally in Canada than in any other jurisdiction of the world. While the mechanisms for regulating the practice of engineering in the United States are similar to those in Canada, such mechanisms do not exist in most countries of the world.
2. Any suggestion that Canadian Professional Engineers require the assistance of PEO or CCPE to remove statutory barriers that restrict them from practising outside North America is unfounded. The qualifications of Canadian Professional Engineers are highly respected and internationally accepted, to the extent that Canada is reportedly the fourth largest exporter of engineering services in the world.
3. The academic qualifications, experience, language skills, ethics, legal responsibilities, codes, standards and regulations that apply to the practice of engineering vary widely around the world. They reflect the intrinsic value that each jurisdiction places on protection of the public welfare, safety, the environment and professional licensure. While Canada and the United States share many such values, many countries of the world do not.
4. PEO's governing legislation sets out the qualifications which applicants for a Professional Engineer (P.Eng.) licence must possess. PEO has a duty to ensure that its admission process is administered in a uniform, fair and transparent manner for all applicants (both foreign and domestic). It has no authority to exempt foreign practitioners from any legislated or regulated admission requirement in exchange for a

reciprocal exemption in their jurisdiction. PEO Council should not barter its “Right-to-Title” or “Right-to-Practise” with foreign jurisdictions to benefit its members.

5. To regulate the practice of professional engineering effectively, PEO must regulate not only the admission process, but also the standards of the practice and its complaints/discipline process. While the Professional Engineers Act grants PEO legal powers to regulate the practice in Ontario, PEO cannot exercise or enforce these powers outside its jurisdiction. The granting of reciprocal licences to practitioners in foreign jurisdictions would make it difficult, if not impossible, to regulate these foreign holders of PEO licences.

This report presents a set of clear guiding principles that PEO Council, Staff and Committees can formally adopt to help ensure that international agreements it negotiates or ratifies do not adversely affect the public interest or welfare.

The recommendations of the International Mobility Task Force are itemized below:

1. That PEO not enter into any international agreement that would diminish its ability to fulfill its regulatory functions or put it into conflict with any provisions of the Professional Engineers Act.
2. That PEO formally adopt the guiding principles for international mobility agreements set out in Chapter 6 of this report.
3. That PEO reject any CCPE initiative for blanket “reciprocity at the full 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 and provides the safeguards necessary to protect the public interest and welfare.
4. That PEO not support CCPE’s initiatives to establish and participate in international Registers for Engineers. These are “advocacy issues” not “regulatory issues” and might well be misunderstood by foreign registrants as an entitlement to somehow practise in Ontario.
5. That PEO discourage CCPE from engaging in Initial Assessments for immigrant applicants to Canada because they pose hardships both on the foreign-trained applicants and PEO.
6. That PEO monitor the international mobility initiatives of CCPE and other provincial, national and international bodies via its directors and other representatives to CCPE.
7. That Council uses the existing Temporary Licence to facilitate access of foreign engineering practitioners to the practice of professional engineering in Ontario.
8. That Council reconsiders its resolution to eliminate the Canadian citizenship/permanent residency requirement for professional engineering licensure from the Professional Engineers Act.
9. That CCPE be accountable to the constituent member associations/order for its activities that have the potential to impact directly or indirectly on the regulation of the practice of professional engineering in Canada.

CHAPTER 1: INTRODUCTION

1.0 Preamble

Initiatives being taken by our federal and provincial governments to promote and facilitate the globalization of free trade in goods and services are destined to affect the manner in which professional engineering practice is regulated in Ontario. Consequently, these globalization initiatives are of strategic importance to Professional Engineers Ontario (PEO).

1.1 The Task Force’s Mandate

Pursuant to the Professional Engineers Act, the principal object of PEO is to regulate the practice of Professional Engineering in Ontario, in order that the public interest may be served and protected. PEO

Council, therefore, has a legislated duty to ensure that foreign engineering practitioners who seek to practise in Ontario are held to equal standards of qualifications and accountability as those who reside in Ontario.

To ensure that PEO Council is able to make informed decisions concerning MRAs or other reciprocal licensing agreements, international registers of engineers [e.g., the Asia-Pacific Economic Cooperation (APEC) Register¹] and other initiatives [e.g., the Engineers' Mobility Forum] being taken by the CCPE, as well as its constituent member associations/order individually, PEO Council mandated the creation of the Task Force at its March 2001 Council meeting. The Task Force's Draft Terms of Reference are appended to this report as Appendix A. In view of the importance of these issues, the Task Force was requested to fast-track its work and to submit its report to PEO Council by the end of August 2001, if possible.

The Task Force is aware that PEO Council approved the recommendations of the 1998-99 Admissions, Complaints, Discipline and Enforcement Task Force (ACDE TF)² with respect to the issue of MRAs. In addition, the Task Force is cognizant of Council's endorsement of PEO's Strategic Plan at its June 22, 2001 meeting in which globalization is a key element. Details of PEO's Strategic Goals and Initiatives are provided in Appendix B.

This Task Force supports the globalization of engineering practice. However, it recognizes that it is incumbent on PEO to ensure that any initiatives taken to facilitate and promote global practice must not compromise the public interest or welfare.

1.2 Justification

Canada is reportedly the fourth largest exporter of engineering services in the world. This achievement is attributable not only to the country's high technical standards respecting engineering training but also to the exemplary professional and ethical conduct demonstrated by its licensed engineering practitioners as well. This well-earned reputation could conceivably be jeopardized if PEO and/or any of the other associations/order across Canada are perceived to be granting reciprocal licences to unsuitably-qualified or under-qualified foreign practitioners. Therefore, as a regulatory body, any effort by PEO to foster the globalization of professional engineering services must be justified by the Association's legislated mandate to serve and protect the public interest.

Consequently, before commencing its work, the International Mobility Task Force undertook to validate its mandate to ensure consistency with the intent of the Professional Engineers Act.

The Task Force believes that the "public interest" which PEO is 'sworn' to serve and protect can properly be categorized as: the "social interest," the "economic interest" and the "environmental interest." And because the Ontario provincial government deems it in the economic interest of the province to promote and facilitate the implementation of international free trade in both goods and services; therefore, as an extension of the provincial legislature, PEO must have a legitimate interest in the establishment of MRAs, international mobility agreements (IMAs) and/or other international agreements with foreign jurisdictions in so far as such agreements impact on the effective regulation of the practice of professional engineering in Ontario. Consensus was achieved, within the Task Force, that MRAs, IMAs or other agreements intended to serve the "economic interest" of the public, must not be allowed to conflict with PEO's duty to serve and protect the "social interest" and "environmental interest" of Ontarians.

1.3 Task Force Membership

The Task Force membership was comprised of PEO members who have broad international experience, supplemented by senior PEO staff members who are charged with administering PEO's admission process, including the Registrar and Deputy Registrar, Admissions. In addition, representatives of the CCPE/CEIB, Ontario Society of Professional Engineers (OSPE) and Consulting Engineers of Ontario

(CEO) were invited to join the Task Force. A list of the Task Force members which highlights their international experience is presented in Appendix C.

Individual members of the Task Force have practised engineering in North America, Central America, South America, Europe, Africa, the Middle East and Australasia. They include graduates of non-CEAB accredited university programs who were required to pursue PEO licensure via the examination route provided for by the legislation. Others held chartered membership granted by the Engineering Council in the U.K. Consequently, these Task Force members brought to the Task Force valuable insight into engineering titles, membership in professional associations, standards of practice and registration of engineering practitioners in foreign jurisdictions as well as the unique cultural values and social issues that influence the practice of engineering in different countries of the world.

The discussion at the Task Force meetings were both thorough and candid. With the focus placed on the CEIB's activities, the CEIB representatives on the Task Force did not always share the majority view. This was not unexpected. However, during the meetings, all Task Force members were afforded the opportunity to state their views and each member took advantage of the privilege. This report reflects the majority view of the Task Force.

1.4 Activities and Communications

The Task Force met seven times at PEO offices beginning on April 24, 2001. Participation was facilitated, as necessary, via teleconference and e-mail to accommodate Task Force members.

Throughout the course of its work, the Task Force actively sought the input of PEO members and stakeholder groups via PEO's Web site, PEO publications and through its Chapter system. Copies of all written submissions received by the Task Force are enclosed in Appendix D. External stakeholder groups, such as the OSPE and CEO, were invited to join the Task Force and to submit formal position statements.

Coverage of the International Mobility Task Force by Council was provided on page 19 of the May/June issue of Engineering Dimensions. In the same issue, on page 13, the Task Force's Call for Submissions was published. In mid-May, the Task Force Terms of Reference and Call for Submissions were published on an International Mobility Task Force page in the Committees and Task Forces section of the PEO Web site. A conference for discussion of International Mobility issues in general, and the Task Force in particular, was established in the Members' Forum area of PEO's Web site, with a message from the webmaster on the purpose of the conference advising members where to find the Terms of Reference and Call for Submissions. Maximus Perera, P.Eng., Co-chair of the Task Force, posted his own message on PEO's Web site shortly thereafter, reemphasizing the Task Force's request for submissions and input concerning this important issue.

CHAPTER 2: REGULATION OF ENGINEERING PRACTICE

2.0 In Canada

Regulation of the practice of engineering in Canada is quite unique. The practice of engineering is more formally and widely regulated in Canada than in any other jurisdiction in the world. The Professional Engineers Act of Ontario (and similar provincial/territorial legislations across Canada) prohibits an unlicensed engineering practitioner from engaging in the practice of professional engineering (with some exclusions) in order that the public interest may be served and protected. All professional engineers in Canada are required by their Code of Ethics to accept that their duty to the public is paramount. They are also obligated to comply with all applicable legislation, regulations, codes and standards that apply to their area of professional practice.

The underlying concepts behind Canadian requirements of professional ethics, knowledge of the legal framework of engineering practice, and familiarity with local codes, regulations and standards of practice are not part of the requirements for professional registration in most countries outside of Canada and the U.S. Professional codes of ethics are often part of the features corresponding to membership in learned societies and engineering associations that fulfill an advocacy rather than a regulatory function.

The purpose of regulating the practice of engineering so strictly in Canada is to minimize the need and the cost for government agencies to rigorously review, approve and police engineering activities to safeguard the public interest and welfare.

2.1 In the United States

In most American States only a minority of those engaged in engineering work are required to be licensed. This fact was acknowledged by the President of the National Council of Examiners for Engineering and Surveying (NCEES) who estimated, at the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) May 2001 Conference on Mobility that "only about 20 per cent of engineers in the U.S. are licensed."³

The respective State licensing board (which is an arm of the respective State government) is responsible for granting the professional engineer (P.E.) licence in each State. The language and specific provisions of State engineering licensure laws vary from State to State, but every State law outlines the same process whereby an applicant who has:

- A four-year undergraduate engineering degree from a program approved by the State engineering licensure board,
- Four years of qualifying engineering experience, and who successfully completes
- The eight-hour Fundamentals of Engineering (FE) Examination, and
- The eight-hour Principles and Practice of Engineering (PE) Examination,

will be granted the P.E. licence.

State licensing boards typically approve engineering programs accredited by ABET and CEAB, but may approve others as having equivalent standing. State board approval of an engineering educational program is often based on ABET accreditation. This approval qualifies applicants to write the FE and PE examinations.

NCEES, an independent organization, sets the two technical examinations (the FE and PE) and all States use them. Most States now permit engineering graduates to take the FE examination which covers the fundamentals of engineering at the time of, or several months before, graduation from an engineering curriculum approved by the State board. A few States permit individuals without degrees who have four or more years of engineering experience to take the FE examination. However, the number of States permitting non-degreed individuals to take the FE examination is said to be dwindling. [The NCEES examinations are confined to nine specific disciplines whereas PEO licenses engineers in 17 disciplines including computer, software and bio-engineering.]

Passing the FE exam legally certifies the candidate to be an "Engineer-in-Training" (EIT), or an "Engineer-Intern" (EI). Generally four more years of experience are required before the EIT or EI is permitted to sit for the PE exam. Passing the PE exam qualifies the candidate to be licensed as a professional engineer and entitles the licensee to use the title "P.E."

There are alternate ways of qualifying to take the examination other than through an approved engineering degree. Each State has a different method of weighing non-approved engineering study, four-year engineering technology programs, four-year study in a science related to engineering, graduate

study in engineering, the teaching of engineering, and engineering experience. In addition, each State has its own rules regarding licensure through well-established practice, licensure by eminence, and licensure by comity.

Each State engineering licensing board evaluates applications for licensure. State statutes set forth the basic requirements for licensure and delegates to the board the authority to determine if the applicant meets the established requirements. In those States having a rule which permits licensure by requiring the writing of one or both examinations, the State board also makes the determination after an interview. Engineering licensure boards are composed of licensed professional engineers. Thus, applicants are assured that members of the profession evaluate their qualifications, rather than individuals unfamiliar with engineering activities. Some States also have lay members on their licensure boards, but these public members generally do not participate in evaluation activities.

It is noteworthy that neither the FE or PE examination covers areas related to law, ethics and professional practice, unlike the requirement in Canada which imposes such an examination [the Professional Practice and Ethics (PPE) Exam]. However, a New Model Law for licensing of engineers has been proposed recently by the National Society of Professional Engineers (NSPE), whereby P.E. licence candidates would be required to pass a professional licensing examination. The proposed examination would focus on professional practice issues, ethics, codes and standards.

2.2 Outside Canada and the United States

Most other countries in the world do not regulate the practice of engineering legally or formally by statute. Public safety is protected by legislation which provides control on specific products or activities, rather than by regulation of individual engineering practitioners.

2.3 Potential Impact of Unregulated Practice of Engineering

In those countries of the world where engineering is not regulated by statutes, virtually anyone can lay claim to the title "Engineer" and practise engineering. Their ability to practise engineering is only limited by a client's perception of their qualifications and/or the value of their services. In such unregulated regimes, engineering practitioners have no duty to serve and protect the public interest. Purchasers of engineering services are left to their own devices and/or the courts when the services provided by an engineering practitioner fail to meet their expectations. As a result, in many developed countries, complex government bureaucracies have evolved to review, approve and police engineering activities in order to safeguard the public interest and welfare.

It is difficult within such unregulated environments to assess the competence of a foreign engineering practitioner. While some are well-qualified engineering practitioners, others lack the requisite academic training and experience required of professional engineers in Canada.

No member of the Task Force has ever been precluded from practising engineering in countries outside North America. Nor have they received complaints from any PEO member or Stakeholder who has ever been precluded from doing so. Their credentials have been accepted and their professionalism has been respected around the world. The only jurisdiction in which they have ever been restricted from practising engineering without a local licence is in the United States; and, then, only in those specific areas of engineering practice where a P.E. licence is specifically required by government agencies.

Professional engineers licensed by PEO require no assistance from PEO or CCPE to export their services outside North America. Only those PEO members who wish to practise in the specific areas of engineering that are legally regulated in the United States might benefit from such intervention. Consequently, there is no benefit to be derived in terms of the "economic interest" of Ontario by PEO Council's endorsement of any MRAs or other such agreements with jurisdictions outside North America.

Furthermore, it is worth noting that that a provision in PEO's governing legislation ensures that no artificial barriers can be erected to prevent qualified foreign engineering practitioners from practising engineering in Ontario. Foreign-trained engineering practitioners in Ontario are held to the same admission standards as those who receive their training in Canada. In addition, foreign, non-resident engineering practitioners can apply for a Temporary Licence to practise engineering in Ontario on a project basis. This facility is similar to that provided by the New York State Board for Engineering and Land Surveying. Licensed non-resident professional engineers, including those licensed in another State or country, may receive a permit to practise professional engineering in New York State for a limited number of days in a calendar year.⁴

CHAPTER 3: LEGISLATED AUTHORITY GOVERNING ENGINEERING PRACTICE

3.0 Legislated Right-to-Practise

The right-to-practise professional engineering in Canada is formally regulated under the authority of provincial/territorial legislation. Only those persons who possess the academic qualifications; who have served a prescribed period of internship (i.e., who have practised engineering under the supervision of a professional engineer); who have demonstrated their knowledge of the ethical responsibilities and obligations of a professional engineer in Canada and the legal implications of professional engineering work by passing the Professional Practice Examination; and who are proficient in one of Canada's two official languages are entitled to become licensed and thereby legally permitted to practise engineering in Canada.

In addition to this official right-to-practise, sole proprietorships, partnerships or corporations wishing to engage in the business of providing or offering engineering services to the public are required by provincial/territorial legislation to hold a Certificate of Authorization (C of A) or Permit to Practise, to comply with the applicable Engineering Act; and to maintain professional liability insurance coverage (subject to certain exclusions and/or conditions).

The purpose of this legislated right-to-practise requirement across Canada is to safeguard the public interest and welfare from the consequences of the misapplication of science, negligence, incompetence and other forms of professional malpractice. As such, the "right-to-practise" professional engineering in Canada is restricted by law, in the same way as the "right-to-practise" medicine, law, dentistry and other professions, the practice of which can adversely affect the public interest or welfare.

The legislated right-to-practise engineering in Canada is unique in the world. Whereas few jurisdictions (notably, the United States) have implemented similar safeguards within specific areas of engineering practice (e.g., structural engineering, environmental engineering, nuclear and electrical engineering) most other jurisdictions do not regulate the practice of engineering by similar right-to-practise legislation. And those which do, restrict such legal Right to Practise to only specific areas of engineering practice.

The fundamental difference in the approach being taken by international jurisdictions with regards to the right-to-practise engineering demonstrates the philosophical differences that exist in the world with regards to the protection of the public. Canada deems it preferable to protect the public interest by strict right-to-practise legislation to regulate engineering practitioners. Other countries rely upon government agencies to police vital engineering services and their courts for remedies when such engineering services give rise to injuries or damages. In such unregulated regimes, the legal doctrine of caveat emptor applies.

Because the practice of engineering in most jurisdictions is not regulated by right-to-practise legislation similar to that in Canada (and to a lesser extent in the United States), PEO and the other associations/order across Canada have few (if any) counterparts in the world with which to negotiate or execute MRAs, IMAs or other agreements. By extension, therefore, CCPE as the organization which represents the provincial/territorial associations/order with the legislated mandates respecting the right-to-

practise engineering across Canada, likewise has virtually no counterparts outside Canada and the United States with which to negotiate any such agreements.

3.1 Legislated Right-to-Title

This legislated right-to-practise professional engineering also confers the right-to-title upon these individuals. PEO and the other professional engineering associations/order across Canada have the exclusive legal right to confer the title “Professional Engineer” (“P.Eng.” or “ing.”) on persons who meet their requirements for admission to the practice of professional engineering. State Licensing Boards in the United States possess comparable powers to grant the “P.E.” titles to their licensed members.

This legal right to an exclusive title is essential to the regulation of any learned profession. Only those persons who possess the qualifications defined by a legally mandated regulatory body and prescribed by an official government Act and/or Regulation are legally permitted to claim such a title. Moreover, persons granted such a professional title are required to use the title to identify themselves to the public as being bona fide members of a regulated profession, with the right-to-practise that profession.

With almost no exception, no such right-to-title for the practice of engineering exists in countries outside of Canada or the United States. Whereas in some countries (e.g., the U.K.) professional engineering bodies or associations maintain a “Register” of engineers who are granted titles (e.g., Chartered Engineer, Incorporated Engineer, etc.) based on standards of education, training and professional competence, these titles do not confer a restricted right-to-practise on the title holders. Consequently, they are not equivalent to a P.Eng. (Canada) or P.E. (U.S.) title. Individuals are not required to be members of such an engineering “Register” to practise engineering, nor are they required to use such registered titles.

In some countries (e.g., France), the academic institution to which a person was admitted and from which that person graduated is deemed a more important indicator of a person’s qualifications to practise engineering than a right-to-title granted by membership in any engineering institute or technical association. In these countries, the use of any title by an engineering graduate is deemed not only unnecessary but affectatious.

Within most developing countries of the world, only the privileged few are able to obtain a university education. Consequently, those who do are accorded the highest respect. Engineers, technicians and technologists in these countries (especially expatriates from the Developed World) are often lumped together and addressed as “Engineer Smith” rather than “Mr. Smith.” No distinction is considered necessary amongst engineers, technicians or technologists and their qualifications are seldom questioned. No formal right-to-title exists in these jurisdictions.

3.2 PEO’s Admission Process: Its Basis, Criteria And Rationale

Under the authority of the Professional Engineers Act, PEO sets the standards for admission to the engineering profession in Ontario, as part of its mandate to regulate the practice of professional engineering. These standards are translated into well-defined criteria, which form the basis for PEO’s admission process.

PEO’s governing legislation states that applicants for the professional engineer (P.Eng.) licence must:

- be citizens or permanent residents of Canada;
- be at least 18 years old;
- be of good character;
- satisfy PEO’s academic requirements
- fulfill PEO’s work experience (internship) requirements

- successfully complete PEO's Professional Practice Examination

Admission to the profession entails the granting of the P.Eng. licence to practise professional engineering and the right to use the title professional engineer (or its abbreviation "P.Eng."). The admission process begins with the verification of the first three above-listed criteria, when an applicant submits an application for licence, before the application proceeds to the following steps:

a) Substantiation of the Academic Requirements

Applicants who hold an undergraduate degree in engineering from a CEAB-accredited program are deemed to satisfy the academic requirements for licensing. All other applicants are required to substantiate to PEO's satisfaction that they possess equivalent academic qualifications. It is PEO's belief that a sound preparation at the baccalaureate level provides the requisite depth and breadth of knowledge for professional engineering licensing purposes.

b) Writing the Professional Practice Examination (PPE)

All applicants for licence must successfully complete the PPE. It is a three-hour, closed-book, essay-type exam on professional practice, ethics and engineering law. PEO believes that all of its licensees should have an awareness and understanding of his or her ethical responsibilities and obligations as a practitioner as well as the legal implications, including professional liability, of his or her work.

c) Fulfillment of the Work Experience Requirements

Applicants must demonstrate that they meet PEO's stipulated work experience requirements. At present, registration in PEO's Engineer Intern Training Program is not mandatory. However, many applicants elect to register in it to take advantage of the guidance that it offers as they gain the required forty-eight months' experience of which at least twelve months must be acquired in a Canadian jurisdiction, under the supervision of person(s) legally authorized to practise professional engineering in Canada.

PEO believes that the formation of a competent professional engineer is predicated on sound academic preparation, adequate practical training and exposure to the practice of professional engineering in Canada. In addition, there is an expectation for recognition of his or her responsibility to society, and the attendant professionalism, for the purpose of ensuring that the public welfare, interest and safety are well protected. It is, therefore, important to underscore the requirement that all applicants for licence must obtain the mandatory twelve months of Canadian experience to acquire sufficient knowledge of, and expertise in, the applicable Canadian codes, regulations and standards pertaining to their respective field of practice, to enable them to meet the generally accepted standards of skill required to engage in the practice of professional engineering in Canada.

d) Access to the Practice of Professional Engineering in Ontario

The legislated requirement that applicants for admission be citizens or permanent residents of Canada serves to ensure PEO's ability to carry out its disciplinary functions. In view of the increasing global nature of professional engineering practice, access is facilitated via PEO's Temporary Licence Program. A provision in PEO's governing legislation provides for the granting of Temporary Licences to foreign engineering practitioners who are assessed by PEO to satisfy the requisite qualifications to practise professional engineering in Ontario. There is a requirement for the temporary licensee to collaborate with a PEO member. This arrangement is to ensure that public protection is not compromised. Furthermore, it provides some assurance that PEO would not be handicapped in its ability to effectively fulfill its entire regulatory role, i.e., Discipline as well as Admissions. (In some cases, judged on their own merits by PEO, the collaborator requirement may be waived.)

3.3 Cultural Differences⁵⁻¹⁰

When engineering practitioners from different countries work together, their cultural differences must be taken into account as they go about solving technical problems. Indeed, there are major differences in the way engineering practitioners carry out their professional activities around the world; in particular:

- The courses that engineering students need to take and the knowledge that they are expected to acquire in order to become engineers. Some are expected to focus on theory while others spend a significant fraction of their time in internships. These differences can generate significant tension in multicultural engineering teams when engineers trained in one country overlook the approaches preferred by engineers trained in another. They may also be the source of significant technical breakthroughs when different problem-solving approaches are combined synergistically.
- Being a good team player requires different behaviours in different countries. In particular, being a good team player by Latin American standards goes invariably against expectations in English Canada, and vice versa. In many cases, teams break down into sub-teams along national/cultural fault lines.
- A good presentation by English Canadian standards is often considered superficial in Germany or Japan, while English Canadian audiences tend to view most Japanese and German presentations as too detail-oriented and dull. Communicating effectively and presenting one's ideas to audiences from other cultural backgrounds usually requires some adaptation; and
- Canadian engineers practising overseas and foreign engineering practitioners practising in Canada need to adapt to the local way of negotiating, handling contracts and tenders, selling and providing customer service.

In order to be effective, foreign engineering practitioners who wish to work in Canada must learn and understand the Canadian culture of engineering practice. At the same time, foreign engineering practitioners can significantly enrich the practice of engineering in Canada when they work alongside engineers trained in Canada, by providing new ideas, new problem-solving approaches, and new methodologies.

3.4 Accountability

In Canada, professional engineers are accountable to provincial/territorial licensing bodies for their professional conduct. They are required to comply with provincial standards or guidelines for professional practice; to comply with provincial/territorial and federal statutes, regulations, codes and applicable standards; to comply with all provincial workplace regulations (e.g., respecting harassment, compliance with health and safety regulations, etc.); and to report any evidence of professional misconduct to their provincial/territorial licensing body.

C of A (or Permit to Practise) holders who engage in providing or offering to provide professional engineering services to the public are also accountable to their provincial/territorial licensing body. They must maintain insurance coverage (or comply with disclosure requirements and comply with all other applicable regulations).

In Canada, engineering licensees and permit holders can be disciplined (i.e., have their right-to-practise curtailed, suspended or revoked) for misconduct, even if such misconduct is not legally actionable (i.e., gives rise to neither injuries nor damages and breaches no provincial/territorial or federal laws). The intent of such victimless disciplinary action is to safeguard the public from possible injury or damage by incompetent and/or negligent practitioners.

The Professional Engineers Act has been carefully crafted to grant the Registrar and PEO Complaints Committee the legal powers they require to investigate complaints against licensees or C of A holders and to enforce any discipline orders, via our court system. However, these legal powers are provincial and not federal or international.

Provincial/territorial regulatory bodies across Canada exist to regulate the practice of engineering for the protection of the public. They have a common interest. Therefore, an individual practitioner or professional engineering business entity found guilty of negligence, incompetence and/or unprofessional conduct by one province/territory in Canada are held accountable by the others.

Professional engineers in the United States are held accountable to their State licensing boards in similar ways as Canadian practitioners. And it seems possible that Canadian and U.S. regulatory agencies could include provisions in MRAs to ensure that professional engineers and permit holders are held accountable in both jurisdictions for misconduct in one. Moreover, under the terms of the North American Free Trade Agreement (NAFTA), a civil court judgment against a practitioner or C of A holder in one jurisdiction can be enforced in the others.

Provincial/territorial legislation that regulates the practice of engineering for the protection of the public has no legal significance in most of the other parts of the world. And because the practice of engineering is not regulated by statute in most of the world, PEO would have little (if any) authority to exercise its legal powers to investigate, discipline or otherwise hold foreign practitioners (i.e., licensees or C of A holders) accountable for their actions in Ontario. Nor could they ensure that a foreign insurance policy would respond to compensate a person in Ontario for injuries or damages arising out of the professional services provided by a foreign C of A holder in Ontario.

PEO has legal powers to regulate foreign practitioners who are granted a Temporary Licence because such licences are project specific. The owner, government agencies and other authorities involved on a specific project in Ontario can be notified of a revocation or condition imposed on a Temporary Licence holder so that they can take steps to check the work of this practitioner and replace that engineer on the project. However, it would be difficult or impossible, to protect the public from a foreign professional engineer or C of A holder so authorized by PEO who refuses to surrender their seal or C of A to PEO and continues to practise in Ontario either in person, or via electronic means.

3.5 International Standardization

Contrary to common belief, the statutes, regulations, codes and standards with which engineers must comply vary widely around the world. Those that apply to machinery, equipment and products which are transportable and freely traded (e.g., automobiles, electrical appliances, cement and steel) are capable of being designed and built to generic, international standards of quality and/or safety. However, those which are not transportable and which must be custom-engineered to suit local conditions (e.g., permafrost, seismic activity, weather, etc.) and local values (e.g., public and worker safety, the natural environment, etc.) are unique to every jurisdiction.

It is naïve to believe that an engineering practitioner whose experience is limited to practising in a subtropical developing country with few codified environmental and safety standards would be competent to practise in Canada (or vice versa). Without proper internship experience in Canada, such a practitioner could not possibly know (or properly interpret) the unique local, provincial and federal statutes, codes and regulations that apply to their practice.

The Temporary Licence provision of the Professional Engineers Act of Ontario safeguards the public interest by requiring such a licence holder to collaborate with a professional engineer licensed to practise in Ontario on any projects undertaken by that Temporary Licence holder in Ontario. Likewise, while PEO gives due credit for every applicant's foreign experience, there is a requirement imposed on such applicants to obtain at least 12 months of appropriate Canadian experience under the supervision of a

Canadian professional engineer. In addition, they impose a Canadian citizenship/permanent residency requirement on applicants, for full licensure, to ensure that they develop an understanding of our Canadian culture and the value Canadians place on safety and the environment.

The Professional Practice Examination (PPE) that all applicants for licensure in Canada must pass is an additional safeguard imposed on all applicants for licensure to protect the public and the practitioner. It ensures that all applicants (foreign and domestic) have an appreciation for, and an understanding of, the laws and the code of ethics that apply to the practice of engineering in Canada.

CHAPTER 4: CANADIAN INTERNATIONAL MOBILITY INITIATIVES

4.0 NAFTA

NAFTA, as an international trade treaty signed by the Federal Governments of Canada, the U.S. and Mexico, is a treaty senior to any professional mobility agreements. This means that the NAFTA treaty principle called “National Treatment” applies to agreements such as professional engineering mobility accords. This principle requires that “no new admission rules incorporated after January 1, 1994 can be more onerous to engineers from the NAFTA countries than those in effect as of January 1, 1994 unless they are also applied to local engineers”. As a result, any concession made on the PEO regular admission requirements in order to reach a reciprocity agreement with one particular State must be afforded to any other State in the U.S. regardless of whether that State has entered into an agreement with PEO or not. It is for this reason the Temporary Licence was recommended to accommodate applicants from signatories to the NAFTA-Mutual Recognition Document (NAFTA-MRD) agreement.

The NAFTA-MRD is a professional engineering mobility agreement that was negotiated by the CCPE, on behalf of Canada, the United States Council on International Engineering Practice (USCIEP) on behalf of the U.S. and the Comité Mexicano para la Práctica Internacional de la Ingeniería (COMPII) on behalf of the Mexican government. These signatories represented federal jurisdictions in their respective countries, while the regulation of the practice of professional engineering is a matter of provincial(or territorial)/state jurisdiction both in Canada and the U.S. Therefore, this agreement needed the ratification of each province/territory in Canada, each State in America and the Department of Education in Mexico to be implemented. All the Canadian provinces ratified the NAFTA-MRD. However, none of the American States, nor the Mexican government have done so, to date. Texas issued a Letter of Intent but never implemented the MRD.

The NAFTA-MRD includes provisions to ensure that the host jurisdiction had to be satisfied that the applicant had the necessary knowledge of the local language, regulations, codes and laws governing the practice of engineering. It also had a provision for cross-border disciplining. (The NAFTA-MRD applies only to CEAB graduates, ignoring all the Canadian professional engineers who were educated abroad; i.e., mainly non-CEAB graduates.)

PEO’s 1995-97 NAFTA Task Force¹¹ recommended that PEO ratify the NAFTA-MRD, based on Temporary Licences only, for engineering practitioners from signatory States. This recommendation resulted from deliberations and the expert advice of a well-known legal counsel who is a specialist in trade issues. It represents the best reasoned approach to extend the terms of the MRD only to those signatory States who offered PEO members a Temporary Licence without their having to write State examinations, while retaining the essential mechanisms to protect the Ontario public from unqualified practitioners. In fact, the Ontario Attorney General’s office accepted this condition as a proviso to permit an amendment to the Regulations to accommodate this trade accord.

4.1 Mutual Recognition Agreements and International Registers

The Government of Canada is a signatory to various international trade agreements and accords including the NAFTA, General Agreement on Tariffs and Services (GATS) and APEC which promote

trade liberalization for services via separately negotiated MRAs. While GATS Article VII allows member countries to negotiate MRAs dealing with conformity of assessment procedures, NAFTA Chapter 12 encourages professional regulatory bodies to negotiate MRAs on licensing and certification.

Mutual Recognition involves the acceptance by one country of another's system or standard as equivalent to its own. It allows two or more parties to address some of the trade impacts of differences in regulation and licensing processes without requiring harmonization of regulations and processes. However, it is also seen as a first step towards harmonization of standards, especially where none exists.

MRAs can vary in scope from partial to full recognition of professional standards, regulations and certification processes. In cases where the standards differ significantly the MRA may only provide partial recognition of elements such as education, training or experience. In such cases, an applicant from one country may be exempted from certain requirements in another country's licensing process. Where the standards and regulations in two countries are sufficiently similar, an MRA may provide full recognition allowing free movement between the two countries, subject to obtaining a licence in the other country by completing suitable documentation and paying the applicable fees.

4.2 CCPE Activities

In the recently published Guideline on Admission to the Practice of Engineering in Canada¹², CCPE represents itself as being "the voice of its constituent members in national and international affairs." In this guideline (which is being distributed by CCPE both nationally and internationally) the CCPE describes its international activities as follows:

"In fulfilling its role to foster recognition of Canadian engineering qualifications abroad, CCPE is a signatory to a number of international agreements with accrediting and regulatory bodies in other jurisdictions. Some agreements recognize the accreditation systems of other jurisdictions as being equivalent to those of the CEAB. Other agreements are for reciprocity at the full professional level. Graduates of programs included in CCPE mutual recognition agreements are normally considered academically qualified for licensing, subject to the provision of authentic documentation, and subject to the specific details of the Agreement." (Emphasis added)

CCPE has to date executed four international agreements on behalf of the associations/order in Canada. In Interpretive Guide 1 to its Guideline on Admission to the Practice of Engineering in Canada, CCPE describes the four international agreements it has signed with foreign jurisdictions. These include the agreement with ABET in the U.S., the Washington Accord agreement, the NAFTA agreement and the MRA with the Commission des titres d'ingénieurs (CTI) in France.

It is interesting to note that the CCPE has in recent years stepped-up and broadened the scope of its MRA and other international activities, as follows:

1. The agreement that CCPE signed with the CTI in France goes beyond a mutual recognition of academic engineering degrees. It is supposed to be a full-blown "Mutual Recognition Agreement for practice as a professional engineer" (Emphasis added) which also "provides mechanisms for the reciprocity of "ingénieur diplômé
2. In June 2000, the CCPE hosted an APEC Engineer Register Workshop at which it agreed to be the secretariat for this Register. The APEC Engineer Register became operational on November 1, 2000. The CCPE has also conducted a pilot project with Association of Professional Engineers and Geoscientists of the Province of British Columbia (APEGBC), the results of which the CCPE intends to implement across Canada, on behalf of the associations/order.

3. The CCPE is currently in the process of negotiating MRAs at the full professional level with the Hong Kong Institution of Engineers (HKIE), the Institution of Civil Engineers (ICE) in the U.K. and with Chile under the Canada-Chile Free Trade Agreement.

The CCPE has publicized both the purpose and scope of its international activities with regards to MRAs, the APEC Engineer Register and international mobility via workshops and articles in the journals and newsletters of its constituent member organizations (including Engineering Dimensions, PEO's official journal). However, the CCPE has never formally sought PEO Council's approval or ratification of these initiatives that have resulted from its recently expanded mandate [except for the CTI (France) agreement that PEO Council rejected in 1999].

CCPE is also actively involved in vetting the qualifications of prospective immigrants who claim status in their application for immigration to Canada under the quotas set for "engineers," by our federal government. The fee it charges for this ancillary service and the profit it generates for CCPE have generated controversy. Despite the lack of any real justification for continuing this activity, beside the fact that it is a huge profit centre, there appears to be an unwillingness on the part of the associations/order to ask CCPE to curtail it.

4.3 Provincial/Territorial Associations' Activities

One goal of the provincial/territorial associations/order is to achieve full U.S.-Canada recognition of each other's licensing system rather than imposing one system on the other. The NAFTA-MRD goes a long way towards achieving this goal, with full recognition for licensed/registered members with 12 years post-graduation experience. However, in the absence of ratification of the NAFTA-MRD by all of the States apart from Texas (where implementation has not taken place, to date), many border American-Canadian States/provinces (notably Ontario-Michigan, New Brunswick-Maine, Alberta-Idaho and British Columbia-Washington State) have been pursuing bi-lateral agreements.

The biggest challenge for reciprocity with the American States has been their dependence on (and belief in) the FE and PE examinations, due to apparent concerns about the consistency of ABET accreditation, plus the issue of lack of fairness if the examinations are waived for foreign applicants (i.e., non-U.S. residents), while their applicants are required to write them. Many State Licensing Boards waive the FE examination (and a few the PE examination) for Canadian P.Eng. applicants with considerable experience; but the years of experience required vary enormously (from 5 to 25 years).

The following comments summarize the current situation, from East to West:

a) New Brunswick – Maine: An informal agreement whereby Canadian P.Eng. applicants with considerable experience (15 years) may undertake an oral examination with the Maine Experience Review Committee in place of both the FE and PE examinations.

b) Ontario – Michigan: Canadian P.Eng. applicants are informed that they will need to sit and pass the FE and PE examinations. If they request a hearing before the Board to appeal this ruling, the FE examination is normally waived (also the PE in some cases) for applicants with at least five years of experience. The obstacle for Michigan PEs seeking full licensure in Ontario (temporary licensing is available) is the requirement in the Act 14(1)(a) that the applicant be "a citizen of Canada or has the status of a permanent resident of Canada." PEO Council passed a Motion in January 2001 to remove that clause, but it has yet to be forwarded to the provincial government for legislation change consideration.

A Bill was introduced before the Michigan Senate in the fall of 2000 and reintroduced in 2001 (SB 0113) that would provide for reciprocal recognition of qualification for licensure, for a number of professions, for practitioners currently licensed in Michigan or Ontario. This bill, as introduced, was opposed by many Michigan PEs, the Michigan Society of Professional Engineers (MSPE) and the American Consulting Engineers Council (ACEC) on the grounds that Canadian P.Eng.s should not be exempt from

examinations required for Michigan applicants. MSPE and ACEC, however, were prepared to support a modification that would waive the FE examination only for P.Eng. applicants from Ontario with five years' experience. The removal of Clause 14(1)(a) from the Professional Engineers Act was to be the PEO concession for Michigan applicants to PEO.

At the time of writing (October 2001), PEO is preparing to attend a senate hearing on the Bill. This Task Force finds the concession by PEO to be excessive, and, therefore, inequitable when compared to what Michigan proposes to give. Therefore, it advises Council not to pursue an unequal arrangement. Furthermore, the Task Force recommends that PEO Council withdraw the motion that it passed to remove the Canadian citizenship/permanent residency requirement.

c) Western Provinces/States: There have been a number of discussions involving the licensing bodies in Alberta, British Columbia, Yukon, Washington, Oregon, Idaho and Alaska, some under the auspices of the Pacific Northwest Economic Region (PNWER), some on a one-to-one basis. PNWER unanimously passed a resolution in June 2000 that "encourages and supports development of bi-lateral agreements between the appropriate regulatory authorities specifically providing for mobility of licensed professional engineers, geoscientists and geophysicists through mutual recognition of substantial equivalent qualifications and experience". No bi-lateral agreements have been signed to date, although progress is being made on several fronts, and there are informal arrangements in place waiving the FE examination for P.Eng. applicants with (varying) experience. APEGBC is planning to proctor the Washington State FE and PE examinations, so that British Columbia applicants need not travel to Washington to sit the examinations.

CHAPTER 5: STAKEHOLDER PERSPECTIVES

In order to study the complex issues surrounding international mobility thoroughly, the Task Force sought the input of PEO members as well as other stakeholders. The CCPE, OSPE and CEO were all invited to have a representative become a member of the Task Force. They were also invited to file a written position brief that would be appended to this report.

The Task Force's purpose for extending this offer to stakeholders was to give PEO Council the opportunity of understanding how its actions with regards to international mobility might affect the interest of these important groups.

The CCPE accepted the offer and actively participated in the work of the Task Force. Ms. Wendy Ryan-Bacon, P.Eng., CCPE's Vice-President International Affairs and Mr. William Walker, P.Eng., a member of CCPE's CEIB, provided valuable insights into CCPE's international activities and the CEIB's philosophy in this regard. They also provided the Task Force with the CCPE reports and the other submissions that are presented in Appendix E. The submission by Ms. Ryan-Bacon, dated October 3, 2001, states CCPE's position on international mobility and the mandate established by the CEIB. In addition, her submission attempts to answer questions raised by other Task Force members during the July meeting which she was unable to attend.

OSPE did not wish to have a representative as a member of this Task Force. However, they participated through Ms. Joyce Rowlands, as an observer, who provided the Task Force with information concerning OSPE's interests and concerns with regards to the proposed MRA being negotiated by PEO with the Michigan Society of Professional Engineers and the Michigan State Licensing Board. (The Briefing Note that Ms. Rowlands prepared, concerning these negotiations is presented in Appendix E.)

CEO was unable to participate in the work of the Task Force until much of the groundwork had been completed. However, Mr. James A. Beechinor, M.A.Sc., joined the Task Force as an official representative of CEO and participated in the discussions that generated the conclusions and recommendations contained in this report. (CEO's position regarding globalization is also presented in Appendix E.)

Unfortunately, despite the Task Force's many solicitations, few PEO members provided the Task Force with comments or submissions to guide its work. All of the written submissions the Task Force received from PEO members is included in Appendix D for the information of PEO Council.

The Task Force is unable to draw any significant conclusions from the few responses it received from PEO members. However, it seems to confirm the belief of the Task Force members; namely, that PEO members do not encounter significant barriers to international practice, except in the United States.

CHAPTER 6: GUIDING PRINCIPLES FOR PROFESSIONAL ENGINEERS ONTARIO

As the regulatory body entrusted by the Ontario legislature to regulate the practice of professional engineering, PEO cannot negotiate or execute any international agreement that might conflict or appears to conflict with this imperative. To regulate the practice of professional engineering effectively, PEO must maintain control over all of its regulatory functions. These functions are not limited to Admissions but include Complaints, Discipline and Enforcement.

In order to develop a clear set of guiding principles to assist PEO Council in its decision making with respect to any proposed agreement intended to facilitate the globalization of free trade in professional engineering services, the Task Force sought guidance from the Professional Engineers Act and its supporting Regulations, before exploring the broader issues. Those guiding principles that the majority of the Task Force members recommends are listed below.

1. MRAs and similar mechanisms to be introduced to assist in assessing engineering qualifications granted by foreign institutions, compared to those from CEAB-accredited programs in Canada, merit PEO support. The benefit of such agreements in helping to remove artificial barriers to admission and to ensure equal treatment of Canadian and foreign applicants has been amply demonstrated (e.g., the CCPE-ABET Agreement and the Washington Accord). MRAs of this type contribute to PEO's ability to conduct its admission function fairly, transparently and with what is seen as an acceptable degree of subjectivity.

While they serve a useful purpose, the same cannot be said for the CCPE-developed Foreign List of institutions which provides little value to PEO's assessment of applicants' qualifications for professional engineering licensing purposes. At best, like the CCPE's initial (informal) assessment, it represents a first check in the evaluation process subject to a more comprehensive review of the applicants' documents. Therefore, any agreement or similar mechanism must be evaluated in terms of their basis as well as the material value they provide in engendering consistency and fairness with a high degree of rigour.

2. Any proposed MRA that extends above the level of helping to determine academic equivalency to the level of work experience should each be assessed by PEO's Registrar, its Academic Requirements Committee and its Experience Requirements Committee, as required by the legislation. The assessment should aim to answer the following as a minimum:

(a) Do the foreign signatories to any such proposed agreement possess the ability (e.g., jurisdiction, regulatory responsibilities, finances, staffing, accountability) and the motivation (e.g., political, legal, cultural) to evaluate the work experience of engineers in their jurisdiction fairly, objectively, consistently and transparently?

(b) Are engineers in these signatory jurisdictions formally required to possess supervised work experience to achieve a right-to-title or right-to-practise? Is the definition and framework for acceptable work experience comparable to that required by PEO for admission to the practice of engineering in Ontario?

(c) Are the foreign signatories to any such proposed agreement with PEO, signatory to any MRAs with other jurisdictions that require acceptance of the work experience of engineers outside the control of the foreign signatories? It, therefore, begs the question: Is this “back door” secure?

(d) Are these foreign signatories prepared to grant PEO the right to approve any future MRA that the foreign signatory may wish to execute with a third party jurisdiction, to ensure that such action would not create an uncontrolled “back door” for reciprocity of work experience?

PEO should only approve an MRA or similar agreement if it is satisfied that such an agreement would enhance PEO’s ability to evaluate the work experience of foreign applicants fairly, objectively and transparently against PEO’s experience requirements.

3. PEO should reject any MRA, IMA or other agreement that might impair PEO’s ability to conduct its legislated Complaints/Discipline functions. PEO Council should seek the opinion of its legal counsel, Registrar, Complaints Committee and Discipline Committee about safeguards that must be included in all MRAs, IMAs and similar agreements to ensure that its legislated Complaints/Discipline functions can be conducted to a uniform standard. All licensed practitioners and C of A holders permitted to practise in Ontario must be held accountable to PEO for their professional conduct in Ontario, to a uniform or equivalent standard, regardless of whether they or their practice is conducted from within or from outside Ontario.

4. PEO should reject any MRA, IMA or other agreement that extends beyond helping to ascertain academic equivalency. Any agreement that requires PEO to grant a right-to-title or right-to-practise to practitioners in foreign jurisdictions on a reciprocal basis would pervert the intent of the Professional Engineers Act. It would permit practitioners in foreign jurisdictions to gain admission to the practice in Ontario without complying with the strict admission requirements imposed on all applicants (i.e., academic, Canadian experience, passing the PPE and language proficiency). PEO has no legal authority to waive or relax its admission criteria for any special class of practitioners in a foreign jurisdiction in return for reciprocal concessions or otherwise. To do so would be in contravention of the governing legislation.

5. PEO Council should not entertain any proposed MRA or other agreement that would discriminate against any individual PEO member or group of PEO members based on their race, religion, gender, sexual orientation, country of birth or admission route (i.e., CEAB program route versus technical examinations route).

The Task Force members recommend strongly that PEO Council consider the “Temporary Licence” provision in the Professional Engineers Act as the vehicle for the implementation of all globalization of free trade in professional engineering services. It should, furthermore, encourage its provincial/territorial counterparts across Canada and CCPE to consider introducing a similar mechanism.

The majority of the Task Force members are also concerned about PEO Council’s recent decision to eliminate the Canadian citizenship/permanent residency admission requirement to facilitate an MRA with Michigan. The Task Force believes that this requirement is vital and should be retained to provide a reasonable assurance that U.S. and other foreign practitioners understand the standards, codes, regulations and customs that apply to engineering practice in Ontario (and vice versa for PEO members). Any such MRA should use PEO’s Temporary Licence as the vehicle for reciprocal practice. Otherwise, PEO could be viewed to be setting a precedent that the World Trade Organization (WTO) could rule must be applied to all foreign practitioners who wish to practise in Ontario.

The majority of the Task Force members therefore suggest strongly that PEO Council rescind its recent motion to remove the Canadian citizenship/permanent residency criterion for PEO admission, as stipulated in the Professional Engineers Act.

CHAPTER 7: CONCLUSIONS

The CCPE/CEIB has become the driving force for international engineering mobility initiatives on many fronts. The objective that CCPE cites in the recently published Guideline on Admission to the Practice of Professional Engineering in Canada for pursuing “international agreements with accrediting and regulatory bodies in foreign jurisdictions” is to “foster recognition of Canadian engineering qualifications abroad.” The difficulties that the majority of the Task Force members perceive with this stated objective are itemized below:

1. It is founded on the premise that Canadian engineering qualifications abroad are either not being recognized now, or are at risk of not being recognized in the foreseeable future. This premise has no foundation in the international experience of the Task Force members and others, and flies in the face of the often-cited statistic that Canada is the fourth largest exporter of engineering services in the world. The only jurisdiction in which Canadian engineering qualifications are being challenged is in the United States and this challenge appears to be political rather than professional.
2. It implies that “regulatory bodies,” comparable to PEO and the other associations/order across Canada, exist abroad, and, therefore, that the CCPE is in fact negotiating international agreements with such entities. In actuality, CCPE is negotiating with phantom agencies that (apart from ABET in the United States) have no bona fide right or authority to regulate the practice of engineering in their respective countries. The fact of the matter is: No comparable “regulatory bodies” exist outside North America.
3. The CCPE’s recent initiatives to negotiate mechanisms for reciprocity of the “ingénieur diplômé” designation and the P.Eng./ing title is tantamount to a bartering of the Canadian “P.Eng.”/“ing” right-to-title. And its publicized objective of negotiating international agreements “for reciprocity at the full professional level” extends to a bartering of Canadian Professional Engineers’ right-to-practise. Both these CCPE initiatives suggest that PEO and the other associations/order across Canada are willing and able to exempt engineering practitioners in signatory jurisdictions from the mandatory Canadian work experience requirement, writing the PPE, and the language proficiency requirement imposed on applicants who are permanent residents of Canada. Alternatively, these CCPE initiatives may well be misinterpreted by the WTO as proof that these requirements have been adopted by the engineering profession in Canada not to serve the public interest, but as an artificial barrier to restrict free trade.
4. The CCPE represents itself to our federal government, to the WTO and to engineering concerns globally as the voice of PEO and the other associations/order, in national and international affairs. The majority Task Force view is that, by its recent actions, the CCPE may be seen to be undermining the public safeguards that have been imposed on the practice of engineering in Ontario by our provincial legislature and which PEO has a legislated mandate to uphold. The international community is unlikely to understand or accept that CCPE’s actions and initiatives cannot be imposed on the provincially/territorially regulated engineering profession in Canada.

CHAPTER 8: RECOMMENDATIONS

The Task Force makes the following recommendations:

Recommendation 1:

Whereas the Task Force believes that PEO has a duty to serve the economic interest of Ontario by supporting federal and provincial governments’ free trade initiatives, it must do so responsibly. As an extension of the Ontario legislature, PEO should not enter into MRAs or similar agreements that would impair its ability to fulfill its regulatory functions or put it in conflict with any provisions of the Professional Engineers Act of Ontario. Nor should PEO, as a constituent member of CCPE, tacitly approve any international mobility agreements, negotiated by CCPE, that might do so.

Recommendation 2:

It is furthermore recommended that PEO Council formally adopt the guiding principles for international mobility initiatives, set out in Chapter 6 of this report. By doing so, Council will not only have defined the principles to be followed for MRAs and similar agreements, by PEO staff and committees, but also those that PEO expects CCPE to respect as well.

Recommendation 3:

The Task Force concludes that the recently stepped-up and broadened international activities of CCPE focused on blanket “reciprocity at the full professional level” are misguided. They are being driven by a false premise (i.e., that the qualifications of Canadian professional engineers are not being accepted abroad) and that PEO and the other associations/order in Canada have comparable counterparts outside North America with which enforceable agreements can be negotiated to regulate the professional practice of engineering, globally.

PEO must not subordinate or abrogate its provincially legislated responsibilities, nor be party to any efforts to do so, to any foreign jurisdiction. Neither should it barter in the right-to-title or right-to-practise that PEO has been granted by the Ontario legislature.

Recommendation 4:

CCPE’s recent initiatives to promote and establish international Registers for Engineers (e.g., The APEC Engineer Register/the Engineers’ Mobility Forum) may benefit Canadian professional engineers who wish to market their services abroad. However, their benefit to the regulation of the practice of engineering in Canada is questioned by the majority Task Force membership. Any such CCPE-developed Registers for Engineers might well be misunderstood by foreign registrants as an entitlement to somehow practise engineering in Canada. In any case, it serves only to engender false expectations in the minds of engineering practitioners who will view admittance to the register as an opportunity to practise engineering in Canada. Therefore, the Task Force recommends that PEO not endorse this clearly non-regulatory CCPE-initiated activity.

Recommendation 5:

That PEO discourage CCPE from engaging in Initial Assessments for immigrant applicants to Canada because they pose hardships both on the foreign-trained applicants and PEO.

Recommendation 6:

In view of the strategic importance of globalization to the regulation of professional engineering practice in Ontario, it is recommended that PEO monitor, via its directors and other representatives to CCPE, the international mobility initiatives of CCPE and other provincial, national and international bodies that may affect PEO’s ability to regulate the practice of engineering in Ontario in an effective manner.

Recommendation 7:

PEO has a Temporary Licence program that effectively eliminates any artificial barrier to gaining access to practise engineering in Ontario. The NAFTA MRD recommended the introduction of a similar mechanism to achieve the same end. Therefore, the Task Force recommends that Council use the existing Temporary Licence that safeguards the public while facilitating PEO’s ability to discipline errant practitioners.

Recommendation 8:

The majority of the Task Force members suggest strongly that Council reconsider its resolution to eliminate the Canadian citizenship/permanent residency requirement for professional engineering licensure from the Act. In the majority of the Task Force members’ opinions, such an elimination would make management of the admission/licensing process difficult, especially the mandatory requirement for obtaining at least 12 months’ experience in a Canadian jurisdiction. (Only nationals of the U.S. and Mexico and individuals who possess a ministerial work permit are able to obtain employment in Canada to satisfy this work experience requirement.)

Recommendation 9:

As the “official voice” of the profession in national and international matters that could affect the regulation of the practice of engineering, CCPE must be accountable to the associations/order across Canada. In the opinion of the Task Force, PEO Council has a duty that extends beyond merely ratifying or rejecting international mobility agreements that CCPE has already executed.

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APPENDICES

Appendix A

TERMS OF REFERENCE INTERNATIONAL MOBILITY TASK FORCE May 15, 2001

1. INTRODUCTION

Issues or initiatives relating to mobility and globalization such as the Mutual Recognition Agreements (MRAs) and the concept of international register of engineers [e.g., the Asia Pacific Economic Cooperation (APEC) Engineer Register] are presented to Council for endorsement without providing clearly the rationale and possible impacts of their implementation. This practice must be discouraged.

It is incumbent on the Council to only make decision and provide direction following full consideration of all the facts and in a reasoned manner with due regard to the principal object of the Act; namely, to govern its licensees and to regulate the practice of professional engineering in the interest of the Ontario public. Therefore, the Council must ensure that it makes only well-informed decisions on all matters, including those pertaining to international mobility and globalization.

In view of the important role that the Council is obligated to play in protecting the public, on behalf of the government, it is desirable for the Council, its legislative committees (the ARC, ERC) and pertinent PEO staff to carefully review these agreements and proposals to assess their impacts and to ensure uniformity and consistency of their proposed application.

It is in the context of fairness that the Council refused to approve the MRA CCPE signed with France (CTI) in 1999. Approval would have meant that PEO P.Eng. members who graduated from CEAB-accredited programs would benefit from the agreement whilst the non-CEAB professional

engineers(members of PEO) would not be afforded the same courtesy. Clearly, the intent of such an agreement is indefensible. It should be noted that the approval by the other CCPE constituent member associations/order has the potential of threatening the viability of the inter-association/order mobility agreement

2. OBJECTIVES

Within the context of the Professional Engineers Act, RSO 1990, the International Mobility Task Force's objectives are to provide PEO Council:

(a) A set of basic principles that it would be guided by in the approval of CCPE's and/or its own initiatives or proposals in respect of international mobility or globalization as they pertain to the provision of professional engineering services. Such principles could be:

- i) Making sure that protection of the public interest are foremost and paramount;
- ii) Ensuring equitable treatment irrespective of academic route for licensing;
- iii) Insisting on applicants satisfying the entry standards to the profession which are not to be compromised by any CCPE or other agreements;
- iv) Maintaining all measures and mechanisms, consistent with PEO's legislative mandate in respect of admission and discipline.

(b) Measures and mechanisms it may need to put in place, to ensure consistency with PEO's legislative mandate in respect of admission and discipline.

3. MANDATE

The International Mobility Task Force's mandate is to

- (a) Consider the concerns and observations identified by the councillors and staff;
- (b) Review existing and proposed reciprocity arrangements for conformity with basic principles the Council should take into consideration;
- (c) Provide PEO Council with recommendations as to a decision framework for approval of international mobility arrangements, and policies for adoption to mitigate any adverse impacts related to the provision of professional engineering services;
- (d) Present PEO Council with any additional recommendations that would improve the communication processes with CCPE and other provincial/territorial associations/order in this regard.
- (e) Explore ways to change the procedure used by CCPE and Canadian Engineering International Board (CEIB), at present, in respect of entering into agreements and then seek approval of the provincial/territorial governing bodies which are legally authorized to develop standards for entry, grant licences to practise and regulate the practice of professional engineering in the public's interest, and with due recognition of the economic benefits attendant..

4. APPROACH

In carrying out its mandated tasks, the Task Force is empowered to make relevant or necessary recommendations to the Council to improve its effectiveness.

Since the definition of professional engineering forms the foundation of what is and is not considered professional engineering, and hence forms the foundation of who is and is not to be considered a professional engineer, the International Mobility Task Force will begin with an analysis of the attributes of 'professional engineering' as crafted by the EEA Task Force.

As is the practice now, licensed professional engineers or persons with equivalent licensing/registration qualifications can obtain a Temporary Licence under Regulation 42-44 to practise in Ontario. PEO has an active Temporary Licence Program in place that could conceivably be improved upon, if necessary, for

use in satisfying the intent of the current on-going Michigan-Ontario reciprocity discussions.

Given that the International Mobility Task Force mandate is to review the existing and proposed agreements and suggest improvements, it is envisaged that any recommended changes could lead to full reciprocity at the full professional level. To this end, the International Mobility Task Force will gather relevant information to (e.g., review information produced by the 1997 Sub-committee of the Strategic Planning Committee that dealt with Globalization, reports dealing with mobility used in other jurisdictions, NAFTA provisions related to engineering, etc.), identify strategies and processes that may be adopted by PEO.

Suggestions for PEO to provide a leadership role and how it could support a competitive practice environment for its members would be welcomed. This may involve PEO maintaining information links, in co-operation with OSPE and CCPE, with both the Provincial and Federal Governments on trade issues in the context of professional regulation and public safety.

In the end, the International Mobility Task Force will provide a report that gives to PEO Council:

- (a) Recommendations that addresses the concerns and observations made by the councillors and staff;
- (b) A decision framework or guidelines to deal with international mobility issues/agreements;
- (c) Ways to improve communication processes between CCPE and PEO with regard to such initiatives.

5. RESOURCES

The Registrar/CEO will suggest PEO staff personnel who are familiar with the issues to provide advice as required to the International Mobility Task Force. In addition staff support to ensure the necessary liaison with CCPE, to facilitate communication among the task force members, recording meeting minutes, and to provide the necessary secretarial support services, research, etc.

Though e-mail will be used extensively for communication purposes to facilitate the proceedings of the task force, face-to-face meetings are needed. About six face-to-face meetings are anticipated at this time.

A budget of \$15,000 from member's equity is requested. Using members equity is appropriate to finance the International Mobility Task Force since this could be an investment in the future of the engineering profession in Ontario, a central consideration for the International Mobility Task Force.

Proposed Task Force members are as follows:

Dr. Norbert Becker, P.Eng. (Chair) Richard Furst, P.Eng.,
Lionel Laroche, P.Eng. (ERC) Manager – Licensure
Wendy Ryan-Bacon, P.Eng. (CCPE)
Maximus Perera, P.Eng. (Co-chair)
William Walker, P.Eng. (CEIB)
William Jackson, P.Eng.
Roger F. Barker, CEO/Registrar
Enrique Tabak, Ph.D., P.Eng.
Dr. Norm S. W. Williams, P.Eng., Deputy Registrar

With the understanding that , if necessary, additional task force members may be added. However, it is agreed that others wishing to participate should be encouraged to do so via written submission(s).

6. TIMING / COMMUNICATION PLAN / DELIVERABLES

An interim report will be submitted to PEO Council for the June 2001 meeting.

A final report with recommendations to be submitted to PEO Council in September 2001.

PEO's Strategic Initiatives, Goals and Imperatives

Appendix B

5. Globalization: PEO assures that Ontario society is served by global engineering.

Strategic Goals Strategic Initiatives

a) PEO regulates the impacts on the Ontario public of international trade in the provision of professional engineering services and engineered products.

b) Stakeholders understand and support

PEO's regulatory role and activities as they relate to international provision of engineering services and engineered products.

c) PEO plays a role in the process of negotiating mutual recognition and other mobility agreements, and international registries.

i) Establish reciprocity agreements that ensure interjurisdictional regulatory mechanisms for admission, discipline and enforcement.

ii) Review mutual recognition, trade and other mobility agreements (e.g. APEC) to define impacts and develop policies.

i) Educate stakeholders about PEO's regulatory role and activities as they relate to international provision of engineering services and engineered products, and gauge stakeholder awareness of and attitudes toward PEO.

i) Develop strategies and terms of reference to be used in negotiations toward mutual recognition and mobility agreements, and international registries.

ii) Maintain effective communications with the Canadian Council of Professional Engineers regarding international negotiations.

Appendix C

PROFILES OF THE TASK FORCE MEMBERS

Norm Becker:

- Has considerable international working experience in the United States, China, Peru, the Middle East and Africa.
- Obtained his undergraduate and graduate degrees in Canada.
- Chair of PEO's Globalization Task Force (1998-99).

Roger Barker:

- Obtained undergraduate engineering degree in the U.K. and Master's from MIT.
- Graduate apprenticeship in the U.K. to meet the requirements of the Institution of Mechanical Engineers as a Chartered Engineer.
- Much work experience in Canada. PEO's Registrar; participant in the current Michigan-Ontario (PEO) reciprocity discussions.

Richard Furst:

- Graduate of a 6-year degree program in Chile.
- Holds a Masters degree (France) in Chemical Engineering & Petroleum and Refining Engineering.
- Canadian working experience with a company where he was also required to be their expert witness to determine process and cost to clean up contaminated chemical products.
- PEO's Manager-Licensure; advisor to the PEO (1995/97) NAFTA TF; familiar with recognition of engineers overseas.

William Jackson:

- Background is in the high-tech (information technology) field.
- Has worked extensively throughout China, Philippines and the Maldives.

Lionel Laroche:

- Graduate of Ecole Polytechnique in France (baccalaureate in Math/Engineering) and California Institute of Technology (doctorate in Chemical Engineering).
- Has experience practicing at the international level notably in France; studied in France and the U.S.
- Works in Canada, France and the EU countries.

Max Perera:

- Emigrated from Sri Lanka.
- Holds post-graduate degrees in engineering and business administration.
- Was a Chartered Engineer and M.I.Mech.E.
- Was Chief Engineer, Services Base Workshop, Colombo, Sri Lanka.
- PEO Councillor with interest in international mobility of engineers; drafted the TF Terms of Reference that was endorsed by Council.

Wendy Ryan-Bacon:

- Vice-President International Affairs, CCPE; has responsibility for negotiating international agreements on behalf of CCPE constituent member associations/order.

Enrique Tabak:

- Civil/Structural Engineering Manager at Holderbank International Company.
- Direct involvement in Holderbank's engineering activities in the U.S. (Colorado, South Carolina, Missouri, Texas, New Jersey, Utah and New York State).
- Responsible for projects in Malaysia, Spain, Mexico, Chile, Brazil, El Salvador, Guatemala, Nicaragua, and Argentina; Extensive international practice experience in Latin America.

Bill Walker:

- Background is in public infrastructure.
- Has focused on public work projects in the international community, specifically Australia, New Zealand and Malaysia, where engineers come from engineering programs and their accreditation represents a form of registration requirement.

- A member of the Canadian Engineering International Board (CEIB) of the Canadian Council of Professional Engineers (CCPE); has represented CCPE at a number of Asia-Pacific Economic Co-operation (APEC) forums; familiar with practice in Australia, New Zealand and Malaysia. Also a member of PEO NAFTA TF in 1995-1997.

Norman Williams:

- Worked in a multi-disciplinary engineering environment in traditional and non-traditional engineering areas.
- Also has international experience working in laser/electro-optical technology systems design for applications of scientific and industrial interest.
- PEO's Deputy Registrar-Admissions; conversant with requirements for recognition of engineering practice internationally.

Appendix D

SUBMISSIONS TO THE TASK FORCE

List of Appended Documents

1. Letter to PEO's President and to the Councillors, APEC-NAFTA and Globalization from Maximus Perera, 21 January 2001.
2. Letter to the Task Force, "Perspectives on Globalization for Canadian Engineering re APEC" by Peter DeVita, MASC., MBA., P.Eng August 17, 2001.
3. Letter to Dr. Norbert Becker, P.Eng., Chair, International Mobility Task Force, from Randy Yu, P.Eng., dated July 11, 2001.
4. E-mail from Michael Jolliffe, dated July 17, 2001.
5. E-Mail from Christopher J. Moorehead, P.Eng., dated October 23, 2001.

SUBMISSIONS TO THE TASK FORCE (Cont'd)

1. Letter to PEO's President and to the Councillors, APEC-NAFTA and Globalization from Maximus Perera, 21 January 2001.

To: The President and
All Councillors
From: Maximus Perera, P.Eng.
Subject: APEC-NAFTA and globalization
Date: Sun, 21 Jan 2001

At the last Council meeting of January 11-12, 2001, this Council made some significant decisions, and I would like to restate my concerns (or fears) once again in the hope that this Council understands the impact of the decisions made.

1. The need to highlight that we have a more severe responsibility than most of our trading partners, except the USA, in the sense that we are protecting the public with a licence to PRACTISE professional engineering. Our prospective trade partners have, at best, only a right to TITLE. Therefore, 99% of the time we will be putting Ontario's public at risk if, by virtue of these international agreements, we commit to let anybody with a right to title to come in and practise.

2. The notion of ethics, as well as the notion of jurisprudence, is, by and large, not normally used by most of our trading partners in the sense that we require them to be used. Similarly, the familiarity with Codes and regulations similar to the Canadian ones is also lacking in the preparation of engineers in most of our trading partners or countries. It is no secret that the obvious purpose of globalization is to allow the free reign of uncontrolled competition where the environment and/or the health of the citizens of any given country are not a factor at all.

3. Points 1 and 2 above are the fundamental reasons why the USA does not participate in APEC, and why they have rejected the NAFTA-MRD by a 2/3 majority of States.

4. CCPE is negotiating deals that seem to offer absolutely no advantage to Canadian P. Engs, while giving away or slowly eroding the ability of the profession to protect the Canadian public from practitioners who are not held to similar requirements of studies, experience and ETHICS as we are. The typical CCPE orchestrated deal leaves it up to each so-called "economies" to qualify their own practitioners against standards which correspond to "right to title", giving them the right to disciplining their own people against unknown ethical standards, instead of creating international bodies to do this along models similar to ours. In addition, I believe that a serious study must be conducted about what real restrictions does a Canadian engineer face to practise in each of these other "economies" given the fact that the profession is not regulated there at all. In other words, it is unclear what, if any, advantage would we gain by giving up so much.

5. The decision to remove the residency requirement (the need to be either a Canadian citizen or a landed immigrant to be eligible for a permanent licence) is of concern. Does it mean that all temporary licencees should be provided with permanent licences? Our complaints and discipline processes would need to have a global reach to prosecute transgressors, and admissions will have to administer examinations off shore.

6. If we are really serious in trying to ensure international mobility based on similar or comparable standards of competency and professional responsibility, the following should be the steps that PEO should impose on the CCPE International Affairs' undertakings:

6.1. Establish an international committee along the lines of the CEAB to continuously audit and accredit engineering programs at specific Universities of the trading partner, against a common international standard acceptable to all partners. The money to pay for such an undertaking should come from the present "touristic" travel allocation used by CCPE delegations.

6.2 Establish as a requirement for the "P. Eng. (International)" licence the need to demonstrate via an exam (marked by others than the applicant's country of origin representatives) that the person understands the code of ethics of our profession in terms of the paramount obligation to protect public health and safety, as well as the fundamentals of how to avoid conflicts of interest, etc.

6.3. Establish international guidelines for what is a satisfactory engineering experience for the purpose of being accepted in the roster of the "P. Eng (International)". An international committee should verify the experience credentials and referees against this international criteria.

6.4. Last but not least establish, as part of any mobility agreement, something like an "extradition treaty" to enable the country where a "P.Eng. International" violates the competence and/or ethical obligations to discipline the transgressor adequately. Perhaps, an international tribunal may be an alternative way to do this. Certainly the home country should not be the one to do the disciplining.

The above is a serious model for a seriously globalized profession, as opposed to the uneven deals reached on the basis of touristic visits. This, of course, assuming that there is something to be gained by the globalization or by bilateral or multilateral mobility agreements. I do not see why the CCPE should spend valuable resources in trying to create agreements with Chile or Costa Rica where the exchange of

engineers is minimal, there is nothing remotely similar in terms of regulatory models, and Canadian engineers can work there with no other impediments than the usual immigration procedures that can only be negotiated between federal governments. Who, then, benefits from CCPE's agreements?

I feel that this should also be the official position of the PEO whenever asked to give opinions or participate in discussions related to the WTO (World Trade Organization). We must protect the human side of the globalization equation, at a globalized level.

If capital can move to the more hospitable jurisdiction in terms of profits (lowest labor costs, less regulation and lowest taxes) then the regulation of the professionals implementing that profitable activity should also be applied at a globalized level to ensure that the environment, health and safety of the human race is protected. In such a case we would have a rational, logical and unlimited international mobility of engineers with the need to demonstrate adequate qualifications only once, and the recourse to discipline any professional misconduct only once, with implications recognized by all countries.

The absence of a comprehensive policy on Globalization has driven this Council to address issues relating to this area in a piecemeal fashion without considering the potential impacts. We have been stumbling gloriously in making significant decisions without really grasping the gravity of such decisions on our prime responsibility of safeguarding the life, health, property and welfare of our citizens. We are obligated to do the required due diligence before making decisions that could have far-reaching consequences on our ability to regulate the practice of professional engineering in the province of Ontario.

We are effectively setting up different routes to admission to the practice of engineering in Ontario for no good reason. Such action is both unnecessary and indefensible. Furthermore, it violates the social contract between PEO (through the powers bestowed by the Ontario legislature) and the Ontario public.

Maximus Perera, P.Eng.
Councillor

SUBMISSIONS TO THE TASK FORCE

2. Letter to the Task Force, "Perspectives on Globalization for Canadian Engineering re APEC" by Peter DeVita, MASC., MBA., P.Eng August 17, 2001.

Perspectives on Globalization for Canadian Engineering re APEC.
Peter M DeVita, MASC, MBA, P.Eng.
August 17,2001

Introduction:

To begin, we need to separate Regulatory ideas from self-interest ones. PEO's concern must focus, as it always must, on the risk to the public interest. It is not PEO's sphere of concern to deal with the ability of Ontario Engineers to get work overseas. However, we are responsible to institute discipline procedures on mal-practice of our Engineers in foreign territory.

When it comes to questions of competitiveness of Canadian engineers on foreign ground or the ease of entrance of Canadian engineers to those projects, it is an OSPE responsibility. These are economic issues. They are ones that deal with the ability of our practitioners to flourish and prosper (it is only a PEO issue if the economic fortunes of our Licencees become so low that the quality of their practice, and therefore, the public interest has a negative impact). In this respect, I believe that OSPE must be at the table when we consider the APEC proposal.

PEO's Role

Coming back to PEO, our concern in detail, is to apply our standard processes for Admission to our profession. We must not have artificial barriers – for example, arbitrarily limit the number of engineers allowed to enter per year despite their qualifications. Our process has three main criteria. These are:

- a) Academic qualifications
- b) Experience or “judgement” and
- c) Ethics or “attitude”

I have no doubt that most countries today have access to the fundamentals of engineering education. Hence reaching agreement on academic qualifications is a matter of comparing programs of study.

The second two criteria are not so objectively easy to compare.

The experience qualifications are aimed at insuring that our practitioners are sufficiently versed in their occupation so that they have a degree of maturity or judgement about what they do. This is a highly qualitative criterion. In my view, the judgment ability has a great deal to do with what are acceptable practices in a society. These can only be learned by practicing in a society under some kind of guidelines. For PEO to be confident of procedures in this area, we need a much improved and much more rigorous Internship program for all applicants.

Internship must be a mandatory program. For foreign engineers with seven plus years of experience, we could allow partial exemptions, but the last year of Internship cannot be exempted. However, to take this step, PEO must also be in a position to assist applicants in finding an employer that follows PEO's Internship guidelines. We must also organize a significant mentor-ship program in which our applicants are advised and coached effectively (a substantial effort needing several thousand volunteers – a great opportunity for retired members). Some foreign countries have higher criteria than Canada (Germany) – how do we match or exceed these?

Finally, there is the subject of Ethics. This is the largest hurdle of all, and is rarely mentioned in mobility discussions at the National level.

In our Canadian assessment of CEAB applications we assume the Canadian frame of reference. We take for granted that our citizens have absorbed most of the fundamental mores of our society; for example, that each individual must be valued and respected. We have certain equality understandings with regard to women, minorities and the handicapped. Our attitudes towards preserving the environment are also different than some others around the world.

The way we do things in Canada, especially with regard to the position of professions is different. The book 'Death of the Guilds' gives excellent insight to this kind of background to the professions in the United States, United Kingdom, Germany, Italy and France. An equivalent work on APEC countries is needed. This is a Sociological study. It covers all the major professions and provides a basis on what makes people tick from various nations.

Assessing this expanded view of ethics takes substantially more work on our part. It is not merely having someone pass a Law and Ethics test. There is a cultural context within which we must interpret an individual. For example, we have had individuals caught cheating during their ethics exam. This is a very clear demonstration of an unethical act. But in the applicants view, the ends justify the means. Not so for us. Other issues dealing with attitudes that affect behavior are more subtle, for example, a man who believes women are inferior in doing engineering. Some differences can be dramatic - for example, if the value of an individual is low, then it does not matter if a few get killed on a construction job. At a demolition site, the blast is let off as soon as it is ready - too bad if anyone was not quick enough to get out. Such attitudes would be intolerable in Canada.

I cannot give a solution to this issue. I can say, however, that it will take a lot more study on the part of our profession's leaders.

If the CCPE Board and the Councils of associations across the country think they want mobility with another country then we need to understand them thoroughly. We need to understand, as a minimum, their system of "Licensure". We also need to understand the history and sociological context of those nations with regard to the creation of their Engineering professions. If we can get that far, we might begin to resolve how to exchange professional credentials – or whether we even should with a specific nation!

I must add that PEO has been considering a mobility agreement with our neighbours, the state of Michigan. Clearly, American and Canadian attitudes and derived ethics are very similar. We also understand each other's system of Licensure. Finally, there are several thousand engineers that flow between our borders now. In short, a reciprocity agreement would permit us to properly regulate and discipline what is already happening.

PEO Council dropped its residency requirement in considering the Michigan potential. Canada's view is that such a requirement is really an arbitrary one. Being a Canadian or actually living in Canada does not make a better engineer per se.

Summary;

Whether from Michigan or from an APEC nation, what is important is to ensure that our three criteria are met. Once these hurdles have been passed we can be confident that risks to the public interest have been minimized.

Peter DeVita Associates
2 O'Connor Crescent
Richmond Hill L4C 7P3

SUBMISSIONS TO THE TASK FORCE (

3. Letter to Dr. Norbert Becker, P.Eng., Chair, International Mobility Task Force, from Randy Yu, P.Eng., dated July 11, 2001.

4. E-Mail from Michael Jolliffe, dated July 17, 2001

Appendix D (Cont'd)

From: Wendy Ryan-Bacon [mailto:wendy.ryanbacon@ccpe.ca]
Sent: Tuesday, July 17, 2001 4:34 PM

To: Norman Williams
Cc: Bill Walker; Michael Jolliffe
Subject: PEO International Mobility Task Force

Hi Norm:

You may recall that at the beginning of the task force, I had suggested Michael Jolliffe as a member and followed up with him about the work of the task force. At my suggestion, he has provided a brief commentary from his perspective on the role of CCPE and PEO in international mobility.

Could you pass this along to other members of the task force?

Thanks,
Wendy

----- Original Message -----

From: Michael Jolliffe
To: Wendy Ryan-Bacon (E-mail)
Cc: Michael Jolliffe
Sent: Tuesday, July 17, 2001 3:39 PM

Subject: Engineering and the International Marketplace

Hi Wendy

Thank you for your initial call concerning the PEO task force on mobility. I have been swamped so have not had an opportunity to pass along my thoughts until now.

Given my experience Chairing the ACEC Working Group on Access to the US Market, I would say PEO and all provincial bodies as well as CCPE play an important role in mobility issues relating to our industry. At first glance it may not seem that way, but the regulations and requirements set out by our respective bodies are critical to our business, both in terms of ensuring quality standards at home but also in working cooperatively with other jurisdictions to establish consistent standards that allow Canadian engineers access to those markets today and in the future. Our foreign markets will not maintain their existing practices forever, as we see now in the US, so it is important that we maintain a close watch on trends and developments and in some instances become proactive to ensure our interests are protected.

There are no better representatives of our industry than those who work in it. I see two distinct roads ahead: a domestic market and an ever emerging international market that will require a sophisticated and coordinated approach by all players in our industry: government, CCPE/PEO/ACEC etc., and private sector firms to deal with issues from taxation to immigration all the way to acceptable professional recognition. I already see this happening in the US and can only expect this to occur elsewhere as our markets become more integrated and our clients' needs more global.

Again, sorry for not responding sooner. If you have any upcoming meetings or sessions, please let me know and I will try and make it.

All the best,
Michael Jolliffe
Vice-President, Government Relations
AMEC Inc.

Appendix D

5. E-Mail from Christopher J. Moorehead, P.Eng., dated October 23, 2001

International Mobility From:
Christopher Moorehead (cmoorehead@attglobal.net)

Date: Tuesday, October 23, 2001 01:00 PM

Greetings—

A piece of information that you may find useful—there is one state in which the profession is self-regulated: Delaware. The Delaware Association of Professional Engineers (DAPE) is similar to PEO in its organization & scope. As a result, there is more leeway in accepting the credentials of Canadian P.Engs. For example, DAPE will accept P.Engs as references on PE applications, while most other states will not.

I am in the process of getting licensed in Delaware—I have already passed the FE exam & will be writing the PE exam next April. When I submitted my application to DAPE, I received a telephone call from the Executive Director, who told me that Delaware will grant a PE without examination to Canadian P.Engs who have been licensed for at least ten years. However, as no other state will do the same, the holder of such a license will not be able to obtain a PE in another state through reciprocity. Since I am planning on relocating to Delaware next year & will likely be consulting (which would require licensure in several states, Delaware being relatively small), I have elected to go the exam route.

Self-regulation isn't the only thing DAPE & PEO have in common—to offer professional engineering services in Delaware, it is necessary to hold a Certificate of Authorization. In most other states, a PE license is all that is required.

Hope this helps...

Chris

--

Christopher J. Moorehead (P.Eng.)
Durham, NC
cmoorehead@attglobal.net

Appendix E STAKEHOLDERS' POSITION STATEMENTS

List of Appended Documents

1. Canadian Council of Professional Engineers' Submission to PEO's International Mobility Task Force Report, dated October 3, 2001.
2. Canadian Council of Professional Engineers (Canadian Engineering International Board) Monitoring Report to the CCPE Board of Directors dated May 2001.
3. Ontario Society of Professional Engineers Briefing Note dated July 24, 2001.
4. Letter from Consulting Engineers of Ontario addressed to Dr. Norbert Becker, P.Eng., Chair, International Mobility Task Force, dated October 12, 2001.

STAKEHOLDERS' POSITION STATEMENTS

1. Canadian Council of Professional Engineers' Submission to PEO's International Mobility Task Force Report, dated October 3, 2001.

CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS
Submission to the PEO International Mobility Task Force Report
Wendy Ryan-Bacon, P.Eng.
Vice-President, International Affairs
Canadian Council of Professional Engineers
October 3, 2001

CCPE was very pleased to be asked to participate in PEO's International Mobility Task Force. In its mandate, as established by the Associations/Ordre in a Letters Patent, the CCPE acts on behalf of and to promote the views of its members concerning the engineering profession in matters that are national or international in scope, including without limitation, international registration or certification of engineers, and reciprocal practice. Over the years CCPE has undertaken many international initiatives that have

contributed to a high regard for the Canadian engineering profession abroad and the development of international standards in engineering education and practice. In all of these endeavours, the CCPE is mindful that the primary reason for regulation of the profession is to protect the public.

The CCPE has adopted the following positions on International Mobility:

1. In the interests of public safety, CCPE supports rigorous international standards of practice and qualifications for admission to the profession of engineering that are in accord with the standards and qualifications that apply in Canada.
2. In the interests of public safety, foreign-trained engineers must demonstrate that they meet Canadian standards for admittance into the profession prior to licensure.
3. CCPE believes that federal policies must enhance the national and international mobility of engineers to retain the existing high standards of engineering in Canada and to encourage the development of equally high standards abroad.

In 2000, the CCPE established the Canadian Engineering International Board (CEIB) with the following mandate:

- To achieve recognition by the international community of Canadian standards of excellence in engineering education and practice.
- To remove barriers so that Canadian engineers have the right to practise abroad without discrimination.

Among the expected outcomes of the CEIB are policies and mechanisms for the recognition of Canadian engineering credentials other countries for the right to title and practise and policies and mechanisms for the recognition of foreign engineering credentials in Canada with due regard for public safety, regulation of the engineering profession in Canada and the admission practices of the constituent members of CCPE. One mechanism to achieve these outcomes is a Mutual Recognition Agreement. In entering into a mutual recognition agreement, CCPE has the following objectives:

- to protect the public
- to treat others equitably
- to improve international mobility
- to enhance global competitiveness

The process of coming to an agreement is often long and arduous. Typically, CCPE will establish a team of engineers with a breadth of knowledge and experience in the Canadian engineering education and licensure system. The investigation starts with an exchange of information about each other's systems. If deemed appropriate, then there will be an exchange of observers to see the systems in operation. This may involve observing an accreditation visit, an annual meeting, an experience interview, etc. The actual activities will depend on the nature of the system being investigated. From CCPE's perspective, the basis for all negotiations is the CCPE Guideline on Admission to the Practice of Engineering in Canada. The preparation of this document involved extensive consultation with the Associations/Ordre. It was first published in 1992 and has been recently updated and re-issued. In all negotiations, the CCPE team ensures that the other party understands the legal requirements to practise engineering in Canada and the role of the Associations/Ordre. It is always made clear that the final authority for issuing a licence is the appropriate Association/Ordre.

To date, the CCPE has signed four international agreements, known as the "ABET Agreement", the "Washington Accord", the "NAFTA MRD" and the "France Agreement". Descriptions of these agreements were provided in an article to Engineering Dimensions, January 1999 issue. In addition, CCPE has been participating in two forums related to establishing International Registers of Engineers. The Registers are intended to form a framework for bilateral agreements between interested parties. Being on the Register provides no practice rights in any jurisdiction. A description of the APEC Engineer Register appears in an article to Engineering Dimensions, January 2001.

During one of the Task Force's meetings, a number of questions were raised concerning CCPE's international initiatives. The following answers are provided:

Does CCPE have any legislated mandate to assess qualifications for licensing?

No. CCPE works in the interest of its constituent members, which have the ultimate authority for issuing licences to practise engineering. Our teams investigate systems in other countries (using the national Admissions Guideline as the basis) and enter into agreements only where appropriate. Assessment of an individual's qualifications rests with the Association/Ordre.

The APEC Engineer Register appears to be appropriate as a database to which foreign governments could have access in their search for Canadian professional engineering expertise. Is this a regulatory matter or an advocacy issue?

The initial concept of the Register was to establish a framework that could be used for negotiating bilateral agreements between interested parties. A mutual recognition agreement assists in the regulatory functions for assessing the qualifications of engineers wishing to practise in Canada. For Canadian engineers wishing to practise in other countries it can be considered an advocacy matter.

Where did they get their mandate?

CCPE's mandate is established by its constituent members, i.e., the 12 provincial and territorial associations/ordre that regulate the profession of engineering in Canada, through a letters patent. Any changes to the Letters Patent must be approved at a meeting of members. At such a meeting, the members of CCPE are represented by the Presidents of the Associations/Ordre.

What is the rationale for CCPE to get in the middle of trying to involve Canadian engineers?

As part of its mandate, CCPE represents the Canadian engineering profession in international matters.

If an engineering practitioner from a foreign register gets the right to practise in one jurisdiction, it puts pressure on all the other jurisdictions to grant him or her similar rights. This would threaten the IAMA. PEO could invoke the "notwithstanding" clause. Then we would be seen as the "bad guys".

If any one association is out of step with the other Associations, it could impact the Inter-Association Mobility Agreement. One of CCPE's roles is to foster communication among the associations in order to achieve the greatest commonality of procedures. Through a consultative process, the CCPE tries to ensure that all concerns are met before proceeding with an initiative.

PEO is responsible to ensure that all applicants for licensing satisfy the same standards. The final authority for issuing licences rests with the Associations/Ordre.

There exists really no country outside North America that has a regulatory regime for engineering practice.

The regulation of engineering is handled in many different ways. There are no two systems that are identical. This should not mean that there can be no agreements. For systems that have a greater commonality, an agreement should be easier to reach and should have fewer conditions. For systems that are very different, an agreement may be more difficult and maybe narrower in scope.

Does it mean that if a Canadian P.Eng. who is not listed in the register wants to go to Indonesia, he or she could not?

No. The existence of a Register or an agreement based on the Register does not preclude any engineer from following the paths that are currently available. Agreements are intended to facilitate mobility, not prohibit it.

Have we not heard that Canadian engineers do not require a licence or the intervention of neither CCPE nor any of the associations/order to work in a foreign country except the U.S.?

Canadian engineers are currently working in many countries throughout the world without the benefit of an agreement. While this may be the case now, there is no guarantee that this will continue as countries examine their own regulatory systems. Agreements are intended to facilitate mobility.

Does CCPE have any legislated clout to prevent someone from claiming to be an APEC engineer?

This concern can be discussed at a future meeting of the APEC Engineer Co-ordinating Committee meeting. Each national Monitoring Committee acts as the point of contact for the Register in their country and can be contacted to determine if someone is on the Register.

It is not a CCPE initiative, it is really driven by the federal government.

The APEC Engineer Project was conducted under the auspices of the APEC Human Resources Development Working Group. The proposal was submitted by the Institution of Engineers, Australia in conjunction with their government representatives. The focus of the project was to facilitate the movement of engineering professionals. The project received government support but was primarily driven by the engineering sector of each economy.

It seems if this idea is accepted, we run the risk of further reducing our chances of getting a reciprocity agreement with the U.S. Whereas they may consider waiving exams for P.Eng. CEAB graduates, they might be concerned about the possible influx of others who are licensed in Canada and may question our standards.

In fact, the Register concept may be a vehicle for gaining easier access to the United States. It is up to the interested parties to ensure that an appropriate level of confidence in the other system has been developed. However, the threat of "daisy-chaining", i.e. access to one system through an agreement with a third party, exists. The underlying intent in an agreement is that it applies to individuals who have been through that country's assessment process. Careful choice of wording can minimize this risk.

2. Canadian Council of Professional Engineers (Canadian Engineering International Board) Monitoring Report to the CCPE Board of Directors dated May 2001.

CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS
CANADIAN ENGINEERING INTERNATIONAL BOARD

Monitoring Report to the CCPE Board of Directors

May 2001

Last Report to the Board of Directors: May 2000

The terms of reference of the CEIB were approved at the February 2000 Board of Directors meeting and the first appointments were made for July 1, 2000. This report describes the activities of the IAC and, subsequently, the CEIB from May 2000 to April 2001.

Meetings

- June 10 and 14, 2000 in Vancouver
- September 17 and 18, 2000 in Charlottetown
- December 2 and 3, 2000
- April 29 and 30, 2001 in Calgary

Activities/Developments

Operational Matters

Over the last year the CEIB has reviewed, updated, developed or contributed to several policies:

- Policies and Procedures for Recognition of Foreign Professional Qualifications (distributed to the Associations/Ordre at the December national meeting)
- Nomination and selection procedure for members of the CEIB (still under development)
- Proper co-ordination of CCPE international communications
- CCPE Policies and Procedures for Substantial Equivalency Visits (a revised draft will be sent to CEAB for comment)
- National Guideline for Admission to the Practice of Engineering in areas concerning CCPE agreements and activities
- CEIB policy to establish teams for international initiatives

In addition, the CEIB is trying to gather more and better information from the Associations/Ordre related to the implementation of our International Agreements. This is being done in conjunction with Professional Affairs and their annual survey regarding the Inter-Association Mobility Agreement. It has also been identified that more information concerning the requirements related to corporate licensure and practice by foreign professionals is needed to assist our international discussions.

Agreements and Forums

ABET Agreement – Monitoring of this agreement is usually carried out by the CEAB with representatives attending each other's meetings and accreditation visits (see CEAB report of Activities).

NAFTA Mutual Recognition Agreement – Technically this agreement still exists, but implementation by all parties has not been achieved. The CEIB has agreed that bilateral initiatives between Associations and State Boards should be encouraged. The CEIB participated in mobility forums organized by APEGBC in the fall and APEGGA this spring. At the request of NCEES, CCPE has named a Digvir Jayas to their task force looking at engineering qualifications and licensure. CCPE has been invited to give presentations about the Canadian licensing system at the NSPE and NCEES annual meetings this summer. W. Ryan-Bacon, Vice-President, International affairs is working with ACEC on their task force on access to the US market and was invited to an ACEC (US) summit on licensure. L.T. Russell, CEIB Chair appeared in court in Florida on behalf of a Canadian P.Eng. seeking licensure there. CCPE is committed to working with Mexico to achieve implementation of the NAFTA MRA there.

Washington Accord – In the absence of a monitoring schedule by the Washington Accord secretariat, the CEIB requested the CEAB to conduct a monitoring visit to the Hong Kong Institution of Engineers in support of our work to establish a mutual recognition agreement. (see CEAB activities report). Following a presentation to representatives of CEIB and CEAB, the Japan Accreditation Board for Engineering Education offered to host two Canadian representatives to visit two institutions in Japan that had undergone a trial accreditation visit and learn more about their accreditation system. Following the visit by G.Y. Delisle and L.T. Russell (CEIB members and former CEAB chairs), the CEIB agreed to support JABEE's application for provisional membership in the Washington Accord. The next meeting of signatories is scheduled for June 2001 in South Africa.

France Agreement – This agreement has been implemented by all associations except PEO. OIQ reports good success with this agreement. The agreement has also generated a lot of interest in Europe. A paper

by G.Y. Delisle and W. Ryan-Bacon concerning this agreement was presented at the annual conference of the European Society for Engineering Education last September. Representatives from CTI and CCPE met at the same time to discuss issues about the agreement. It is expected that CTI representatives will visit Canada this year. One item that was identified for future discussions is the recognition of other engineers.

Engineers' Mobility Forum – CCPE hosted a meeting of this forum in conjunction with several other international meetings in June last year. The EMF essentially has now adopted the same criteria for its international register as the APEC Engineer Register. The members of the EMF have been preparing their assessment statements in anticipation of the inaugural meeting of the co-ordinating committee to launch this register. Eleven statements have been prepared and distributed (Canada, United States, United Kingdom, Ireland, Australia, New Zealand, Hong Kong, Japan, Korea, Malaysia, South Africa) and will be considered at the next EMF meeting, held in conjunction with the Washington Accord.

APEC Engineer Register – Last June, CCPE hosted a workshop for the regulatory agencies of the participating economies as well as a meeting of APEC Engineer Register Co-ordinating Committee. The qualifications of actual candidates for the Register were discussed to ensure that each economy was meeting the criteria for the Register and that the level of competency was assured. CCPE agreed to act as a secretariat for the Register for the initial period. This was the final step in the project phase, and on November 1, 2000, the APEC Engineer Register became operational. W. Ryan-Bacon and G.Y. Delisle prepared an article for Engineering Dimensions about the impact of this Register. In December, CEIB hosted a meeting of the Executive Directors of the Association/Ordre to provide them with all of the details and developments and to discuss potential implementation of the Register. This meeting also reviewed the outcome of a pilot project conducted with APEGBC in this respect. At its meeting in April, the CEIB agreed to a protocol for the operation of the APEC Engineer Register in Canada. This protocol will now be further defined and developed in consultation with the Associations/Ordre.

Substantial Equivalency Visits

CCPE, through the CEIB and the CEAB continues to work closely with Costa Rica to help them develop an accreditation system for engineering programs and to strengthen their licensing system. Three engineering programs in Costa Rica are now considered to be substantially equivalent to a CEAB-accredited program. Another substantial equivalency visit is scheduled to two more institutions and three programs this month. A visit was also conducted to an institution in Austria.

Current Negotiations

The CEIB is currently negotiating agreements for mutual recognition at the professional level with the Hong Kong Institution of Engineers and the Institution of Civil Engineers in the UK. Last fall we were successful in having our initial meeting with engineering representatives in Chile concerning mutual recognition of engineers under the terms of the Canada-Chile Free Trade Agreement. CEIB will host a team from Chile this June to continue discussions.

Federal Government

The CEIB continues to liaise with representatives from the Department of Foreign Affairs and International Trade and Industry Canada concerning trade in engineering services. We have been requested to provide input into potential trade discussions with Singapore and Central America. We have responded positively to both these initiatives.

Next meeting of CEIB: September 23 and 24, 2001
/wrb 010504

Summary of Agreements and Forums

CEAB/CCPE – EAC/ABET Agreement (signed in 1980) – a mutual recognition agreement concerning engineering accreditation systems in Canada and the US.

NAFTA Mutual Recognition Agreement (signed in 1995) – a mutual recognition agreement and protocol for the temporary licensing of engineers in the jurisdictions of Canada, Mexico and the US. Agreement is technically unapproved in the US since the National Council of Examiners of Engineering and Surveying withdrew its ratification. (Texas was the only state to implement the provisions of the agreement during the two-year ratification period.)

Washington Accord (signed in 1989) – a mutual recognition agreement concerning accreditation systems for engineering degree programs in Canada, USA, UK, Ireland, Australia, New Zealand, Hong Kong, South Africa.

CCPE – CTI Agreement (signed in 1998 – an agreement that will recognize Canadian professional engineers who have graduated from a CEAB-accredited program as “ingénieur diplômé” in France and reciprocally, will admit “ingénieur diplômés” from France without the need for technical examinations.

Engineers’ Mobility Forum (formed in 1997) – a forum to discuss recognition at the full professional level among the countries of the Washington Accord and now includes Japan, Korea and Malaysia with FEANI (European Federation of National Engineering Associations); pursuing the concept of an international register of engineers who meet a uniform set of criteria – the register would be the framework for bilateral agreements.

APEC Engineer Register (operational as of November 1, 2000 – an initiative to facilitate mobility of engineers within the APEC economies under the auspices of the APEC Human Resources Development working group; developed the concept of the “APEC Engineer” (similar to the EMF international register); seven economies are authorized to operate a Register (Australia, Canada, Japan, New Zealand, Korea, Malaysia, Hong Kong).

Substantial Equivalency Evaluations – in conjunction with the CEAB, the CEIB conducts substantial equivalency evaluations upon request by foreign institutions to individual programs using CEAB criteria and procedures.

Appendix E (Cont’d)

STAKEHOLDERS’ POSITION STATEMENTS (Cont’d)

3. Ontario Society of Professional Engineers Briefing Note dated July 24, 2001.

Ontario Society of Professional Engineers
Briefing Note
Date: Updated July 24, 2001

Subject: Proposed Ontario/Michigan Mutual Recognition Agreement (MRA)

1. Background

Professional Engineers Ontario (PEO) and the State of Michigan [Michigan Society of Professional Engineers (MSPE) and the Michigan licensing board for PEs] are currently in negotiations to conclude an MRA to facilitate mobility of engineers between Ontario & Michigan, i.e. to establish “reciprocity” of professional qualifications.

These discussions have been underway for several years, the original impetus, apparently being the 1995 NAFTA Mutual Recognition Document, signed by national engineering bodies in Canada, the U.S. and Mexico, but ultimately rejected in the U.S. when two-thirds of the states voted against it (it was not NSPE that rejected the agreement but the states acting as a block in another national forum).

2. Specifics of the proposed agreement:

- PEO & Michigan have agreed in principle to eliminate certain mobility barriers in their respective jurisdictions
- Specifically, PEO has agreed to eliminate the Canadian citizenship/residency requirement for licensure under the Professional Engineers Act. In early 2001, PEO Council passed a motion to

eliminate this requirement. The Ministry of the Attorney General is aware of this development but has not taken steps as yet to implement it (an amendment to the Professional Engineers Act would be required).

- Enabling legislation (Bill 0113) is making its way through the Michigan Senate; it deals with "reciprocity" of qualifications for a number of professions, and would give licensing/regulatory bodies in Michigan leave to accept the qualifications of Ontario registrants/licensees (details to be determined by the licensing bodies concerned).
- PEO Registrar/CEO, Roger Barker was to appear at a Michigan Senate committee hearing in March, 2001 to present PEO's position; the hearing was cancelled at the last minute but Barker distributed his intended remarks (setting out PEO's position to several parties), including OSPE
- If the draft agreement is completed, Michigan engineers seeking licensure in Ontario would be required to demonstrate one year Canadian experience and write the Professional Practice Exam; PEO members would still be required to write two technical exams in Michigan, with the exception that those with five years licensed experience in Ontario would be exempted from the first of the two exams.
- Currently, Michigan requires two eight-hour technical exams -- the Fundamentals of Engineering (FE) exam and the Principles and Practice exam; both are discipline-specific, technical exams, the latter includes four hours of sub-discipline material (candidates select the subdiscipline). We understand that currently the Michigan licensing board sometimes waives the FE for PEO members who hold a graduate engineering degree and have five years licensed experience, and, reportedly, for applicants with 15 years licensed experience in Ontario (this is unconfirmed).
- It would appear that an analysis of the equivalency of PEO licensees and Michigan PEs in regards to education standards has not been done, though the Washington Accord, signed by Canada, the U.S. and other countries, recognizes that the academic standards of those countries as substantially equivalent. In effect this means -- so we are told -- that PEO begins by "looking to exempt" (from exams) when evaluating candidates from these countries, provided other conditions are satisfied.

3. Concerns expressed

Various parties have expressed views about the proposed agreement, including the following:

- The matter requires careful review from the perspective, not only of the individual professional engineer, but also that of consulting firms and the engineering sector as a whole.
- In some U.S. states, the real barrier to market access is not the licensing of individual professional engineers but restrictions on the ability of foreign firms to do business there; in some cases the owners/directors of a firm must be licensed PEs in that state and/or be resident in the state and/or own property there.
- The proposed agreement would make it significantly easier for Michigan PEs to work in Ontario and to work on Ontario projects from their home base in Michigan; on the other hand, the elimination of one of the two licensing exams for Ontario P.Engs. seeking licensure in Michigan, while lowering the barrier somewhat, leaves in place a significant obstacle, i.e. the need to write a difficult technical exam -- considered a formidable obstacle for those who completed their engineering studies a number of years ago. Is this reciprocity?
- While Michigan's technical exam is a significant barrier to those who have been away from studies for some years, the elimination of one of the two exams currently required may, in fact, facilitate the "brain drain" to Michigan of recent Ontario engineering graduates, for whom writing an exam may not pose as great a barrier (like Ontario, Michigan is currently experiencing a shortage of structural/civil engineers). The proposed agreement may ease the flow of young Ontario engineers to Michigan, thereby hurting Ontario consulting firms, which are already experiencing difficulty recruiting civil/structural engineers.
- A general concern about the removal of the Canadian citizenship/ residency requirement is that it will become more difficult to verify candidates' one-year Canadian experience, which would continue to be a requirement under the Act. For some, this calls into question PEO's stated

position that the “citizenship/residency clause ... serves no purpose in serving and protecting the public.”

4. Other approaches

Other approaches might include the following:

- eliminate both Michigan exams for PEO members
- eliminate both exams for PEO members who are CEAB grads
- eliminate both exams for those with graduate degrees
- eliminate both exams for those with graduate degrees and five years licensed experience in Ontario
- eliminate both exams for those with 15 years licensed experience in Ontario, etc.

5. Impetus/motivation

- PEO entered into discussions with MSPE and the Michigan licensing board in good faith and in the spirit of the 1995 NAFTA MRD for engineers negotiated by the Canadian Council of Professional Engineers (CCPE), the U.S. Council for International Engineering Practice and the COMPII in Mexico. As mentioned above, however, that agreement was ultimately rejected by all U.S. states; there is no onus on Ontario to take action under the NAFTA MRD.
- Though PEO has stated that it “desires reciprocity with engineers from Michigan”, the terms being proposed do not constitute reciprocity.
- Some argue that the proposed agreement is a “better deal” for Michigan PEs than for Ontario P.Engs., and further, that the impetus behind it has everything to do with access to markets, trade in services, competitiveness, etc. and very little to do with regulation (the Act change proposed by PEO is intended solely to facilitate access by Michigan engineers to the Ontario market). As such PEO’s action requires consultation with other organizations and stakeholders in the engineering community who will be affected by its actions.

6. OSPE Position

- OSPE has some concerns about potential negative impacts of the proposed agreement between PEO and Michigan on individual professional engineers, consulting firms and the engineering sector as a whole, and believes that a full evaluation of the pros and cons of eliminating the one-year Canadian residency requirement from the Act is required. Consultation with other interested parties and stakeholders is seen as the appropriate next step; in addition, an objective analysis of the pros and cons of the proposed change, conducted by an outside consultant, should be considered.

Note: Under NAFTA, it is relatively easy for an Ontario Engineer to obtain a visa and enter the U.S. to work on a temporary basis, without being licensed in a particular state. A licence is required only for work covered by demand-side legislation, in which case the Ontario engineer can collaborate with a PE in that state.

Prepared by J. Rowlands
Appendix E (Cont’d)

STAKEHOLDERS’ POSITION STATEMENTS

4. Letter from Consulting Engineers of Ontario addressed to Dr. Norbert Becker, Chair, International Mobility Task Force, dated October 12, 2001.
10 Four Seasons Place, Suite 405, Toronto, Ontario M9B 6H7 Tel: (416) 620-1400 Fax: (416) 620-5803 E-Mail: staff@ceo.on.ca
October 12, 2001

Dr. Norbert Becker
Chair, PEO International Mobility Task Force
Professional Engineers Ontario
25 Sheppard Ave., West, Suite 1000
North York, ON
M2M 6S9

Dear Dr. Becker:

As requested, Consulting Engineers of Ontario (CEO) has participated on the PEO International Mobility Task Force and has reviewed the draft report issued by that task force. We are pleased to provide the general support of CEO for the recommendations adopted by your task force.

CEO is an association devoted to the business and professional aspects of the practice of engineering in Ontario. Our membership of approximately 260 firms, with more than 13,000 employees, includes companies of all sizes from sole proprietorships to the largest engineering firms in the province. Unlike many PEO members, the engineers within CEO firms must maintain a license to practice engineering, since they are routinely involved in providing services to the public. For this reason CEO has a direct interest in the subject of your task force.

We are pleased to provide our support for the recommendations contained within Chapter 8 of your report. Specifically, we offer the following to emphasize our position on some of the key issues:

a) CEO agrees that there is no apparent merit in continuing or promoting mobility agreements with national jurisdictions other than the United States. Canadian engineers and engineering companies do not require those agreements to operate in other countries around the world. The acceptance of Canadian engineering qualifications and experience in virtually all other countries is well documented and certainly is supported by the international successes of CEO's members. We see no obvious benefits in international mobility agreements in countries where official national regulators do not exist.

b) With respect to the negotiation of reciprocity agreements with any of the U.S. states, CEO supports such agreements if the process is truly fair and equal. In this respect, for example, we will not support an agreement that requires examinations for the applicants from one country and not from the other. Examinations to enter the profession of consulting engineering may have merit for new entrants with little or no practical experience. For practitioners with extensive experience, we do not support the concept that a theoretical examination is an appropriate means of testing professional qualifications. We believe that reasonable judgments, which could be supported by references from peers, can be made in those circumstances.

c) To encourage the mobility of engineers between Ontario and any of the U.S. states, CEO would suggest the temporary license process that currently exists in Ontario and in some states. The approach is simple and could readily be introduced in other jurisdictions. The applicant for a temporary license must demonstrate academic qualifications and appropriate practical experience and must also align with a local license holder who is familiar with local laws, standards, etc. Adoption of a common temporary license system could be a major step toward future reciprocity.

d) CEO is interested in both the licensing of individual engineers and the secondary licensing of engineering companies. With respect to the opportunities for non-resident companies to work in Ontario

or most of the U.S. states, the playing field is definitely not level. It is relatively easy for a U.S. engineering company to work in Ontario or to own an Ontario company. Residency requirements for owners and directors form an effective entry barrier in most U.S. states, for Ontario companies. From a CEO perspective, this situation is more restrictive than the licensing of individual engineers.

If further discussions on this subject are contemplated, CEO would like to be involved in the process. We would also suggest that if there are discussions at the national level, our national association, the Association of Consulting Engineers of Canada (ACEC) should be included.

Yours truly,

CONSULTING ENGINEERS OF ONTARIO

D. C. Ingram, P. Eng.
President

Copies to: Norm Huggins, P. Eng.
Chairman, CEO

Tim Page
President, ACEC