Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

This text version is for your personal study only. Reproduction and/or redistribution is not allowed.

Please note that this is a text-only version. All links and animations are not activated in this version. It is recommended that you view the topic online for an interactive learning experience.

## Table of Contents

- 1. Introduction
- 2. Professional Accreditors
- 3. Other Special interest Groups
- 4. Discussion
- 5. Summary

# 1. Introduction



This topic discusses special interest networks with particular focus on international agreements governing the mutual recognition of engineering education qualifications and professional competence.

#### **Objectives: Special Interest Networks**

Upon completion of this topic, you should be able to

- identify the international agreements governing mutual recognition of engineering educational qualifications and professional competence
- identify the requirements for inclusion in the Washington Accord
- discuss the reasons for lack of progress in other special interest networks

## 2. Professional Accreditors

With the increasing mobility of graduates, particularly in professional fields, there is a growing need to provide a service to graduates who want their qualifications recognised in countries beyond the one in which they were educated. Further, the increasing activities multi-national companies creates the need for a recognition mechanism to assess employee credentials across national boundaries. Programlevel accreditors are collaborating internationally to provide a solution.

#### Engineering

Perhaps the best-known and most-cited collaboration is the Washington Accord between the professional engineering accreditation bodies of English-speaking countries. Most of these bodies are in some way related to professional and technical societies, which become prime stakeholders.

There are six international agreements governing mutual recognition of engineering qualifications and professional competence, differing significantly in their actual effect. In each of these agreements countries/economies wishing to participate may apply to become members or signatories to the agreement.

Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

There are three agreements dealing with the mutual recognition of tertiary-level qualifications in engineering:

- <u>The Washington Accord</u> (1989)
- <u>The Sydney Accord</u> (2001)
- <u>The Dublin Accord</u> (2002)

Click the tabs to view the three agreements in detail.

# International Engineering Agreements: Tertiary Qualifications in Engineering

#### The Washington Accord

The Washington Accord signed in 1989 recognises the substantial equivalency of engineering accreditation standards, criteria, and processes among its members. The member systems are considered to be "English-speaking." Graduates of first-professional degree programs are thus entitled to use the protected title of "engineer" and are considered to be entry-level professionals, eligible to commence a a process leading to the P.E. license (similar to the U.K. Chartered Engineer). That process includes a work experience, under supervision by the various professional societies.

#### The Sydney Accord

The Sydney Accord of 2001 recognises the substantial equivalency of accreditation standards, criteria, and processes for degree programs in engineering technology. Graduates in this area fill technological support roles at a level higher than that of a technician and lower than that of a licensed professional engineer. The training of an "engineering technologist" is not considered equivalent to that given in the German fachhochschulen, Dutch HBO, or U.K. polytechnics.

#### The Dublin Accord

The Dublin Accord is an agreement for the recognition of substantial equivalency in the accreditation of tertiary qualifications in technician engineering, normally of two years' duration. It commenced in 2002.

Given below are the other three agreements that cover recognition of equivalence at the **practising** engineer level, i.e., they deal with individual people rather than qualifications that are seen to meet the benchmark standard.

- <u>APEC Engineer agreement</u> (1999)
- Engineers Mobility Forum agreement (2001)
- Engineering Technologist Mobility Forum agreement (2003)

#### International Engineering Agreements: Competence Standards for Practising Engineers

#### APEC Engineer agreement (1999)

Under the APEC Engineer agreement, the representative organisation of each economy creates a register of engineers who wish to be recognised as meeting a

Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

generic international standard. Other economies may recognise this when such an engineer seeks recognition of his or her actual competence.

## Engineers Mobility Forum agreement (2001)

The APEC agreement has been broadened into the Engineers Mobility Forum agreement (2001). It is intended to draw EMF and APEC closer together through membership at an international level.

## Engineering Technologist Mobility Forum agreement (2003)

The Engineering Technologist Mobility Forum agreement was signed by participating economies/countries in 2003. The parties to the Agreement have agreed to work toward a mutual recognition scheme for engineering technologists.

The concept of the three compacts is that a person recognised in one country as meeting an agreed international competence standard should only be minimally assessed (primarily for local knowledge) in order to obtain registration in another member country.

The initial six countries in the Washington Accord were Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States. Below is a list of the original and subsequent full members:

- Australia Represented by Engineers Australia (1989)
- **Canada** Represented by Engineers Canada (1989)
- Chinese Taipei Represented by Institute of Engineering Education Taiwan (2007)
- Hong Kong China Represented by The Hong Kong Institution of Engineers (1995)
- Ireland Represented by Engineers Ireland (1989)
- Japan Represented by Japan Accreditation Board for Engineering Education (2005)
- **Korea** Represented by Accreditation Board for Engineering Education of Korea (*2007*)
- Malaysia Represented by Board of Engineers Malaysia (2009)
- New Zealand Represented by Institution of Professional Engineers NZ (1989)
- **Singapore** Represented by Institution of Engineers Singapore (2006)
- South Africa Represented by Engineering Council of South Africa (1999)
- United Kingdom Represented by Engineering Council UK (1989)
- United States Represented by Accreditation Board for Engineering and Technology (1989)

In 2011 six other countries had provisional status as recognised candidates, i.e.,

- **Germany** Represented by German Accreditation Agency for Study Programs in Engineering and Informatics
- India Represented by National Board of Accreditation of All India Council for Technical Education
- Pakistan Represented by Pakistan Engineering Council
- Russia Represented by Russian Association for Engineering Education
- Sri Lanka Represented by Institution of Engineers Sri Lanka
- Turkey Represented by MUDEK

These associations have agreed that:

Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

- the criteria, policies and procedures used by them to accredit engineering academic programs are comparable; and
- the accreditation decisions made by one association are acceptable to the others.

This gives engineering graduates a high level of mobility.

One reason that the Washington Accord works is that the engineering discipline is largely independent of geography. There is also a widely accepted notion of what an entry-level professional should know and be able to do. Therefore, the core requirement for membership in the Washington Accord is that an accreditor's scope is 'substantially equivalent' to that of the other members. A second requirement is a thorough accreditation process in relation to this scope. To verify this, each country hosts, from time to time, a group of Accord country engineering accreditors to observe one of its accreditation reviews. Thus, membership in the Accord can be expensive, not for institutions, but for more or less "non-profit" organisations. Another expense item is the activities of a national agency to establish and maintain relations with licensing and professional bodies. A third requirement is the circulation and consideration of any procedural or policy revisions made by one of the associations.

The actual licensing or registration of professional engineers is not part of the Washington Accord. However, the basic academic requirements for licensing or registration are dealt with by the member accreditation agencies. The licensure process differs among the signatory countries, so engineers must contact the individual signatory country in which they wish to obtain a license in order to be advised of national regulations and requirements.

#### **Other Professions**

Despite the attention drawn to the Washington Accord, it has not spawned many copies. This may be because:

- Requirements for engineering education are inherently international and highly prescribed, so the subject matter dealt with by the various associations activities is very similar.
- The agreed process for maintaining the currency of the Accord is costly and time-consuming; and
- The engineering associations generally 'belong to' their members; also, people do not have to join an engineering association in order to be legally entitled to use the title 'engineer' (This depends more on government regulation of professional titles. In many countries an association of professional engineers formulates and administers the professional engineering examinations)

Professions that are more tightly controlled by law or statute find the mutual recognition task more difficult. However, progress is being made in a number of other areas.

- In Architecture, an international charter was agreed in 1996, and work on this has resulted in the UNESCO-UIA Architectural Education Validation System (UIA is the International Union of Architects).
- Nurse Anaesthetists have been working on this for some a number of years, and their International Federation is the first international nursing or medical organisation to have developed 'International standards for education and practice'. IFNA has also adopted the concept of international accreditation by region, but it will be several years before it is developed and implemented.

Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

## 3. Other Special interest Groups

At present, only a few QA networks are focused on other dimensions, although there is a network of Small Island Developing States (SIDS) supported by the Commonwealth of Learning, with QA in higher education (HE) on its agenda. INQAAHE and UNESCO both have (collaborative) projects for assistance to small states, including QA capacity.

# 4. Discussion

## Discussion: Relationship of QA Networks with Other Organisations

a. This module concentrates on networks of QA agencies. What would be the value of associating with organisations of other types? Should one incorporate vertical as well as horizontal links?

How should networks generally relate to other organisations such as UNESCO, foundations, development banks, national governments, etc?

b. Go to the Washington Accord website at: <a href="http://www.washingtonaccord.org/Washington-Accord/">http://www.washingtonaccord.org/Washington-Accord/</a>

Familiarise yourself with the working principle of the Accord, notably the "substantial equivalency" of accreditation systems. This is different from recognition based upon a detailed analysis of studies completed by individuals. In a sense it works as a "gatekeeper", determining who may enter into a period of audited work experience, culminating in a licensing examination.

What do you believe is the real significance of the Accord? Are there other fields, disciplines, or occupational areas in which the Accord principle could be applied to good effect?

Subject	External Quality Assurance
Module	Networks Of External Quality Agencies
Торіс	3.11 Special Interest Networks

## 5. Summary

This topic covered the following main points:

- The increasing multi-national commercial operations of companies and growing mobility of graduates in professional fields have created a need to have qualifications recognised in countries other than the one in which the qualifications were earned.
- The following are three agreements covering mutual recognition in respect of tertiary-level qualifications in engineering:
  - o The Washington Accord
  - o The Sydney Accord
  - o The Dublin Accord
- The following are the other three agreements that cover recognition of equivalence at the practising engineer level:
  - o APEC Engineer agreement
  - o Engineers Mobility Forum agreement
  - Engineering Technologist Mobility Forum agreement
- The following are requirements for inclusion in the Washington Accord:
  - An accreditor's scope, principles, and methods are 'substantially equivalent' to those of the other members.
  - A thorough accreditation process in relation to this scope is carried out.
  - Any revisions made by any one of the associations to its policies or procedures are circulated and considered.
- The Washington Accord has been successfully implemented because of two main reasons:
  - The discipline of engineering is largely independent of geography.
  - There is a widely shared understanding of what an entry-level professional engineer must know and be able to do.
- As compared to the Washington Accord, there has been much less progress in special interest networks for other professions because it is a costly and time-consuming process to create and maintain a network.