

REPORT
on
INTERNATIONAL PROFESSIONAL REGISTRATION ADVISORS (IPRA)
CONFERENCE APRIL 2009
by
R A HARKER

1. INTRODUCTION.

The IPRA Conference is held every year in London at Savoy Place and IPRA,s are generally invited to attend every 3 years.

This year's IPRA Conference was combined with the IET Volunteers' Spring Conference.

The IPRA Conference was held on Thursday 23 April and Friday 24 April, followed by the IET Volunteer Spring Conference on Saturday 25 April and Sunday 26 April.

2. IPRA CONFERENCE.

2.1 Programme

2.1.1 Day 1

- Welcome and aims of the day
- IET Global
- Professional Registration: Process
- Professional Registration: Categories
- Fellowship
- Professional Registration: Case Studies

2.1.2 Day

- Overview of Registration Process
- The Professional Review Interview
- Interview Case Studies
- Competency Assessment
- Role of the Interview Convenor

2.2 Attendees

The conference was attended by delegates from 13 Countries – Australia, Brunei, Canada, Egypt, Greece, India, Italy, Japan, Kenya, Mauritius, Saudi Arabia, Singapore and South Africa. A number of the delegates had been to previous conferences and it was good to meet up with some old friends.

2.2.1 Conference Issues

The conference was a huge success and some very important issues arose and were discussed. These are as follows:

2.2.2 Establishment of the IET

With the formation of the IET from the amalgamation of the IEE and The Institution of Incorporated Engineers, membership and registration was divorced from each other. Registration is thus a separate process done on behalf of the EC UK.

The IET now has Engineers, Inc Engineers (Technologists), Technicians, Scientists and non-engineering people associated with Engineering as members.

2.2.3 Registration Categories

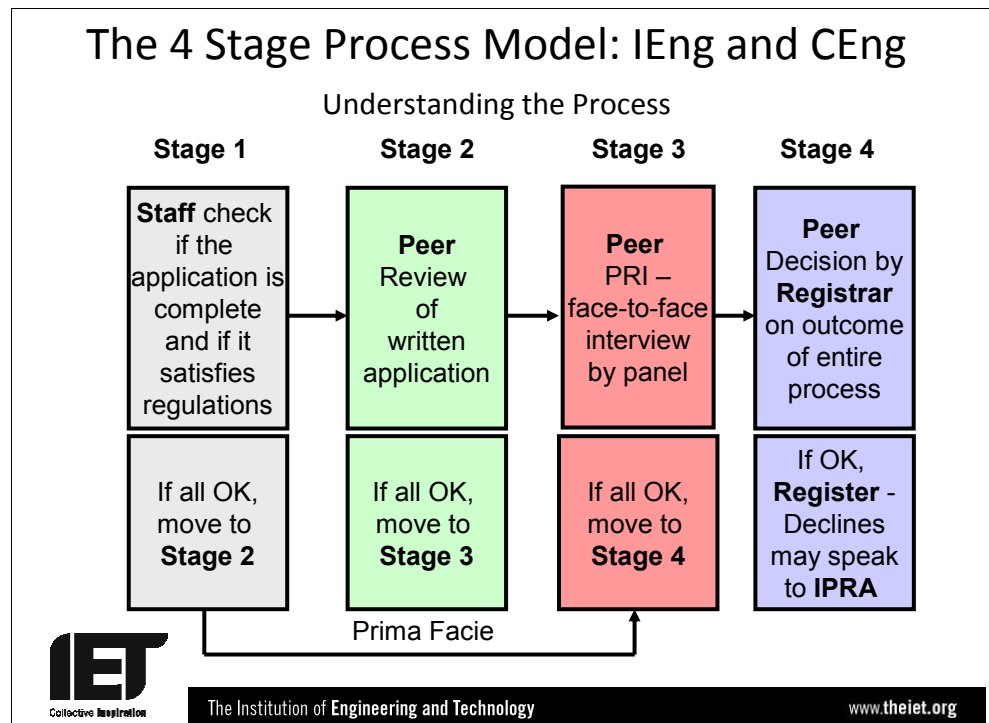
The IET is licensed by the EC UK to register Chartered Engineers, Incorporated Engineers, Engineering Technicians and ICT Technicians according to the EC UK-SPEC Standard which is competency based and requires compliance with 16 competency descriptors (13 for EngTech and ICTTech).

2.2.4 Registration Implications

The Institution of Inc Eng was a multi disciplinary institution which implies that the IET is now a multi-disciplinary organisation and as such can register any discipline. This has already occurred and the IET has registered Civil and Mech engineers in addition to Elec and Industrial engineers.

2.2.5 Registration Process for IEng and CEng

With the introduction of UK –SPEC standard and the formation of the IET, the registration process has been revised and the old process of the large membership committees has been dropped and a new 4 stage process has been introduced. This process is shown in the following table for IEng and CEng.



The process is as follows:

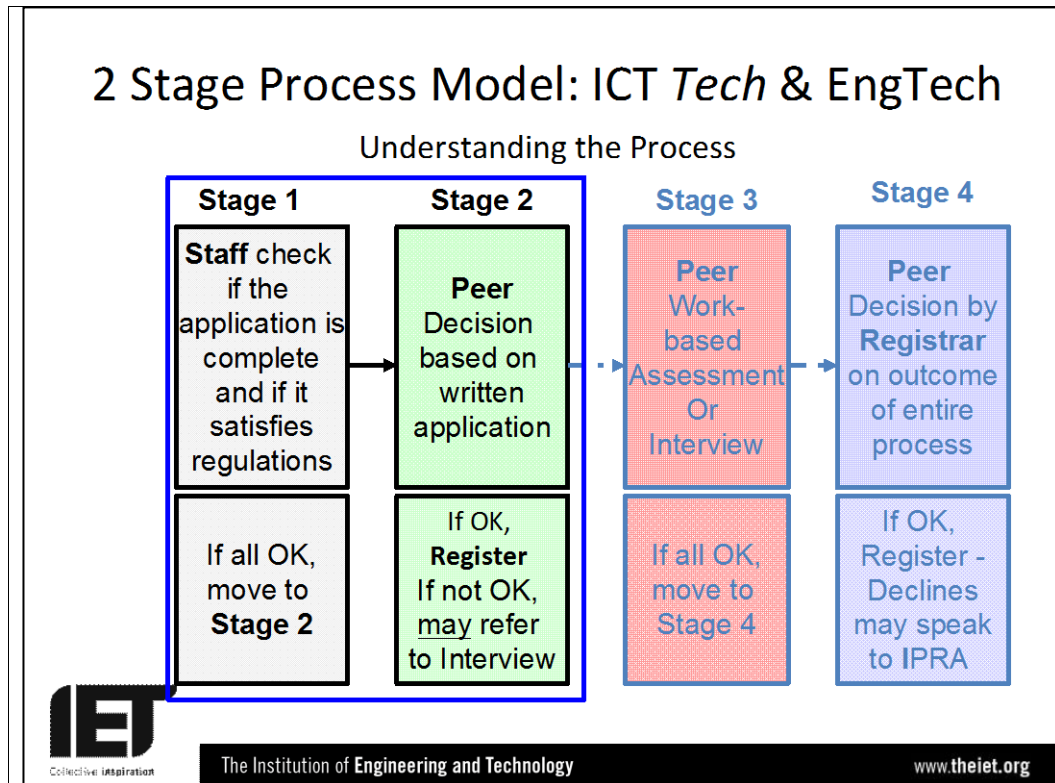
- **Stage 0** - The applicant should make use of a PRA (or IPRA in our case) to advise and review the application before it is submitted.
- **Stage 1** - Staff review of written evidence to ensure that the application form is complete.
- **Stage 2** - Peer Review - Assessment depends on panels (usually) of 2 Assessors (Members who are peer engineers) being able to form a judgement about the competence of the candidate and communicate this to a Moderator, who will refer on to the PRI, or make some other decision re competence development or Further Learning
- **Stage 3** - Professional Review Interview – to be conducted in English or Welsh (and subject to any future EC legislation). Interview involves peer engineers (Registered Members), who are trained for purpose, who will make a recommendation
- **Stage 4** - Registration decision – by Peers. ‘Decision’ depends on panels (usually) of 3 Assessors (Members who are peer engineers) being able to make a final recommendation about the competence of the candidate based on the results of the Stage 2 and Stage 3 Assessments and communicate this to a Registrar, who will make the final decision as to whether to register or decline the candidate (if the latter, may make a final recommendation, which should be referred to the IPRA).
- If there is a query that cannot be resolved at any stage in the process, it can be referred to Registration Group.
- The above process implies that at least 9 independent peers assess the applicant.
- **Prima Facie** case - to meet the criteria, the candidate needs to hold an exemplifying qualification, AND have followed an accredited Professional Development Scheme.
- All **Prima Facie cases** are referred directly by staff to Stage 3, the Professional Review Interview, i.e. they bypass Stage 2

2.2.6 Competency and UK&U

It's important to realise that you **DON'T** have to have an accredited degree to be registered. Accreditation does **NOT** provide a guarantee of competence. This is **VIP**.

- Competence includes the knowledge, understanding and skill which underpin performance. Engineers become competent through a mixture of education and professional development.
- UK-SPEC says that: “Registration as a Chartered or Incorporated Engineer is open to everyone who can demonstrate competence to perform professional work to the necessary standards, and commitment to: 1) Maintain that competence, 2) Work within professional codes, 3) Participate actively within the profession.
- Underpinning Knowledge and Understanding is an intrinsic part of competence, it is not stand-alone. If you don't hold the exemplifying qualification, then you need to prove that you **do** hold the relevant knowledge and understanding that would have been gained by that qualification. If you can't do that through your existing work experience, you might need to undertake some Further Learning.
- The IPRA role is to develop greater awareness of judging UK&U within the context of overall competence, i.e. what types of role, how might experiential learning be expressed where candidate does not hold exemplifying qualifications
- Some jobs will offer much more opportunity to gain UKU than others, for example: Senior Design Engineer vs Project Manager.

2.2.7 Registration process of EngTech and ICTTech



The process is as follows:

- **Stage 0** - The applicant should make use of a PRA (or IPRA in our case) to advise and review the application before it is submitted.
- **Stage 1** - Staff review of written evidence to ensure that the application form is complete
- **Stage 2** – Peer Decision whether or not to Register – can competence be inferred from the written application – ‘Assessment’ depends on panels (usually) of 2 Assessors (Members who are peer engineers) being able to form a judgement about the competence of the candidate and communicate this to a Moderator, who will make a decision either to register, or request further evidence, or exceptionally, refer to an interview to probe the competences in more detail.
- **Stage 3** – Professional Review Interview – **THIS IS NOT MANDATORY FOR ENGTECH** – only used where further evidence may be required - to be conducted in English or Welsh (and subject to any future EC legislation). Interview involves peer engineers (registrant Members), who are trained for purpose, who will make a recommendation.
- **Stage 4** – Registration decision – by Peers. ‘Decision’ depends on panels (usually) of 3 Assessors (Members who are peer engineers) being able to make a final recommendation about the competence of the candidate based on the results of the Stage 2 and Stage 3 Assessments and communicate this to a Registrar, who will make the final decision as to whether to register or decline the candidate (if the latter, may make a final recommendation, which should be referred to the IPRA).
- If there is a query that cannot be resolved at any stage in the process, it can be referred to Registration Group.

2.2.8 ICTTECH

ICT Technician

ICT Technicians are Information & Communications Technology Practitioners that work in a range of jobs supporting or facilitating the users of ICT. They use ICT knowledge and understanding when applying technical and practical skills; and contribute to the design, development, testing, commissioning, installation, operation, migration or maintenance of ICT products, processes, systems or services. They are required to exercise personal responsibility in performing their work, communicate effectively and make a personal commitment to a code of professional conduct, recognising obligations to the public, profession and environment.



The Institution of Engineering and Technology

www.theiet.org

ICT practitioners are concerned with ICT systems. They may research, consult, administer, develop, market, maintain, design, sell, support, install, integrate, service or market these systems

The essential elements of an *ICT* Technician role are highlighted in red on the slide. In summary, an *ICT* Tech applies proven techniques and procedures to the solution of practical engineering problems. i.e.

- Apply technical and practical skills by going beyond the immediate requirements of the job and use experience to solve problems or improve processes
- Contribute to the design development, manufacture, construction, commission, operation or maintenance of products, equipment, processes, systems or services.
- Accept and exercise personal responsibility by seeing a process through to completion within agreed targets.
- Use effective communication and interpersonal skills by contributing to discussions, making presentations, reading and synthesizing information and writing different types of documents.
- Make a personal commitment to an appropriate code of professional conduct.

2.2.9 EngTech

Engineering Technician

Engineering Technicians are involved in applying proven techniques and procedures to the solution of practical engineering problems. They carry supervisory or technical responsibility, and are competent to exercise creative aptitudes and skills within defined fields of technology. They contribute to the design, development, manufacture, commissioning, operation or maintenance of products, equipment, processes or services. They are required to apply safe systems of work.



The Institution of Engineering and Technology

www.theiet.org

The essential elements of an Engineering Technician role are highlighted in red on the slide. In summary, an EngTech applies proven techniques and procedures to the solution of practical engineering problems. i.e.

- Apply technical and practical skills by going beyond the immediate requirements of the job and use experience to solve problems or improve processes
- Contribute to the design development, manufacture, construction, commission, operation or maintenance of products, equipment, processes, systems or services.
- Accept and exercise personal responsibility by seeing a process through to completion within agreed targets.
- Use effective communication and interpersonal skills by contributing to discussions, making presentations, reading and synthesizing information and writing different types of documents.
- Make a personal commitment to an appropriate code of professional conduct.

2.2.10 IEng

Incorporated Engineer

Incorporated Engineers are characterised by their ability to maintain and manage applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation. Incorporated Engineers are variously engaged in technical and commercial management and possess effective interpersonal skills.



The Institution of Engineering and Technology

www.theiet.org

The essential elements of an Incorporated Engineer are in red. In summary, an IEng acts as an exponent of today's technology. i.e.

- Apply existing and emerging technology.
- Design, develop, manufacture, construct, commission, operate and maintain engineering products, processes, systems and services.
- Provide technical and commercial management.
- Demonstrate effective interpersonal skills.
- Demonstrate a personal commitment to professional standards.

2.2.11 CEng

Chartered Engineer

Chartered Engineers are characterised by their ability to develop appropriate solutions to engineering problems, using **new** or existing technologies, through **innovation**, **creativity** and **change**. They might develop and apply **new** technologies, promote advanced designs and design methods, introduce **new** and more efficient production techniques, marketing and construction concepts, pioneer **new** engineering services and management methods. Chartered Engineers are **variously engaged** in technical and commercial **leadership** and possess effective interpersonal skills.



The Institution of Engineering and Technology

www.theiet.org

Essential elements of a Chartered Engineer highlighted in red. A CEng is expected to: **Develop appropriate solutions to engineering problems.** i.e.

- Optimise the application of existing and emerging technology, through innovation, creativity and change.
- Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.
- Provide technical and commercial leadership of teams of professional Engineers involved in innovation and change.
- Demonstrate effective interpersonal skills.
- Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

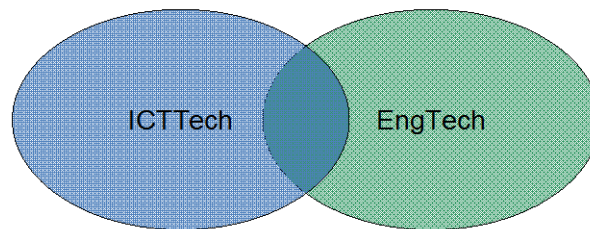
- Typically, an IEng applies proven techniques and procedures to the solution of practical engineering problems; he/she has supervisory and/or technical responsibilities and will contribute to the design, development, manufacturing, commissioning, operation or maintenance of products, equipment, processes or services.

- Typically, a CEng is able to develop appropriate solutions to engineering problems using new or existing technologies through innovation, creativity and change. Examples include developing and applying new technologies, promoting advanced designs and design methods, introducing new and more efficient marketing and construction concepts, pioneering new engineering services and management methods. Engaged in technical and commercial leadership with appropriate interpersonal skills.

2.2.12 Overlap

Overlap

- Where standard is met for both ICTTech and EngTech categories, it's the individual's choice;
 - Future Aspirations
 - Preference




2.2.13 Career Manager



Career Manager

- Online professional development system:
- www.theiet.org/career-manager
- Accessible by members
 - use personal log-in
 - start to work towards professional registration;
 - submit online registration application
 - record competence based evidence
- Further information available in literature pack



The Institution of Engineering and Technology

www.theiet.org

This programme is only accessible by members of the IET

Functions:

- Ability to input and store personal & career details for CV builder
- Register intent to start working towards Registration & submit online form
- Option to record competence based evidence to support a Professional Registration application for CEng, IEng, EngTech or ICTTech
- Able to carry out online assessment against UK-SPEC for interim review/assessment by nominated supporters & electronic verification of evidence for final Registration application
- Swift online submission of Registration application
- Option to set development objectives, plan actions and training for career development by identifying training needs/further learning
- Data can be downloaded to Word as summary reports for appraisals/reviews/performance management

2.2.14 Further Learning (CEng & IEng)

Applicants not holding an exemplifying qualification will need to provide other evidence of UK&U. This could be:

- Work-based Learning
- Formal Further Learning
- Technical Report

More information on further learning can be found at: www.theiet.org/furtherlearning

2.2.15 Professional Review Interview (PRI)

The PRI will probe aspects of the five competence and commitment statements:

- Knowledge and Understanding
- Application of Knowledge
- Leadership, Management & Supervision
- Interpersonal and Communication Skills
- Professional Conduct

2.2.16 IET Global

- The IET is already Global with members in 127 countries and Local networks in 37 countries. UK – 82%, Asia – 9%, Europe – 35%, Americas – 3%, Africa – 2%, Australasia – 2%
- Recently the IET has developed a strategic plan to strengthen and support our global aspirations by establishing a Global Network with Regional Networks.
- 5 Regional Networks will be established, China; India; Hong Kong; Americas; Europe, Middle East and Africa and UK and Ireland
- Promote membership and Local Networks
- Promote Professional Registration and Professional Development
- Promote events and publications
- Marketing and communications
- One of the Strategies is establishing strategic partnering with:
 - Government bodies
 - Local Engineering Institutions
 - Leading Universities
 - Leading businesses

This is a complete change in approach and has great opportunities for us in SA and other countries with regard to membership and registration and will be followed up.

2.2.17 Useful links

The following links will be useful

- UK-SPEC – www.engc.org.uk/ukspec
- Professional Registration – www.theiet.org/professionalregistration
- Registration Process – www.theiet.org/process
- Professional Registration Advisor – www.theiet.org/advice
- ICT *Tech* – www.theiet.org/icttech
- EngTech – www.theiet.org/engtech
- IEng – www.theiet.org/ieng
- CEng – www.theiet.org/ceng
- Further Learning – www.theiet.org/furtherlearning
- PD How 2 Guide – www.pd-how2.org
- Career Manager – www.theiet.org/career-manager
- Accredited Courses – www.theiet.org/careers/accreditation

3. IET VOLUNTEERS' SPRING CONFERENCE – BUILDING COMMUNITIES

3.1 Programme

3.1.1 Day 1 Saturday, 25 April

- Opening Welcome by the President – Chris Earnshaw
- Introduction and Ice Breaker by Conference Chair – Paul Streeter
- Empowering the Organisation – various
- Exploiting Advances in Communication Technology – demonstration of Audio and documentation conferencing
- Workshops on web facilities – various topics (5)
- Networking and drinks
- Conference Dinner

3.1.2 Day 2 Sunday, 26 April

- The Responsibility of Communities to Recruit and Retain Members
- IET Strategy Programme
- Q&A on Issues Raised by Volunteers
- Conference Summary and Action Points

3.2 Attendees

297 IET Volunteers, IPRA's and IET Staff from the UK and around the world attended the event. Messrs David Levin, Mark van Wyk and Rod Harker represented South Africa.

3.3 Conference Issues

David Levin will produce a report on the IET Volunteer Weekend. I would like to however mention the objectives for the past and present year

2008

- Raise the profile of the IET – New logo now recognised by 29%
- Establish two new Regional Offices – Established in India and China
- Local Network Support Programmes – Launched
- Arrest decline in Membership – decline dropped by 1.2%
- Re alignment of Knowledge Networks – in progress
- Revise decline in Professional Registration – need to push this
- Improve financial sustainability and budgeting

2009

- Complete strategy and implementation plan
- Increase membership particularly 30 to 40 year old
- Refine quality of Knowledge Network
- Push Registration – new *ICTTech* now has 8 registrations
- Improve financial performance and efficiency
- Deliver Global strategy – Established Regional Boards
- Partnering
- Working together with other UK Institutions on Gov issues

3.4 Final Q&A

3.4.1 Now that the IET is Global is there a possibility that we may see a President from out of the UK.

President – Yes but do not have a time frame yet.

3.4.2 With 150 000 is 50 000 attendance at events good?

President – No. We need to double this in 5 years. Supported by Michelle Richmond, Director Registration and Membership.

3.4.3 How are the Changes going to be communicated to members?

President – Strategic Plan must include a very strong communication strategy.

- Regional Boards will help
- Chairman of Local Networks must be pro-active with this and take leadership.

3.4.4 Are we looking for quantity or Quality with eth membership drive?

President – We want to engage at all levels and we want a relationship for life and we want to get them involved.

YP – We want quality and we would like to see at least 15 student members at every university in the world.

3.4.5 Don't we need a grade between Member and Fellow?

President – This is on our agenda but we need more information which has been requested and we will look at it again in 3 to 4 months.

3.4.6 Why is there a drop in Professional Registration?

? – Young people do not see any value in registration.

President – This is VIP in our strategy and we must get out to Industry. Companies need to call for registration in their adverts.

Michelle – There is a slow decline in CEng registrations

- A large drop in IEng, and
- An increase in Eng Tech
- The armed forces are now pushing registration in the UK
- RAF has identified 75 post positions that they want to be filled by registered professionals
- BAE is now also calling for registration
- IET is working with IBM on getting their staff registered
- There is definitely

YP – We need to drive this as this is a peer review function and we as Young Professionals consider this to be very important.

President – Select committee of EC UK recommended to Government that Gov Engineers should be registered

3.4.7 Would it not help if renewal of Registration is brought in?

? – IET has 75 000 members registered with the EC UK and this is an ongoing debate. This would however be a logistical nightmare.

3.4.8 EC UK Further Learning. What is available to assist?

The IET had a draft guide on the IET web to assist and this is being continually improved

3.4.9 Mark van Wyk stated that SA standards are lower than those of the UK and wanted to know if the IET would accept these lower standards and also stated that SA was registering Pr Eng's with BTech qualifications?

Michelle – Definitely not! The new Global Network will be able to assist developing countries.

3.4.10 What is the IET doing to encourage women in Engineering?

President – The IET is an open organisation and open to all

- Has an Outstanding Woman of the Year Award
- Has no particular strategy but supports a number of activities such as bursaries, prizes etc

Deloris, VP – Has a personal strategy to get women to upgrade their membership. Of 15 000 women members only about 100 are fellows

3.5 Closing by President

The president was very pleased with the conference

- The change to global is still in process but is starting to happen
- The unique differentiator of the IET is its large membership base
- Volunteers are very important to the IET
- The Majority of questions were positive which was very pleasing
- We must not stop what we are doing while the IET is developing its strategy as the implementation will be evolutionary and not revolutionary
- Local Networks should work through their Regional Coordinators
- He thanked all for attending and wished them a safe trip home.