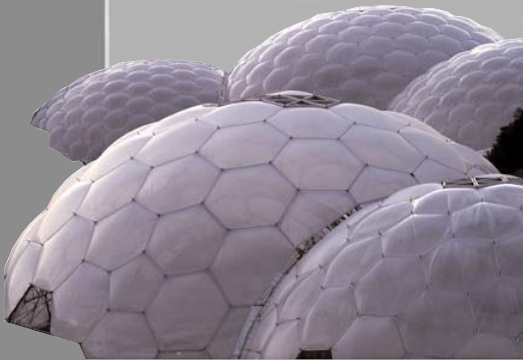


ENGINEERING COUNCIL UK

# review

uk

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2003



## MESSAGE FROM THE CHAIRMAN



The Mission of the **Engineering Council UK** is to set and maintain realistic and internationally relevant standards of professional competence and ethics for engineers, technologists

and technicians, and to license competent institutions to promote and uphold the standards.

Born, in March 2002, out of the far-sighted decision to separate the promotional role of the former Engineering Council from that of registration of Professional Engineers and Engineering Technicians, **ECUK** is settling into its new role. Relationships with Institutions are clear, and those with the Engineering and Technology Board becoming clearer. The sharp focus on regulatory issues is helpful in avoiding unproductive use of resource.

Maintaining the value of the Register to employers and registrants requires a constant review of developing policies and initiatives. The ability of the education system to furnish degrees of the content and depth that employers have traditionally sought; the balance between HE and FE qualifications; and new routes into engineering education and training all need evaluation and debate.

**ECUK** has started to demonstrate the value of its ability to bring the profession together to determine these issues.

S I R C O L I N T E R R Y

## MESSAGE FROM THE EXECUTIVE DIRECTOR



The immediate future for **ECUK** is very much concerned with revision of the standards for registration. Many potential registrants will need reassurance about the effects of the

new standards. We also anticipate close working with Institutions to iron out teething problems. However, if the new standards achieve, as we hope, much wider acceptance, there will be increased interest from sectors not previously engaged, particularly employers.

Within the UK profession, an increasingly professional approach to audit and licensing will enable more sophisticated systems over the coming period. At the same time it has become clear that increased delegation, to Institutions, of responsibility for maintaining the Register, and the associated database of accredited degree programmes is both possible, and welcomed by Institutions.

Externally, globalisation is increasing the pressure for greater “tradeability” of the register qualifications outside the UK. The continuing development of the Bologna Declaration – due to be fully implemented by 2010 – and the General Recognition Directive, are major preoccupations for **ECUK**.

A N D R E W R A M S A Y

# THE REGISTER

ECUK provides a central Register for 276,613 registrants (31 December 2002) who met standards for entry as Chartered Engineers, Incorporated Engineers or Engineering Technicians, or have satisfied interim registration requirements. The work of assessing

individuals against the published standards is undertaken by Institutions, licensed by ECUK. Inevitably, in addition to the 6,000 or so losses and gains each year, considerably more Registrants change their addresses, registration status or Institution.

ECUK regards it as essential to be able to communicate information on registration to aspirant registrants and employers, and to provide backup support to Institution membership departments. We aim to show high professional standards and provide a cost-effective service.

## REGISTER STATISTICS AT 01/01/03

	2002	2001
Final Stage Registrants	257,039	258,133
Interim Registrants	19,574	21,054

Female registrants rose to 6,586 (2001 – 6,368) with the largest growth in Chartered Engineers 5,920 (2001 – 5,716)

The breakdown was as follows:

CEng	194,871	195,427
IEng	48,228	49,252
EngTech	13,940	13,454
Deaths	1,102	956
Other losses	6,535	4,965

New Registrants	2002	2001
CEng	5,180	4,932
IEng	789	1,362
EngTech	574	592
Total	6,543	6,886

### Overseas Registrations

CEng	36,357	36,159
IEng	4,828	4,824
EngTech	1,362	1,328

The largest number of overseas registrants were based in Hong Kong (10,410); Australia (5,111) and USA (4,112)

## % EXPENDITURE

Registration

14%

Board and overall strategy

15%

International advice and liaison on common standards and registers

16%

Audit of institutions and accreditation database

25%

Registration standards: Development of standards & advice on implementation

30%

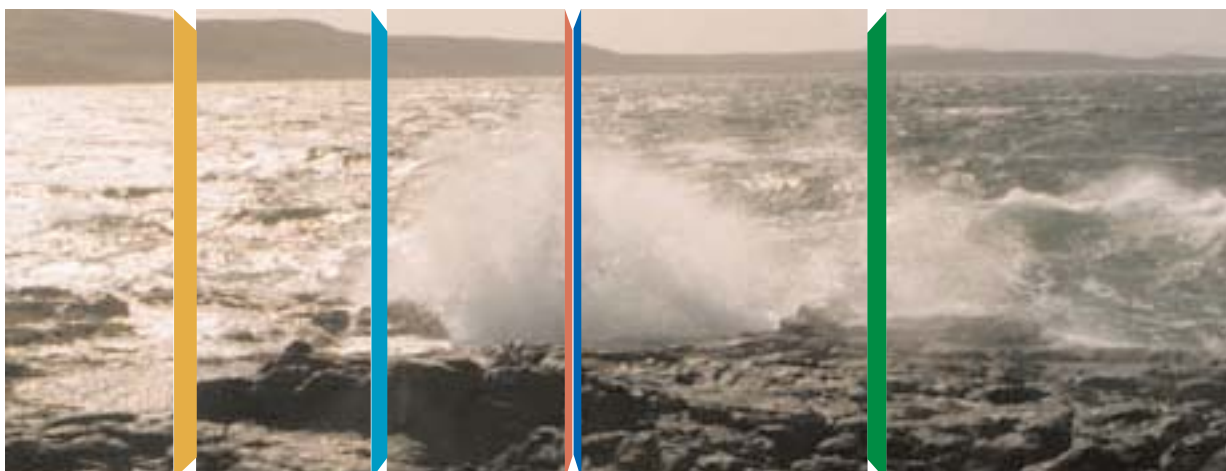


Photo: Chloe Nast



# REGISTRATION STANDARDS

The Registration Standards Committee leads development of the standards for Registration. Constituted from Institution nominees, and chaired by Professor Kel Fidler, Vice-Chancellor of Northumbria University and a member of **ECUK** Board, the Committee provides the policy framework for advice on the application of current standards.

Issues considered include the need to maintain flexibility in the face of falling numbers taking key post-16 qualifications. The increasing popularity of the MEng degree has been welcomed, but increases in IEng programmes have stalled. These factors have been fed into the Standards Review Working Group, consisting of five Board Members, including Professor Fidler.

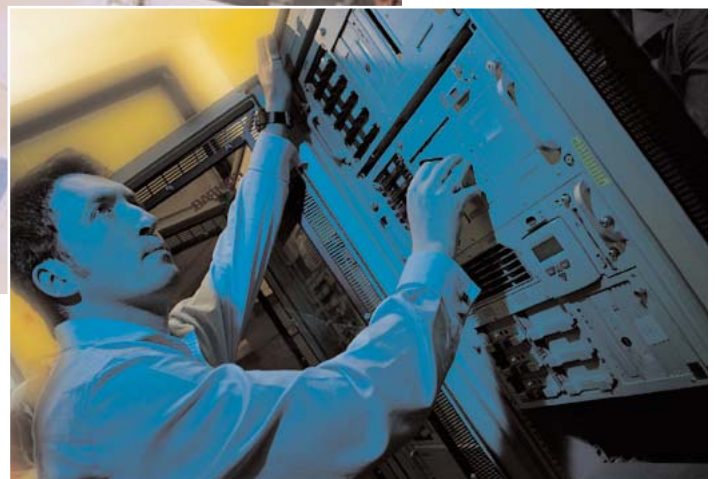
The 1997 Standards (SARTOR Edn3) were widely criticised for their emphasis on input standards for degree programmes. Since then, both the Engineering Professors' Council and the Quality Assurance Agency have developed output benchmarks, with increasing participation on behalf of the Committee.

Development of the Advanced Modern Apprenticeship has allowed a closer match between the requirements for registration of Engineering Technicians and the product of NVQ-based qualifications.

Attention is focused on the development of frameworks for encouraging and promoting professional development. **ECUK**'s own guidance on professional development is widely supported, but

support networks are still in their infancy. One such is the Institutions' own Professional Development Forum, another is the Professional Development Partnership. Every encouragement is being given for these to develop, within **ECUK**'s financial constraints.

A close watch is kept on the pre-19 education system, as this provides the traditional foundation for professional engineering careers. Some participation in national policymaking has been possible – particularly for science, design and technology, and mathematics. **ECUK** acknowledges the valuable links established with, for example, SEMTA, CITB, and with the Engineering and Technology Board – providing a valuable insight into employer needs, and a means to share views on key issues.



Above: Lisa Staples, Registration Co-ordinator  
Background: Scott Lindsey, Facilities Officer,  
and Pat Shaw, Registration  
Right: Tim Jackson, Operations

## QUALITY ASSURANCE

Registration Standards are underpinned by a sophisticated quality assurance programme. This is largely resourced by the Institutions themselves, through an overarching Quality Assurance Committee. The Committee is chaired by Philip Corp, an **ECUK** Board Member. Institution volunteers are trained and organised by **ECUK** staff to undertake the roles of auditing and sharing good practice.

The five-year auditing cycle has ensured that most participating Institutions have brought their policies and procedures into line across the profession, and this has been reinforced by universal adoption of internal audit.

Inevitably some Institutions experience difficulties in maintaining the standards necessary to ensure consistent application of the rules for admission. Wherever possible help is provided through the Quality Assurance function. This may include advice on mergers, or support for repositioning the Institution as a Professional Affiliate – which allows the profession to recognise a significant contribution to professional engineering, without requiring procedures to enable registration of individual members.

A comprehensive list of qualifications accredited as fulfilling the academic requirements entry into the three sections of the register – CEng, IEng, and EngTech – is now accessible through

the Engineering Council website at [www.engc.org.uk](http://www.engc.org.uk). The database was extensively overhauled in 2002. It can be searched in a variety of ways, but especially by college and title of award. Open searches can be conducted to establish statistical data, such as numbers of accredited MEng degree courses.

The UK approach to accreditation of individuals, Institutions, and programmes is attracting increasing interest from outside the UK, particularly from the Far East, and from continental Europe. A number of visits have been received, and presentations made to meetings on the continent. With **ECUK** support a website comparing accreditation procedures has been established at [www.feani.org/ESOEPE/HomePage.htm](http://www.feani.org/ESOEPE/HomePage.htm).

*From left:*  
Ruth Wright,  
Executive, Formation;  
Adrian Bodimeade,  
Manager, Quality  
Assurance;  
Bob Simmons,  
Operations Manager;  
Andrew Ramsay,  
Executive Director



*Below:* Sue Ainsworth,  
Secretary to  
Andrew Ramsay  
and Sir Colin Terry

*Below:* Gina Faning,  
Administrative Officer,  
Quality Assurance;  
and Victor Lucas,  
Further Education  
Advisor



*From left:* Ann Lee,  
Central Services Co-ordinator;  
Sue Smith, QA Support &  
Accreditation Officer;  
Chloe Nast, Project Officer

An International Panel provides policy advice to the Board, meeting under the chairmanship of Board Member David Long. The two main international policymaking organisations in which **ECUK** participates are the European Federation of National Engineering Associations (FEANI), and the Washington Accord. Both organisations are changing rapidly. FEANI is having to respond to two major policy developments in Europe: the Bologna Declaration; and proposals for overhaul of the General Directive on Recognition of Professional Qualifications. Although not consciously linked, they have both opened up tensions within the Federation, particularly concerning the length of university degree required for recognition, and the general basis for determining requirements to practise.

The UK position continues to be that outcomes are more important than time-serving, and that, however long the degree programme, it cannot substitute for a necessary period of professional practice before full professional status can be achieved.

Globalisation is driving creation of new registers. The FEANI Index (of university degrees) has been made more accessible through the web and CD. An International Register of Professional Engineers has been established by the Engineers Mobility Forum, a group associated with the Washington Accord. A Dublin Accord has been signed to begin international recognition of Engineering Technicians, while the Sydney Accord breaks down barriers for Incorporated Engineers.

### **Bologna Declaration**

This agreement between European Higher Education Ministers, seeks to create a “European higher education area”. Some of its proposals for qualification structures pose questions for UK engineering degrees. An **ECUK** fact sheet is available and posted on the **ECUK** website.

There is a great deal of momentum behind proposals for an educational system of 4–5 year plus, moving towards a system of 3 + 2 years for engineering degrees recognised for practise.

## **E C U K B O A R D M E M B E R S**

Sir Colin Terry KBE CB FREng CEng BSc(Eng) FRAeS  
 Professor David Anderson BSc(Eng) PhD CEng  
 FIStructE FICE  
 Mr John Baxter BSc CEng FIMechE FIEE  
 Mr Amar Bhogal BSc(Hons) CEng FICE  
 Mr John Chapman CEng FBCS  
 Mr Philip Corp CB MA CEng HonFSOE FIMechE FRSA  
 Professor Graham Davies DSc FREng FInstP FIEE

Rear Admiral Peter R Davies CBE MSc CEng FIEE  
 Mr Peter Dipper IEng FIHIE MIHT  
 Mr Barry Dobson BSc CEng FIEE FIEE  
 Dr Trevor J Evans CEng FIChemE  
 Dr John Ferrie FREng Eng D BSc CEng FRAeS FIMechE  
 Professor Kel Fidler BSc PhD CEng FIEE FRSA  
 Mr Bryan Franklin CEng FCIBSE  
 Professor Peter Hills MPhil DIC CEng FIMechE FIED

Mr David Long CEng FIMarEST  
 Dr Sa’ad Medhat PhD MPhil CEng FIEE FCIM FCMI MinstD  
 Dr Peter Melville DEng CEng CPhys FInstP  
 Ms Shahana Mirza BEng(Hons) CEng MIChemE  
 Ms Michelle Richmond CEng FIE MIEE  
 Dr B A Rickinson CEng FIMMM  
 Mr Mark Taylor LLB BSc IEng FIE Solicitor  
 and Harwicke Scholar of Lincoln’s Inn



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