

## **The Engineering Landscape**

The sheer size and diversity of engineering in the UK means that no one professional body can represent the whole sector. For this reason, there are currently over 50 bodies with such an interest, known informally as the professional engineering community. They work both collectively and individually with government, industry, academia and a range of other bodies to represent, promote and support the profession, while ensuring that UK registered engineers maintain the highest standards and reputation globally. The professional engineering community comprises the following bodies:

### **The professional engineering institutions ([www.engc.org.uk/institutions](http://www.engc.org.uk/institutions))**

There are 36 professional engineering institutions (PEIs) which represent some 600,000 professional engineers and technicians. They are licensed by the Engineering Council to assess candidates for professional registration. Some also accredit educational programmes and company training. Each PEI focuses on sectors and disciplines within engineering. They are independent bodies, mostly with educational charitable status, and receive no core public funding. Many are international in scope with a strong membership base outside the UK.

PEIs provide a key public benefit in ensuring the safety and wellbeing of society through the adoption and maintenance of professional engineering standards.

### **The Royal Academy of Engineering ([www.raeng.org.uk](http://www.raeng.org.uk))**

The Academy, a registered charity, brings together 1,500 of the most successful and talented engineers across all engineering sectors in business and industry, academia and the public sector for a shared purpose: to advance and promote excellence in engineering. The Academy provides analysis and policy support to promote UK capacity; invests in research alongside business and industry; takes a lead on engineering education and promotes the public profile of engineering. As a national Academy with a global outlook, it undertakes a range of international activities with partners across the world.

### **EngineeringUK ([www.engineeringuk.com](http://www.engineeringuk.com))**

EngineeringUK promotes engineering and engineering careers on behalf of the whole engineering community. It is a charitable body with core funding provided by registered engineers and technicians. EngineeringUK's principal activities are its leadership of the annual Big Bang science and engineering fair and the Tomorrow's Engineers programme of enrichment and enhancement in schools. It produces the annual Engineering UK statistical report.

### **The Engineering Council (EngC) ([www.engc.org.uk](http://www.engc.org.uk))**

EngC is the UK regulatory body, established by the profession to set and maintain the internationally recognised standards of professional competence and ethics which govern the award and retention of the professional titles: Engineering Technician (EngTech); Incorporated Engineer (IEng); Chartered Engineer (CEng); and ICT Technician (ICTTech); held by 240,000 members of the 36 licensed PEIs. The EngC has a further 18 Professional Affiliate bodies, who have a significant interest in engineering, some of which may become licensed institutions in due course. EngC is a charitable body, funded through registration fees.

## Collaboration

The professional engineering community works together on shared programmes whenever possible. Key joint activities are:

## Public policy

- **Engineering the Future (EtF)**  
EtF ([www.engineeringthefuture.co.uk](http://www.engineeringthefuture.co.uk)) is an alliance representing the whole professional engineering community, hosted by the Royal Academy of Engineering. It provides a single route into independent expert engineering advice for policy makers and works in the policy domain to support the rebalancing and growth of the UK economy. The alliance also works to promote understanding among policy makers, parliamentarians and the public of the contribution that engineering makes to the economy, society and to the development and delivery of national policy.

The alliance works with government departments to shape, inform and deliver on projects that contribute to national policy.

- **Education for Engineering (E4E)**  
On the specific and key topic of education policy, the E4E group ([www.educationforengineering.org.uk](http://www.educationforengineering.org.uk)) brings together the CEOs of the institutions and others (at policy level) and their education specialists (at operational level) together with business, to formulate advice and policy positions on education at all levels, the current focus being on higher and further education policy. E4E is engineering's counterpart to SCORE in science and ACME in mathematics.

## Promotion of engineering

- **Big Bang Fair** ([www.thebigbangfair.co.uk](http://www.thebigbangfair.co.uk))  
Launched in 2009, The Big Bang: UK Young Scientists & Engineers Fair, is the UK's biggest single celebration of science and engineering for young people. Attended by 30,000 young people, teachers and parents, it is led by EUK with strong support from the professional engineering community. A network of regional and local fairs feeds into the Big Bang. The Fair also hosts the finals of the prestigious National Science & Engineering Competition and kicks off National Science and Engineering Week 2011.
- **Tomorrow's Engineers** ([www.tomorrowsengineers.org.uk](http://www.tomorrowsengineers.org.uk))  
Engaging with more than 1,000 schools and 35,000 students each year, Tomorrow's Engineers creates sustainable long-term involvement with communities, schools and colleges in order to increase the uptake of engineering as a career. The programme, led by EUK, brings together a wide range of practical activities which are relevant to the curriculum and designed to meet the requirements of each Key Stage, making it easy for schools to plan ongoing engineering engagement throughout their students' school lives. Tomorrow's Engineers provides funding, communications, evaluation and administrative support to organisations to help deliver high quality extra-curricular engineering activities as well as training and careers information.