Engineering Council

Annual Review
2019

www.engc.org.uk

INTRODUCTION
from Chris Atkin

In 2019 the Engineering Council has continued to progress towards the objectives set out in our 2018-2020 Strategic Plan, building on the work and successes of 2018. We have also remained flexible enough to respond to key issues, affecting the engineering profession and society at large, which were not anticipated in our Strategic Plan.

This has included further work throughout 2019 on enhancing engineering competence, introducing a role of Lead Engineer and improving public safety, as part of the response to the Grenfell Tower fire and Dame Judith Hackitt's independent review of building regulations. We became one of the participants in the Cyber Security Alliance, which - with the Institution of Engineering and Technology (IET) as lead – is now working to deliver the UK Cyber Security Council. The Engineering Council also carried out a substantial amount of work in developing a proposal to deliver External Quality Assurance (EQA) of apprenticeships, recognising their importance as a pathway into engineering.

Maintaining our position as an effective regulator of the profession means ongoing review and improvement of our systems and processes, including the review of our Charter and Byelaws. The regular review of our Standards is nearing completion and we have also commissioned research on the recognition of experiential learning. We have established a joint Engineering Ethics Reference Group with the Royal Academy of Engineering (RAEng) and also put in place a programme to review our guidance for individual engineers and technicians.

To ensure we continue to meet the regulatory needs of the profession, we successfully implemented the risk-based approach to Licensing approved in 2018. As a result, annual risk assessments now supplement the five-yearly Licence Reviews of the professional engineering institutions licensed by the Engineering Council. Our work with the institutions licensed by the Engineering Council remains at the core of our purpose, including providing support with the transition to mandatory CPD sampling.

Our work on international professional recognition has taken on increased significance as the UK negotiates its future relationship with the EU. As well as providing input to the Department for International Trade (DIT) and Department for Business, Energy and Industrial Strategy (BEIS) on mutual recognition of qualifications in the context of trade agreements, we have begun discussions with European regulators about new competence-based mechanisms for mutual recognition.

In 2020, the Engineering Council will continue to deliver the objectives of our Strategic Plan, while working with stakeholders to formulate goals for 2021 onwards. Our core regulatory functions remain crucial to public confidence and safety, as we maintain internationally-recognised standards for the engineering profession, champion those standards through the institutions we license and hold the Register of individuals assessed as meeting them.

Professor Chris Atkin FREng CEng FRAeS
Chairman

VISION AND MISSION
What we do, why and how we do it

VISION:
That society continues to have confidence and trust in the engineering profession.

MISSION:
To maintain internationally recognised standards of competence and commitment for the engineering profession, and to license competent institutions to champion the standards for the deliverance of public benefit.

What we do

- Develop and maintain common professional standards for engineering competence and commitment

- License professional engineering institutions to professionally develop and assess engineers and technicians against the common standards

- Maintain the national Register of professionally registered engineers and technicians

Why we do it

- To safeguard the public

How we do it

- Self-regulation by peer review

ACHIEVEMENTS IN 2019

Over the course of 2019 the Engineering Council has responded to new issues that have arisen on behalf of the profession alongside undertaking those activities as set out in our Strategic Plan. This has required the organisation to be flexible and demonstrate its agility, investing resource in areas that are strategically important for the future.

Work begun in 2018 in response to the Grenfell Tower tragedy and Dame Judith Hackitt's independent review of building regulations has continued, with the Engineering Council leading a working group on competence. Working with the professional engineering institutions it licenses and the broader cross-industry Competence Steering Group (CSG), the Engineering Council has committed to take forward a series of solutions to enhance engineering competence, introduce the role of Lead Engineer and improve public safety.

In response to the changing apprenticeship landscape, we have worked with the Institute for Apprenticeships & Technical Education (IfATE) to understand requirements for External Quality Assurance (EQA) of apprenticeships. As a result, we have developed a proposal to offer this service to organisations registered with IfATE as End-Point Assessment Organisations, including professional engineering institutions and submitted this for approval at the end of 2019.

Recognising the importance of Cyber Security to the economy and national resilience, the Government carried out consultations on the formulation of a UK Cyber Security Council. The Cyber Security Alliance, in which the Engineering Council is an active participant, has begun a new programme of work to deliver that Council.

STRATEGIC OBJECTIVES
of the Engineering Council

Provide Public Benefit
Our aim to provide public benefit will be delivered through three objectives:

Maintain a Globally Recognised Standard
Our aim to maintain a globally recognised Standard will be delivered through three objectives:

Meet Future Needs
Our aim to meet future needs will be delivered through three objectives:

OBJECTIVE 1
Maintain the Engineering Council's position as an effective and well-respected regulator of the profession

OBJECTIVE 2
Ensure that no barriers exist for anyone appropriately qualified to become professionally registered

OBJECTIVE 3
Ensure that the Engineering Council is operationally sound and is recognised by stakeholders as delivering value for money

OBJECTIVE 4
Widen engagement with key stakeholders on the promotion of the Register and the Standard

OBJECTIVE 5
Safeguard and promote UK registration standards internationally

OBJECTIVE 6
Ensure that the needs and expectations of stakeholders are being met

OBJECTIVE 7
Ensure that the regulatory needs of the profession are being met

OBJECTIVE 8
Ensure that all regulatory functions remain fit for purpose and support the Standard

OBJECTIVE 9
Ensure that the engineering profession's pathways to registration remain appropriate for the needs of future stakeholders

ACHIEVEMENTS IN 2019
Provide public benefit

1. Maintain the Engineering Council's position as an effective and well-respected regulator of the profession

We have continued to work closely with the Department for Business, Energy & Industrial Strategy (BEIS) in our capacity as a competent authority in respect of the EU directive on Mutual Recognition of Professional Qualifications (MRPQ). This included giving input on professional registration processes and standards to be considered for arrangements post-Brexit. We have also responded to a series of external consultations, on topics including apprenticeship routes, engineering ethics and higher technical education.

Revisions to the Engineering Council's Charter and Byelaws have been approved by the Privy Council and an Extraordinary General Meeting (EGM) is being arranged for 2020 to formally adopt these changes.

Our Volunteer Support and Management Strategy now has four workstreams established, on centralising data, setting up common processes, creating common message and increasing understanding.

Building on our existing ethics work, we have established an Engineering Ethics Reference Group with the Royal Academy of Engineering, operating at a strategic level, to steer the profession towards enhancing a culture of ethical behaviour. The group led on the profession's response to the Inter-Disciplinary Ethics Applied Centre (IDEA) Engineering Ethics 2028 Vision.

2. Ensure that no barriers exist for anyone appropriately qualified to become professionally registered

Under the banner of Project Mercator, we have provided each of the licensed professional engineering institutions with a map of engineers and technicians in their sector, based on the engineering footprint agreed with the Royal Academy of Engineering and EngineeringUK, using the latest available Office for National Statistics (ONS) data.

We continue to champion policies and practices to promote diversity and inclusion across the profession, including encouraging the professional engineering institutions to benchmark their progress, working closely with the Royal Academy of Engineering and including diversity issues in our Standards Review.

Business improvements include producing professional stamps faster and more efficiently, providing an enhanced service to registrants as part of our overall continuous improvement programme.

3. Ensure that the Engineering Council is operationally sound and is recognised by stakeholders as delivering value for money

Following a supplier review, we have changed IT support provider and increased the operational resource available, enhancing the organisation's IT efficiency. Planning has begun for establishing the network infrastructure of our new offices and optimising our AV/meeting room facilities.

After a successful transition to quality management standard ISO9001:2015, we have continued to integrate quality management into our business planning and formalised business improvement processes. Improvements include enhancing our complaints process, internal audit procedure and issue management across the organisation, as well as updated document control processes.

The organisation has remained largely fully staffed through the year and is considering adopting further flexible and agile working practices to make the most effective use of available staff resource.

ACHIEVEMENTS IN 2019
Maintain a globally recognised standard

4. Widen engagement with key stakeholders on the promotion of the Register and the Standard

We are developing a public-facing document to promote awareness of the Register and the value of professional registration in a clear and simple way, alongside working closely with stakeholders.

Research has been carried out on key audiences' perceptions of the Engineering Council's brand and benchmarking this against comparable organisations. This will provide the evidence base for future development of our brand and how we articulate the organisation's responsibilities and achievements.

Work is in progress to bring the professional engineering institutions together to implement a contextualised register for building safety. This follows the development of competence requirements for engineers working on higher risk residential buildings (HRRBs) in response to the Grenfell Tower tragedy, on which legislation is expected during 2020.

5. Safeguard and promote UK registration standards internationally

To facilitate mobility, we provided input on the mutual recognition of qualifications for professional engineers (in the context of trade agreements) to the Department for International Trade (DIT) and Department for Business, Energy and Industrial Strategy (BEIS) through a series of expert groups. We have developed a cooperation agreement with the Kuwait Society of Engineers (KSE), which will be signed in early 2020, and are in discussions with European regulators about mechanisms for mutual recognition based on the assessment of competence.

Building on the publication of the Engineering Council sponsored Publicly Available Specification (PAS 525:2018), we have presented at the Lisbon Civil Engineering Summit and shared knowledge with partners in our global and European networks on the assessment of professional engineering competence.

Discussions have been held with our Board and key stakeholders on the feasibility of developing more formal links with overseas bodies that operate competence-based registration.

6. Ensure that the needs and expectations of stakeholders are being met

We are a signatory to the Technician Commitment, which supports professional recognition for technical staff, and are engaged with the review of technical education provision for Engineering and Manufacturing being carried out by IfATE. Work on the Standards Review included recognition of the increased focus on apprenticeships at all levels and an Engineering Technician Value Proposition Working Group has been established.

Our support to the professional engineering institutions in delivering registrant messages included running our first Annual Statistics workshop for their staff and enhancing our Annual Statistics Report to provide information in a more actionable form, as well as sharing current practice around career breaks and the use of interim registration.

We continued to support the professional engineering institutions through the transition to mandatory sampling of registrants and the Professional Development Steering Group is monitoring progress on this. Four new institutions became users of our online CPD system mycareerpath, which saw further strong growth in account creation and usage by members.

ACHIEVEMENTS IN 2019
Meet future needs

7. Ensure that the regulatory needs of the profession are being met

Our Standards Review made excellent progress, with revisions drafted, consulted on and further developed by the relevant Working Groups before a final round of consultation with the professional engineering institutions. The Review includes the UK Standard for Professional Engineering Competence (UK-SPEC) and associated documents, which have been prepared for consideration by our Registration Standards Committee (RSC), for recommendation to the Board.

Our engagement with employers included presentations to Network Rail staff, engaging with British Airways on how professional recognition can build credibility and supporting a University of Sheffield event on professional registration for staff at all levels. We also contributed an article to The Engineer magazine on how professional registration supports skills development.

A programme is underway to review our existing guidance for individual engineers and technicians, starting with our Guidance on Sustainability. We also anticipate developing new guidance on relevant topics, informed by our consultation.

8. Ensure that all regulatory functions remain fit for purpose and support the Standard

We have successfully implemented a risk-based approach to Licensing, which includes carrying out annual desk-based risk assessments of the licensed professional engineering institutions. These are then followed up through reviewing areas of potential risk, enhancing the effectiveness of our regulatory function.

We have worked with IfATE to understand requirements for External Quality Assurance (EQA) of Apprenticeships and have developed a proposal to offer this service to organisations registered with IfATE as End-Point Assessment Organisations, including professional engineering institutions. This was submitted to IfATE for approval at the end of 2019.

We are exploring the feasibility of creating a publicly searchable Register, considering the needs of registrants and other key stakeholders, and working to understand the operational and regulatory issues involved.

9. Ensure that the engineering profession's pathways to registration remain appropriate for the needs of future stakeholders

We have embedded the existence of multiple routes to registration as a key message in our marketing and communications, including our library of registrant case studies. We have also reviewed the terminology used in Standards documents to ensure this does not suggest the existence of one preferred route.

A research report has been commissioned, based on feedback from key stakeholders, on recognition of experiential learning. This will inform thinking on process changes and other opportunities to enhance support for individuals with experiential learning seeking international recognition.

Based on the Labour Force Survey and other ONS data, we have begun work on a public report giving an overview of the UK's engineering workforce, for publication in 2020.
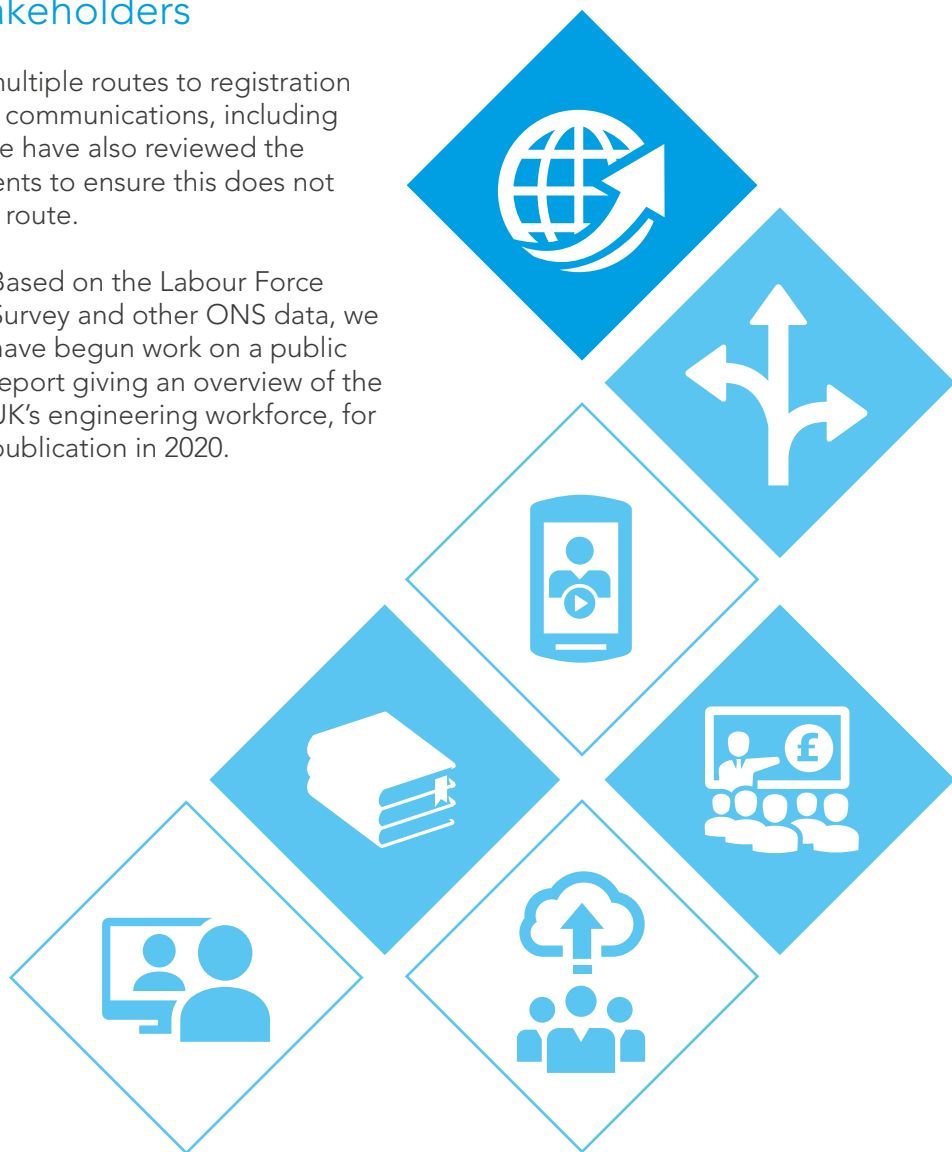
GOING FORWARD

We continue to work towards the priorities set out in our Strategic Plan, with the overall goal that the Engineering Council maintains its ability to meet the needs of the profession, key stakeholders and society.

Our objective is to be recognised for:

- Our effective and respected regulation of the engineering profession for public benefit
- Delivering an efficient and sustainable service to the profession
- Ensuring our regulatory model remains fit for purpose for both current and future engineers and technicians
- Our wide engagement with stakeholders, consultation and consensus building.
- Guidance for professional engineers and technicians

Interested in professional registration?

Find out more:

EngTech: **www.engc.org.uk/engtech**

ICTTech: **www.engc.org.uk/icttech**

IEng: **www.engc.org.uk/ieng**

CEng: **www.engc.org.uk/ceng**

Connect with us:

@EngCouncil

Engineering Council

Contact us:

+44 (0)20 3206 0500

info@engc.org.uk

www.engc.org.uk

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