

## **Standards Review Programme**

### **Public consultation (June and July 2019)**

#### **Summary report**

##### **The Standards Review**

The Engineering Council is carrying out its five-yearly review of the Standard against which engineers and technicians are registered. The review is a key task in the Engineering Council's 2018-20 Strategic Plan.

The purpose of the review is to ensure that the Standard continues to be relevant, flexible and future-ready for the benefit of all stakeholders. To remain relevant, it must accommodate changes in the knowledge and understanding, skills and behaviours required of engineering professionals and in the ways in which these are developed throughout their careers; it must also maintain appropriate standards. It is therefore important that the review considers how these could be affected by changes in engineering and society.

The review is being conducted by way of a programme of linked and interdependent projects covering:

- The categories of registration
- The UK-Standard for Professional Engineering Competence (UK-SPEC)
- Accreditation of Higher Education Programmes (AHEP)
- Approval of qualifications and apprenticeships
- Higher apprenticeships
- Registration Code of Practice (RCoP).

##### **Consultation**

In 2018 we undertook a wide consultation as part of our five-yearly Standards Review. Since then we have analysed the responses that we received<sup>1</sup> and produced draft revisions of:

- The UK Standard for Professional Engineering Competence (UK-SPEC)
- Accreditation of Higher Education Programmes (AHEP)
- Approval of Qualifications and Apprenticeships Handbook (AQAH)
- Registration Code of Practice (RCoP).

As part of that redrafting process, we included the proposed content on Higher Apprenticeships within AQAH. The resultant new document is called Accreditation and Approval of Qualifications and Apprenticeships Handbook (AAQAH). The Higher Apprenticeships Working Group merged with the AQAH Working Group.

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<sup>1</sup> See <https://www.engc.org.uk/consultations> for a summary of the responses to that consultation.

We then undertook a second consultation aimed at eliciting views about the four draft documents. Unlike the consultation in 2018, however, we did not ask specific questions. Instead, we provided the draft revisions, along with summaries of the significant changes in each draft and invited people to review them and to tell us how well they meet their needs. The response to these drafts provided the basis for a redraft of the documents for further review by the professional engineering institutions.

A summary of the responses we received to this latest consultation is at Appendix 1.

The working groups review all consultation feedback alongside other inputs to the review. Other inputs could include, for example, the approaches taken by engineering regulators in other countries, or the need to align with issues that are part of the review,

The working groups aim to balance, when possible, different views. In some instances, however, they may have to adopt a position with which some document users and/or consultation respondents might not agree.

### **What happens next?**

The project groups are drafting revisions, taking account of any further inputs we receive. We will review the four documents from a diversity and inclusion perspective. We will also review their structure and format.

Our aim is that, in the spring of 2020, the Engineering Council's Registration Standards Committee will be able to agree the final drafts for approval by the Board, ready for subsequent publication and agreement of the implementation period.

### **Questions**

If you have any questions about the Standards Review please email us at [standardsreview@engc.org.uk](mailto:standardsreview@engc.org.uk).

# Appendix 1

## Summary of responses to the consultation

### General

1. Over 800 items of feedback were received from PEIs, individuals and representatives from industry and academia. These included input on points of principle, items for clarification, requests for change and a range of editorial issues.

### UK-SPEC

2. A number of respondents commented positively on the changes to the consultation document, for example:
  - a. Support for the changes proposed to UK-SPEC competences, in particular:
    - i. Re-wording the sub-competences and improved clarity;
    - ii. Clearer differentiation between IEng & CEng;
    - iii. Reduced emphasis on technological innovation as the primary way to demonstrate the application of a high level of technical knowledge
  - b. Welcome for increased clarity of the requirements and evidence in the tables of competence.
  - c. The reduced emphasis on academic qualifications.
  - d. The greater prominence of the Individual route.
  - e. The change to make clear that Leadership does not necessarily require Line Management.
  - f. The rewording to help draw out candidates' understanding of ethical issues.
3. The key issues raised by respondents for further consideration were:
  - a. Proposal that sustainability be made more prominent throughout.
  - b. Achievement of overall competence (all registration categories)
    - i. Several respondents questioned the extent to which minor deficiencies in sub-competences can be allowed, or whether all competences (A1-E5) must be met.
    - ii. A small number of respondents asked for clarification on whether technical competence (A and B) should be prioritised over competences C, D and E.
  - c. Accountability (CEng)
    - i. Some respondents identified 'Accountability for' as a key differentiator for CEng that should replace 'contributing to', where appropriate. Examples given include being fully accountable for project, finance and personnel management. 'Responsibility for' was also suggested.

- ii A small number of respondents asked for more precision in wording around leading teams and/or areas of technical specialism, and whether or not a CEng is expected to develop staff, especially in matrix-managed organisations.
- d. Name
  - i. Several respondents suggested that UK-SPEC should be renamed to make clearer its scope (e.g. to refer to commitment as well as competence).
- e. Innovation (CEng)
  - i. Some respondents required greater clarification around the right emphasis on 'innovative' and requirements for 'innovation', especially with respect to engineers who work on safety cases or use relatively established technology to solve engineering problems.
  - ii Several respondents asked for clarity on the balance between innovation and technical responsibility for complex engineering systems.

## AHEP

4. A number of respondents commented positively on the changes to the consultation document, for example:
  - a. The reduction in the number of Learning Outcomes.
  - b. Subsuming 'Additional General Skills' within other Learning Outcomes.
5. The key issues raised by respondents for further consideration were:
  - a. It would be useful to permit Foundation degrees (and equivalent) plus top-up degrees to be accredited towards CEng as well as IEng.
  - b. Some concern about the scale of reduction in the number of Learning Outcomes.
 

Note: we recognise the tension between the support for reducing the number of Learning Objective (4a, above) and the concerns about the scale of that reduction. In response to this we undertook a further consultation event with representatives of the education communities to discuss this in greater detail.
  - c. Greater differentiation between Bachelors and Masters level learning outcomes was needed in some areas.
  - d. New or enhanced Learning Outcomes were requested in areas including:
    - i. The 'selection, use and evaluation of information';
    - ii. Quality management and continuous improvement;
    - iii. Equality and diversity.
  - e. Learning Outcomes should be rephrased to explicitly refer to the use of laboratory and workshop skills.
  - f. Learning Outcomes should include more about security (defined broadly).
  - g. Learning Outcomes should include more about sustainability.

- h. Possible separation of the design and innovation Learning Outcome, to include a definition of 'innovation'.
- i. The order in which qualifications are listed in the Qualification Descriptors and Learning Outcomes documents should be consistent.
- j. The term 'engineering problems' is unnecessarily limiting and should be replaced by 'problems'.

## **AAQAH**

- 6. A number of respondents commented positively on the changes to the consultation document, for example:
  - a. The increased flexibility that the draft standard provides for accrediting and approving qualifications and apprenticeships...is much improved over the current version...
  - b. Clearer recognition of Learning Outcomes and competence development in Apprenticeships and Qualifications at levels 4 and 5
  - c. '...the review process so far has resulted in ...AAQAH...much more transparent and robust'.
  
- 7. The key issues raised by respondents for further consideration were:
  - a. Suggested presentational changes, such as the re-ordering of sections/paragraphs to improve the flow of the document.
  - b. Greater clarity in defining the terms 'approval' and 'accreditation'
  - c. Some concern in the number of Learning Outcomes for EngTech
  - d. Suggested changes to reference the applicability of AAQAH internationally as well as across the devolved nations and not just in England.
  - e. Suggested changes to the relevant Learning Outcomes.
  - f. The need for the AAQAH Competence statements to be consistent with draft UK-SPEC revisions.
  - g. The importance of meeting skills demand in industry at technician level and upskilling.
  - h. The proposed merging AAQAH with AHEP

## RCoP

8. A number of respondents commented positively on the changes to the consultation document, for example:
  - a. The greater clarity about the use of the terms accreditation and approval with regard to programmes of learning.
  - b. The general simplification of the document, and the moves to make regulation more general, particularly in the areas of approval and accreditation of learning.
  - c. Enabling the recognition of programmes of learning that deliver and assess workplace competence; not just knowledge and understanding.
  - d. Proposed changes to remove biases towards 'traditional' academic routes to registration, and to target parity of esteem for each of the routes.
  - e. Related to (c) above, replacing references to 'academic learning' or similar with 'underpinning knowledge and understanding' or equivalent. Equally, replacing 'exemplifying academic qualifications' with 'programmes of learning' or similar.
  
9. The key issues raised by respondents for further consideration were:
  - a. The need for more structure to make the document easier to navigate. This could entail adding 'subsections' and re-thinking the ordering and layout of the existing sections.
  - b. Further consideration of what entails 'exceptional circumstances' in terms of registration and recognition. Does RSC need to consider these cases individually, and if not, should they be described as 'exceptional' in the regulations?
  - c. Whether one of the Professional Review interview assessors could be of a different registration category from the candidate. There was widespread support for this proposal, which still required assessors to be 'suitably qualified and trained'. However, some responses questioned whether the change posed a risk to standards.
  - d. The proposed removal of the facility for changing the level of Professional Registration during the course of the PRI. Comments were received that supported and queried this proposed change, all of which will be considered by the working group.