

Guidance on Applicants without Exemplifying Qualifications, and the Technical Report Process

Introduction

Under UK-SPEC, there are two types of applicant for registration, Standard and Individual. The first will have the exemplifying qualifications for registration, the second will not. All individual applicants will be dealt with initially under paragraphs 36 and 37 of the UK-SPEC **Regulations**, whether they have engineering qualifications which are not accredited or fall short of the exemplifying qualifications (formerly dealt with under the Individual Case Procedure), qualifications in cognate subjects, (formerly referred to as 'Cognate' or even '5.5' candidates), or no relevant qualifications (formerly dealt with through the Mature Candidate Route).

INITIAL ASSESSMENT

Paragraph 36 sets out the first stage in the process. This is for Institutions to assess an individual applicant's education and career history against the relevant exemplifying qualifications, which are set out in paragraph 19 of the UK-SPEC **Regulations**, and to decide whether the required knowledge and understanding has been demonstrated, at the appropriate level. Institutions will have established a record of doing this through the former Individual Case Procedure. In some cases they may decide that an applicant's portfolio of learning equates to the exemplifying qualifications, and nothing more needs to be demonstrated. Where further evidence of knowledge and understanding is needed, paragraph 36 sets out a range of ways in which this might be done. Except for **Technical Report**, all these options were available under SARTOR 3.

Questions and Answers

Q Do these options apply to all registration categories?

A Yes, except for the Engineering Council Examination which is for potential CEng registrants and the integrated assessment of education, training and competence in employment which is for Eng Tech only, as stated in the **Regulations** – this was once known as Route C.

Q What are the further qualifications which an Institution may approve for this purpose?

A They may be academic qualifications, NVQs or SVQs, or other vocationally-related qualifications, so long as they allow the applicant to demonstrate the required knowledge and understanding. They may have been accredited or approved as Further Learning under paragraph 19 of the **Regulations**, but need not have been. The Institution may judge that it will be sufficient for the applicant to take selected modules or units.

Q Can an Institution specify its own exams or qualifications for this purpose?

A If an Institution wishes to do this, it should first provide Registration Standards Committee with an indication of how these exams or awards will meet the requirements, and how the assessment is validated.

Q Does the selection of the option lie with the Institution or the applicant?

A The Institution should try to suggest the option which seems most suitable, but the final choice lies with the applicant, and may be influenced by other factors besides registration.

Q Is the MEng the exemplifying qualification for CEng?

A It is an exemplifying qualification. The main exemplifying qualification is an accredited BEng (Hons) plus an accredited Masters degree.

TECHNICAL REPORT

Paragraphs 38 to 41 cover the Technical Report process, which may be used for all categories of registration. Institutions should only steer towards this option those applicants who have sufficient career experience upon which to base a technical report, and who seem likely to be able, by the time they have completed it, to demonstrate the competence and commitment necessary for registration.

These paragraphs set out the essential characteristics of the Technical Report process, which are that:

- When taken with previous qualifications, if any, it must demonstrate engineering knowledge and understanding at the required level for the registration category the applicant is seeking;

- Its scope will depend upon the applicant's previous qualifications and achievement – for example, someone seeking CEng registration with a degree in a cognate subject would, all other things being equal, have to demonstrate a greater amount than someone with a BEng (Hons);
- Its content must be technical; a pure management study is not acceptable;
- It may include material previously written for employment, but must have a commentary which brings out the applicant's knowledge of underlying principles and ability to apply them;
- It will be assessed by competent assessors, and an interview will form part of the assessment;
- This assessment is separate from the Professional Review process, which it must precede, and must be documented separately from it;
- An applicant cannot be successful in the Professional Review if the Technical Report has been assessed as unsatisfactory.

All Institutions with Individual Route licences should have a clear process for managing the technical report option. These will be reviewed by **EC^{UK}**'s QA department, which is always willing to discuss the process in general or specific cases.

Questions and Answers

Q What are the required levels of knowledge and understanding?

A They are defined by the exemplifying qualifications for each registration category – see Paragraph 19 of the **Regulations**.

Q So the Technical Report for a CEng applicant has to demonstrate MEng equivalence?

A No! But it does have to demonstrate knowledge and understanding to Masters level, just as for IEng it has to demonstrate it to Bachelors level. An explanation of these levels is at www.qaa.ac.uk/crntwork/nqf/ewni2001/contents.htm#qualification

Q Does that mean it has to equal a Bachelors or Masters degree?

A Not in range; as we've seen, its scope may be quite limited. Because it's about technical content, it will really be about the knowledge and understanding underpinning the technical competences in UK-SPEC – the A and B competences.

Q What length does a report have to be?

A UK-SPEC doesn't specify. As we've seen, the scope of a report will vary between applicants, and this will affect the length. Some Institutions have developed guidelines, but these should only be indicative.

Q How many years experience will you need to have to do a Technical Report?

A UK-SPEC makes no stipulations. Any figures quoted by Institutions should only be indicative. Age limits should be avoided.

Q Does it have to be assessed by academics?

A Many assessors will be academics, but they don't have to be. The important thing is that they know how to assess knowledge and understanding. Experience of assessing higher level NVQs might be an alternative to academic experience.

Q In the old Mature Candidate Route, the Professional Review used to precede assessment of the report. Why has it changed?

A Registration is based upon competence, and competence includes having knowledge and understanding. If you haven't got that, you can't be judged as competent. It would be nonsense to pass someone at Professional Review and then tell them they'd failed on the Technical Report.

Q But isn't there a risk of people doing pointless work on a Technical Report when they wouldn't pass a Professional Review?

A That's the point of the first assessment referred to in paragraph 36. Ideally no-one should start doing a Technical Report if there isn't a very good prospect of their being able to succeed at Professional Review by the time they have completed it. But this should not be confused with the Professional Review itself, and the applicant should be left in no doubt about this.

Q Can the same people assess the Technical Report and do the PRI?

A They might, but they will need to be competent to carry out both assessments.

Q Won't the Technical Report assessment interview duplicate parts of the PRI?

A The Technical Report will demonstrate the knowledge and understanding underpinning the technical competences (A & B) in particular. The assessors' report may well include information which is relevant to the wider review of competence which takes place at the PRI, and PRI reviewers will be entitled to take this into account if they think it is valid evidence.

SUPPORT FOR APPLICANTS

Applicants are likely to need support during the Technical Report process in choosing the subject of their report, agreeing a synopsis, and in seeing the process through to completion. Mentoring will therefore be important. Questions which Institutions will wish to bear in mind in operating the process are:

Q Who chooses the subject of the report?

A It should be agreed between the Institution and the applicant. If the latter chooses it, it should be approved by the Institution.

Q Does the applicant have to submit a synopsis for approval?

A This is not a requirement in the **Regulations**, but Institutions are very strongly advised to ask for one.

Q If so, who approves the synopsis? Does the mentor have any involvement in this?

A It should be approved by the relevant Institution committee. Ideally the mentor should have been involved.

Q Who chooses the mentor, the Institution or the applicant?

A It may be either, but the Institution should approve it, if the applicant chooses.

Q What qualities do you look for in mentors?

A Some mixture of the following would be desirable: an understanding of UK-SPEC, experience of mentoring, a knowledge of the technical area involved, and a knowledge of the candidate. But few people will have all of these!

Q What should the role of the mentor be?

A Support and guidance, but not writing the report.

Q How long do applicants have to complete a report?

A Two years is a suggested maximum.

Q How are your assessors to be trained?

A Some formal training is suggested, delivered by people with experience of assessment. These could be members of other Institutions.

Q What arrangements are being made for either internal or external moderation of assessments?

A There are several options. Internal moderation could be through the committee reviewing the reports, and staff and/or members attending a sample of interviews. External moderation could involve members from other Institutions, **EC^{UK}** Liaison Officers or staff, or suitable experts on assessment.

Engineering Council UK

10 Maltravers Street
London WC2R 3ER

Tel: +44 (0)20 7240 7891

Fax: +44 (0)20 7379 5586

email: staff@engc.org.uk

www.engc.org.uk

www.uk-spec.org.uk

Registered Charity no 286142

April 2005