

**UK SPEC and the RAPID Progress File:
A Tool for Academic, Personal and Professional Development in Engineering**

by

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This paper describes a methodology for recording, monitoring, developing and planning academic, professional and individual development of engineering skills. This has been widely implemented through an online tool (RAPID) used by those wishing to pursue or are in the process of pursuing a career in engineering. RAPID is an engineering skills progress file, which was originally developed by Loughborough University as part of the UK's Department for Education & Employment funded project Recording Achievement in Construction (1998-2000). Further development since 2000 has resulted in eight discipline specific versions that have been used widely, across the HE sector, in construction and civil engineering disciplines. Currently there are 14 universities in the UK (and abroad) who are licensed to use RAPID, and to date over 3000 students have started to build a portfolio.

This paper provides an insight into the development of the generic engineering version (as part of the project 'Multi-skills for Advanced Engineering', funded by the European Social Fund), which matches closely the competence/commitment areas and levels presented in the newly launched Standard for Professional Engineering Competence (UK SPEC).

The paper also illustrates changes in emphasis in UK SPEC. For example, although UK SPEC was launched on 1st March 2004 to replace SARTOR 3, the level of competences has not been reduced. The new standard emphasizes inter-personal skills and increases the flexibility in possible routes to achieve the educational requirement, i.e. making the registration as professional engineers or engineering technicians more accessible to those coming from non-traditional routes. The level of required underpinning knowledge remains the same, although the evidence of competence required from engineering applicants will vary.

The competence based new engineering standard is found to correlate closely with the skills / competences within RAPID. The paper presents a mapping chart detailing the UK SPEC competence statements and the corresponding existing skills/competence areas in RAPID. The analysis demonstrates that the existing methodology and defined skills provide a flexible, easily accessible online tool, which enables the user to acquire/develop a personal awareness of skills and skills gaps through skills auditing. This encourages users to then take remedial action through the development of their competences by using a process involving action planning, reflection and the documentation of appropriate evidence. RAPID provides a comprehensive record of the individual's development and achievement of UK SPEC competences, thus providing the types of evidence required by UK SPEC for registration as a professional engineer or technician, and by the Initial Professional Development (IPD) and Continuing Professional Development (CPD) schemes of engineering professional institutions.

Key Words: UK SPEC, Progress File, Professional Development, Skills, Methodology