

# Editorial

The question of recognition of engineering degrees on the international scene between different countries has attracted increasing attention since the European Community is moving towards a free common market with no customs and movement constraints. The engineering education system, and the requirements for an engineer to practise the profession in the different European countries are however, not uniform in a community moving towards economic unity. The question of qualifications has been discussed in many meetings of education authorities and engineering societies. It is apparent from the results of these meetings that, as is to be expected, no large education system is readily prepared to change or to adapt its curricula or time schedules to conform to a rival system. The question of recognition revolves around the following aspects of education systems for engineers. There are engineering education schemes leading to degrees after 4-5 years of studies, there are 3-4 year systems and there are 2 year systems. The situation is further complicated by institutional entrance qualification requirements. Visible trends are emerging from the smaller countries in Scandinavia, and the low countries. The systems rivalling for recognition, are the German, British and French—all different. The main problem child for a unified approach is the shorter degree scheme, exemplified by the Fachhochschule in Germany, and the IUT in France. These institutions supply most engineers in Germany, but are incoherent with the Technical Universities due to the poor possibilities for credit transfers between the institutions. As with the Polytechnics in the UK these types of institutions originated in the secondary school system, and were subsequently incorporated into the higher education systems, generally between 1960 and 1970, but the development paths of these systems were not uniform. Due to this transformation, a requirement for an engineering degree is developing which entails four years of post-secondary studies. These 4 years could include a year of industrial training. With this requirement fulfilled, British institutions and Fachhochschulen have plain sailing towards recognition as engineers in Europe. Following in their wake, the Dutch have adopted similar systems. The Scandinavians, are also interested in joining this type of scheme. In Sweden, only recently introduced engineering studies with two years post-secondary studies may not quite fit into the scheme, and could lead to further changes. All this is further complicated by the professional recognition of degrees as practised in the United Kingdom—but generally not elsewhere in Europe. As British universities such as the University of Cambridge have a three year engineering degree scheme, they would hardly fit into a 4 year requirement. This is alleviated by the professional engineering societies who confer their own recognition of engineering degrees in the United Kingdom some time after graduation from the university. If all this sounds confusing—it is. The community has been dreaming up credit transfer schemes, so that a network of transnational university cooperations will eventually bring about a coalescence of mutual recognitions, with other institutions dragged in their wake. The European Engineer title, as yet not well marketed, is another attempt at conformity. What seems clear is that engineering graduates will be able to practise their profession all over Europe. Whether governments or enterprises will exploit their unique education systems as an alibi to protect their own graduates, as has happened in the past in the medical profession, remains to be seen.

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