

Towards One Institution of Engineers

A personal view by Robert Freer

The Institution of Civil Engineers was founded in 1818, just before the beginning of the Railway Era, and was the first institution for the practitioners of the new profession of engineering. In those days the term civil engineer meant simply a non-military engineer and most of the members at that time were the engineers of the roads, canals and harbours.

The story that the Institution refused to admit George Stephenson because as a mechanic he was not a “gentleman engineer” is, like many other popular stories, probably apocryphal. But the fact remains that the formation of the Institution of Mechanical Engineers, some thirty years after the Civils, with George Stephenson as their first President, started the fragmentation of the engineering profession which has continued relentlessly and has bedevilled and weakened the efforts of engineers today to establish and maintain influence with politicians and with the general public. Today there are between thirty and forty institutions accommodating the main engineering specialisations and many more representing minor interests.

Almost everything engineers do nowadays to build or to maintain the national infrastructure is sponsored or influenced in some way by the Government. The Government is deeply involved in the national infrastructure and it is in the interests of all of us that the specialist practitioners have sufficient influence with the Government to ensure that Government policies are first of all guided by sound technical advice and then carried out in a technically efficient manner. Such advice would carry more weight if it was seen to represent the views of

the whole engineering profession.

Throughout the country there are many technical specialists on every subject able to offer such advice, but with thirty or forty institutions claiming to speak for the engineering profession how does the Government know how to locate and make best use of this reservoir of information?

It would be much simpler for the Government to speak to one Institution of Engineers which could offer, on matters of both policy and its implementation, sound technical advice distilled from a wide range of opinions within its membership. Unanimity among specialists is not to be expected and is unlikely to be achieved but if different views and their consequences are clearly stated and an appropriate technical judgment clearly made it becomes much easier for politicians to adopt and pursue a sound and workable policy.

Personal individuality would not be lost because within the one Institution there would be a number of special interest groups (as there are now in the separate institutions) to provide the “intellectual home” for specialist practitioners.

The older professions have been more far-sighted. If the Government wants technical advice on, say, medical policy or legal policy they have just one organisation they can speak to.

This problem of fragmentation has been recognised by a number of engineers for many years and the Government's impatience with the present arrangements has also been apparent. Since the Finniston enquiry more than twenty years ago (which was prompted by the



Government of the day) there have been three opportunities to bring the main engineering institutions together and three times the opportunity has been lost. Three times is a lot.

Today there is another opportunity to bring the institutions together, and it may be a last opportunity. The practical reality is that the historical distinctions between the different types of engineer are fading and are becoming less relevant in modern practice. And all the large employers and commercial organisations are now multidisciplinary.

Many of the present institutions are concerned that their membership is static or declining and in any case is ageing. It is much better for the main institutions to start negotiations now on a basis of equality than to allow this opportunity to slip by again for a number of years by which time some institutions may need to seek amalgamation for reasons of economic necessity.

Brunel was one of the first to recognise the damaging consequences of the fragmentation of the profession. He was admitted as a Member of the Institution of Civil Engineers in 1837 and later in 1841 he was invited to join the new Institution of Mechanical Engineers. He declined on the grounds that if the new Institution were to be “an Institution for England generally.. I fear it would tend to create a division in our Institution of Engineers and so far would I think be open to objection”. Brunel was born in 1806 and to bring the Institutions together would be a fitting way to commemorate the bi-centenary of his birth in 2006.

Robert Freer is an engineer but the opinions expressed are his own and not those of any institution