"Raising the bar - can learned societies and professional institutions particularly the engineering institutions do more to contribute to economic growth"

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Panellist Opening Statement
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One of the things in which the British lead the world, apart from financial services, is founding good clubs. In the engineering world we have no less than 36 of these, all but 2 of which confer Chartered status on qualifying members. And if the field is widened into science and its leaned societies we have many more. This is in stark contrast to virtually all other leading countries, including our European neighbours and leading Commonwealth Countries. The fact that the institutions can boast increasing numbers of foreign members cannot justify the proliferation in numbers.

In engineering there has, during my professional lifetime, been two attempts to consolidate and rationalise the Institutions to bring them into line with other leading countries. But these were resisted by the Institutions themselves. Not only did the initiatives fail, but in the spin-off we acquired two more Institutional bodies which in different ways now represent the profession---the Engineering Council and the Royal Academy of Engineering. As a member of both bodies and of the ICE, I believe the question needs to be posed who should speak for the engineering profession.

To pursue any new goal an Institution should concentrate its resources and avoid diverting its energy into fringe activities which neither serve the interests of it members nor the goal of economic growth. As regards the ICE there are two major activities which, in my view, qualify as fringe activities. One is the fact that the Institution's headquarters building in Great George Street is better known as a conference centre than as the home civil engineering. The second is the huge promotional drive for the adoption of the New Engineering Contract which was produced by the ICE and is now marketed by its publishing arm. Whatever the merits of NEC its contribution to economic growth is a matter of controversy in which

the ICE should not be committed to one side. These are examples which apply to the ICE. Many of the other Institutions could similarly be accused of diverting energy into activities which serve neither the interests of members nor the goal of economic growth.

In 2002 I delivered the annual Lloyds Register Lecture with the title "Engineering Ethics: Do engineers owe duties to the public?" which may be seen as overlapping with the present theme. The answer to the question was NO in legal terms; but in terms of the broadly drafted and aspirational codes of conduct of most of the engineering institutions, as well as the selfless conduct of many individual members of the engineering profession, the answer should be YES. One role of every engineering institution is the drawing up of a Code of Professional or Ethical Conduct and the putting in place of mechanisms which protect the interests both of its members and the public. This aspect came into sharp focus in New Zealand as a result of the Canterbury earthquakes in 2010/11 in which an inadequately designed building collapsed killing 115 people. The CTV building had been the subject of a report more than 10 years earlier which had revealed the inadequacies. The author of the report had followed the existing professional code but the report became “lost in the system” and the building remained a major risk. There are important recommendations contained in the report of a Royal Commission which should cause all engineering institutions to review the adequacy of their own procedures.

Virtually all the UK engineering Institutions, particularly those of celebrated longevity, suffer from the inertia that comes of being founded in a different age. While they do much to maintain the contemporary relevance of their activities, this does not apply to their structure and governance, which has mostly remained unchanged. As one aspect of that inertia, a substantial proportion of the members who qualified under the rules of one institution are likely to be found to be pursuing activities and employing skills radically different from those that were relevant in earlier times. And a large proportion of engineers now work in areas which cross the boundaries of other Institutions or even other professions, in my own case engineering and law. Yet each of the engineering institutions operates independently as though other institutions and other disciplines did not exist.

In terms of educating new entrants to the professions, this has a serious distorting effect. While the universities could readily offer the cross-disciplinary courses that modern commerce and industry needs, the out-moded structure of the institutions through which they must qualify to gain professional status means that the universities in turn must offer courses which conform to requirements of those institutions, even though it may have little relevance to future careers. Obvious examples are engineering with law, with various sciences, with accountancy, with management and even with languages. Such courses are available at Masters' level, but why should applicants first be compelled to attain a qualification which diverts them away from their goal?

Finally, when reviewing the list of 36 institutions it is noticeable that about half have London addresses—somewhat out of kilter with the distribution of engineers—and the larger ones have very smart addresses. The need to be close to the seat of Government has long passed and while individual institutions still have important input for National policies, the Engineering Council and the Royal Academy are arguably the more appropriate vehicles to communicate with Government. The Institutions should consider whether the interests of their members would be better served by moving to a more appropriate location.