A challenge of the *highest order*

The horrendous attack on the USA makes superfluous any Editorial not addressing the implications.

Going back to the time of Leonardo da Vinci – one of the greatest engineers of all time – engineers have sought to provide improvements to the quality of human life. We have only to look at the way life has improved to see how successful engineers have been.

I will not comment on the fanatical and inhuman nature of the recent attack, but just say that our comfortable lives, created by engineers, have led to a high degree of complacency about the security of our society. We have been used, from the Cold War days, to thinking about threats from 'enemies overseas', but for some time the threat has actually been increasing from within our society. The nature of wars has been changing for a decade or more.

Our lax attitude to illegal immigrants and their employment in the 'black economy' and our tolerance of destructive forces in our society, often operating under the guise of racial or religious equality, is a very dangerous situation. Those who have read Gibbon's *Decline and Fall of the Roman Empire* may smile about this and see some parallels to our present complacency.

Complacency to potential threats towards the country and the weakening of important security organisations in the name of 'political or racial correctness' is now being seen as a significant error in the USA. We might wish not to fall into the same trap in the UK, but sadly it is already happening in an increasing way.

It seems time to recognise that the threat to our civilised societies has changed and that we need to react as soon as possible in a measured way. It is time for the engineering community to do again what it does well – developing systems to improve human life. In the widest terms, this means providing systems to ensure that those who genuinely wish to contribute to our society have the support and security they need and that those who have destructive motives are restrained before they have a chance to inflict even small amounts of damage.

A national identity card system, with the requirement to carry such cards, holding essential data about the individual, is not an unreasonable requirement in a civilised society. One has to question the motives of those who object to this. People usually manage to remember to carry money, bank or credit cards, and their driving licence. Moreover it is an important step towards the government's 'e-society ambitions'.

It has always been a requirement in most countries to carry identification, so why should we be different? With the increasing crime rate in certain sectors (which the police are not addressing since they focus increasing attention on revenue-earning activities such as traffic offences), I suspect that most law-abiding citizens would not object to an increased requirement to produce identification.

Identity cards or not, a major challenge for the UK is how we implement an information-technology-based infrastructure which provides the necessary monitoring, security and confidence to the population for them to pursue and enjoy their business or social lives, but addresses legitimate privacy issues, yet clearly isolates disruptive elements in the society. The elements of the technology in terms of the provision of smart cards, the wireless reading of smart cards, networks for broadband connection of video cameras, distribution of data, and the systems integration software, are all available. At present, as a country, we are playing with some of these systems in an amateur way, with individual communities or local authorities installing discrete systems. One is reminded of Napoleon's comment that we are 'a Nation of small shopkeepers'.

It is more than time for the Government to undertake a national initiative to investigate how we can capitalise on our engineering expertise and social understanding to create a secure environment. The USA already has a 'Homeland Security' initiative with high government profile. The various UK National Academies, such as the Royal Academy of Engineering, would – I am sure – be more than able to assist, were our Government willing to take up this challenge – one which is central to the future of the UK.

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