



SUMMARY OF THE DISCUSSION AFTER THE 2001 ZUCKERMAN LECTURE

“EUROPE AS A GLOBAL PLAYER: THE CONTRIBUTION OF EDUCATION AND RESEARCH”

Held at the Institution of Civil Engineers, One Great George Street, Westminster, London

1st November 2001

Sponsored by:

**Benfield Group
EMTA**

In the Chair: **The Rt Hon The Lord Jenkin of Roding**, Chairman
The Foundation for Science and Technology

Speakers: **The Lord Sainsbury of Turville**, Minister for Science and Innovation, DTI (Introduction)

Frau Edelgard Bulmahn
Federal Minister of Education and Research for Germany

Professor David King FRS, UK Chief Scientific Adviser (Closing Remarks)

In discussion it was observed that in the UK it had long been believed that the right research would bring prosperity. In fact that was not enough: science had to be applied. The same mistake was perhaps being made in the creation of a European research area, in that there was a danger of concentrating on the science and neglecting industry's readiness to make use of it. Even in a traditional sector such as the car industry competitiveness depended on the application of high technology, for instance on-board software. There were arguments for looking again at the patent regime, to give innovators a longer period of grace in which to find commercial backing.

One participant saw signs of a change of direction in the VI Framework Programme, in that it was being formulated by reference to national programmes. It was not yet clear what the outcome would be.

The aim was to add European value and increase European competitiveness, creating networks of centres of excellence. Different financial instruments might be needed for different areas of research.

The Lecture identified a number of challenges which could only be met by joining forces at the European level, and one of these was the development of a transport system based on hydrogen technology. There had been much progress in relevant research and some progress toward applying it - in Germany, for example, some car companies were willing to use hydrogen fuel - but the infrastructure was lacking. The main issues were industrial and political rather than scientific. There were encouraging signs, notably advances in fuel cell design and co-operation between a group of American car companies agreeing common standards for hydrogen pumps and fittings, but as yet there was no network of filling stations.

In the longer term the challenge would be to find efficient ways to isolate hydrogen, perhaps from seawater using solar power.

In her Lecture Frau Bulmahn spoke about the promotion of personal mobility and international movement in German scientific institutions and the creation of more multinational research teams in German universities.

It was suggested that if individual member states took steps to attract scientists from abroad there could be a conflict with the aim of promoting European science. Against this it was argued that opening up German academic and scientific institutions by removing bureaucratic obstacles would be consistent with steps to bring about greater mobility within Europe and between Europe and the rest of the world. For young scientists and teachers in Germany a spell abroad could seriously jeopardise career prospects, and there was still difficulty in getting overseas courses and qualifications recognised.

The Lecture proposed the setting up of a European forum for scientific ethics. One participant questioned whether such a body would be able to reach agreement, otherwise than by going for the lowest common denominator, given the divergence of views within and between member states on such matters as stem cell research, genetically modified organisms, the application of the precautionary principle and nuclear energy. In response it was suggested that a European forum, while not solving all the problems, could promote rational debate. National solutions would not work well for goods and services traded on the European market, notably food.

A consensus on such matters between experts would not necessarily convince the general public. One contributor to the discussion thought that American consumers were more open to innovation because they were protected by strong regulatory organisations. Public discussion was important, and in Germany there had been some success in promoting this. Better institutional arrangements were also needed, though. European regulatory bodies were fragmented, with fifteen national institutions controlling the release of genetically modified organisms. Regulatory systems had to set high standards of safety and quality, while also putting in place practical systems for issuing consents and approvals.

Jeff Gill

The discussion was held under the Foundation's Rule that the speakers may be named but those who contribute in the discussion are not. None of the opinions stated are those of the Foundation which maintains a strictly neutral position.
