

# Foresight: is it working?

*A debate on The Office of Science and  
Technology Foresight initiative*

Held in the rooms of the Royal Society on 18 July 2000

Sponsored by The Office of Science and Technology and Navartis

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*In the Chair:*

Mr. David Moorhouse, Deputy Chairman, Foundation  
for Science and Technology

*Speakers:*

Ms Julie Carney, Director Foresight speaking on behalf  
of The Lord Sainsbury of Turville, Minister for Science  
and Innovation at the Department of Trade and Industry

Mr Tim Jones, Chief Executive, Purseus Limited,  
Chairman of the Foresight Finance Panel and e-  
commerce task force

Professor Colin Humphries FREng, Department of  
Materials Science, University of Cambridge

*For background information on Foresight refer to the  
following web site [www.foresight.gov.uk](http://www.foresight.gov.uk)*

The debate took place against the background of serious concerns voiced by Professor Humphries in his lecture about the state of research in the universities, and, in particular, the availability of research students and postdoctoral staff in the physical sciences. These concerns were endorsed by contributors to the discussion, drawing comparisons with the United States. British governments commanded Parliamentary majorities, whereas in the US the President proposed but the Congress disposed. In fact the Congress had proved willing to back President Clinton's proposals for funding the science and technology that pleased American consumers. Thus, for example, public funds went to research in information technology, but not into methods of curbing global warming because the US public did not believe that there was a problem.

It was observed that Foresight had not devoted much attention to manpower, or indeed womanpower, in UK research: more young women needed to be recruited into science and technology. Some speakers declared roundly that Foresight was fiddling while Rome burnt. It was not without value and had influenced funding to some extent, for instance securing resources for work on photovoltaics for the first time in the UK. Nevertheless it failed to address the big issues. One speaker saw the setting up of Foresight Panels as a device to buy time for the

Government. People knew what the Panels would say. Instead of creating advisory machinery the Government ought to consult one good expert in each industry and then take action.

Others thought that Foresight was being criticised for failing to do things which were not its job. Panels composed of part-time volunteers meeting infrequently, with support staff of good quality but not enough of them, could not be expected to say what the future held and decide what should be done. Their job was to produce provocations, not plans to be implemented.

Much of the value of the process lay in getting relevant people together to share insights. Foresight might almost be described in terms of giving people something to network about. In his lecture Professor Humphries had cited the example of a transfer of turbine-blade technology from the aerospace industry to power generation through an extensive network of collaborators which would not have been assembled without Foresight.

One speaker's judgement was that Foresight was working but could do a lot better. Companies used not to talk to each other and the Government and the universities did not communicate. The success of Foresight lay in getting people to talk and look ahead. The national reports served to demonstrate the process in action.

Foresight reports were nevertheless meant to influence Government policy, and they were more likely to succeed in this because they did not come from civil servants. The Panels were not constrained by the Government's agenda, and the quality of their output would determine what influence they had. One speaker wondered how much effect the first round of Foresight had had on Government spending decisions and worried about a lack of "in-reach". It was noted that two of the current Panels were supported by Government departments. One participant suggested that publicly funded researchers ought to be required to map their work and their findings against Foresight documents, not slavishly but giving useful feedback to the Panels.

A speaker recalled that the prophet Isaiah had asked in exasperation: "Who hath believed our report? and to whom is the arm of the Lord revealed?" (Isaiah, chapter 53.) That revelation, it was suggested, came to those who made things happen, not those who just talked. Some contributors to the discussion thought the outputs from Foresight had less effect than they should because, for want of resources, they were not based on thorough research and did not support their conclusions with hard evidence. Panel reports lacked depth, analysis and rigour. It was relatively easy to convey messages to the Government and the academic world, but much harder to convince industrialists that the Panels had something to say. Tangible outcomes and evidence were essential in order to engage the attention of small and medium firms. In the

experience of one speaker, engineering companies were interested in the questions formulated by the Panels but not in the answers offered.

Against this it was argued that the function of the Panels was to catalyse thinking about the future rather than handing down answers from on high. One speaker claimed that readers of Foresight documents were unlikely to learn anything they did not already know, but this was disputed. One Panel had, for example, predicted a major change in small and medium enterprises, which was not in line with conventional wisdom. People ought in any case, to read the reports of Panels outside their own area of expertise in order to pick up cross-cutting issues.

It was asked how the effectiveness and efficiency of the Foresight process should be measured. The input costs were significant. Professor Humphries had talked of ringing a friend in the US who gave a thumbnail sketch of the state of American science and technology. By contrast Foresight involved thousands of people, with a major contribution from the voluntary sector. One response was that it was wrong to expect to measure the outcome of a process which entailed quality people doing quality work thinking about 2010. It was easier to point to results - a lot of people making a lot of money - than to prove causation. Another measure offered was success in getting science from the bottom to the top rung, in terms of political priority. It had reached that position before 1995, championed by a Cabinet Minister, but had slipped back since.

A concluding assessment was that Foresight was something that had been needed for a long time, to address the yawning gap between Government, industry and science. Elsewhere these were joined up infinitely better, and the UK was still trying to catch up.

*Mr Jeff Gill*

*The discussions were held under the rule that nobody contributing to them may be quoted by name after the event. None of the opinions stated are those of the Foundation for Science and Technology, since, by its constitution, the Foundation is unable to have an opinion.*

Foundation for Science & Technology,  
Buckingham Court, 78 Buckingham Gate, London SW1E 6PE  
Tel: 020 7222 1222 Fax: 020 7222 1225  
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