

COUNCIL FOR SCIENCE AND TECHNOLOGY

ANNUAL REPORT FOR 2002-2003

Introduction

1. This is the fourth annual report of the Council for Science and Technology, covering its work over the period from 1 April 2002 to 31 December 2003. The report covers a longer period than usual because of the re-launch of a new Council due to take place during 2004.

2. Following its re-establishment in March 1998 with new terms of reference, the Council serves¹ as the Prime Minister's top level, independent advisory body on strategic issues concerning Science and Technology (S&T) in the U.K. It is charged with taking a medium to longer term, proactive approach to its core task of keeping under review and making recommendations on ways of improving:

(a) The performance of the U.K (public and private sectors) in S&T, in relation to current and future national needs and opportunities;

(b) The overall impact of the funding arrangements for publicly supported S&T including those for research in higher education institutions;

(c) The effective use and exploitation of S&T by business, Government and the public services to create wealth and improve our quality of life, and;

(d) The synergy between the UK's domestic and international S&T activities and the scope for the U.K to get more benefit from S&T collaboration.

Additionally, the Council provides advice on particular strategic issues of national importance whenever sought by the Government.

3. 2002/2003 saw changes in the Council's membership, with Sir Kumar Bhattacharyya and Sir Richard Sykes standing down after having served the maximum possible term on the Council. The Council's 12 remaining independent members were:

Mr Javaid Aziz (Chief Executive, Aspective Limited);

Mr Euan Baird (Chairman, Roll-Royce);

Professor Sir Alec Broers FRS FREng (Vice Chancellor, University of Cambridge);

Professor Vicki Bruce (Vice Principal & Head of College of Humanities & Social Science, The University of Edinburgh);

Professor Sir Christopher Evans OBE (Chairman, Merlin Biosciences Ltd);

¹ Applies to period of annual report – existing Council ends 31 December 2003.

Professor Dame Julia Higgins CBE FRS FREng (Professor of Polymer Sciences, Imperial College of Science, Technology & Medicine);
Dr Rob Margetts CBE FREng (Chairman, BOC plc, Chairman, Legal & General Group plc, and Chairman (Europe) Huntsman Corporation);
Sir Paul Nurse FRS (Chief Executive – Cancer Research UK);
Dr David Potter CBE (Chairman, Psion plc);
Professor Peter Schuddeboom CBE (Director, Northern Ireland Science Park).
Professor David VandeLinde (Vice Chancellor, University of Warwick); and
Mr John Weston CBE (non-executive Chairman Spirent plc).

4. As an “Advisory, Non-Departmental Public Body”, the Council operates in accordance with the framework for “Opening Up Quangos” which the Government established in 1998. In accordance with this framework, it publishes details of its meetings, work (including most of its advice to government) and membership². The Council adheres to the guidelines issued by the Office of the Commissioner for Public Appointments (OCPA). It has also adopted a code of practice based on the seven principles of public life, the “Nolan” standards of selflessness, integrity, objectivity, accountability openness, honesty, and leadership.

Summary

5. During 2002-2003, the Council met on 23 September and 2 December 2002 and 3 March, 2 June and 22 September 2003, to:

- Consider the PIU Energy Review and associated Energy research Review, and to provide an input to the consultation stage of the Energy White paper.
- Launch and deliver a study into the links between businesses involved in providing knowledge based services and the science base.
- Consider and provide input to the newly revamped Foresight programme.
- Consider and provide advice on a new ‘review of Innovation’ being taken forward by DTI.
- To consider and provide a short input to the Lambert Review of university links with business.
- Discuss and provide views on a European Research Area and FP7.

6. Additionally, the Council was subject to a quinquennial review and a full appointments round for all membership positions on the Council.

² The Council's web site contains this and other information, including the register of interests declared by member at the address www.cst.gov.uk.

Work during 2002-2003

(a) QUINQUENNIAL REVIEW AND APPOINTMENTS ROUND

8. During 2002, the Council was subject to a quinquennial review. The review had a great influence upon the work of the Council and its members.

9. The review of CST was announced on 15 August 2002. It was conducted by an independent reviewer, Dr. Elizabeth Hopkins, guided by a steering board consisting of Sir David King, Dr. John Taylor, Alistair Keddie, Harriet Wallace and, in the later stages, David Hughes.

10. The report of the first stage was published on 7 November 2002. It concluded that CST should continue provided that the Government and Council members were prepared to take steps to make it more effective.

11. Following acceptance of the first stage report by Ministers, Stage 2 proceeded to examine options for making the Council more effective.

12. In concert with the stage 2 process, members considered possible options for the future for CST, its role and its membership. This was undertaken both during the December 2002 meeting of the Council, and also within a workshop set up to examine these questions.

13. The final report of the review was delivered to Ministers on 16 December 2002. The Government undertook follow up work, with further input from CST members, to help it decide how CST should be organised in future. The final report of the review together with details of CST's future terms of reference and organisation were published on 17 July 2003. A public appointments round was announced on 12 August 2003 with a deadline for applications of 1 October 2003. To allow for what promised to be a tight appointments timescale, 7 members kindly agreed to have their membership terms extended until the end of 2003.

(b) ENERGY

14. Following publication of the (PIU) Energy Review and associated Energy Research Review, CST undertook to provide a response to the invitation to provide views as part of the White Paper consultation process.

15. A sub-group was established by correspondence during the summer of 2002 to provide a CST input. The sub-group members were John Weston (Chair), Euan Baird, Rob Margetts and Peter Schuddeboom.

16. The CST paper was not an attempt to 'pick winners' and did not pretend to offer a sufficiently detailed analysis of the complete range of complexities that impact on this topic, but instead proffered the case for an energy 'vision' around which resources and skills could be properly organised. The paper addressed the need for better data, objective setting, more

research funding and international cooperation in energy research. Options needed to be kept open to optimise the solutions package that would eventually be selected to address longer-term needs.

17. The subject of energy needs crosses a number of Departmental boundaries and subject headings. Transport, energy efficiency and education are integral to consideration of the issues.

18. A number of activities had already begun that reflected the views expressed in the CST input. This includes the setting up of an inter-Departmental Energy Research Group, and consideration of a new 'Energy Research Centre'.

(c) STUDY INTO SCIENCE BASE / SERVICES LINKS

19. Having decided that this study should be separated into two distinct stages, during the summer of 2002 the contract for undertaking part one of this study was put out to tender. The objective of the first stage of the study was to try and gain better data on the interactions between the science base and 'services' businesses, and to identify the distinct 'communities' that could prove a good quarry for a possible further, more detailed second stage later in 2003.

20. The CST sub-group looking at this issue comprised Peter Schuddeboom (Chair), Paul Nurse, Rob Margetts and John Weston.

21. The results of the study were finally delivered in September 2003 and were used to inform the Lambert and Innovation Reviews.

(d) FORESIGHT

22. Members were kept informed of developments resulting from the re-launch of Foresight.

23. In March 2003, members were provided with an outline of the new Foresight programme, and how it would work. The new programme would concentrate on fewer issues, and comprise studies based upon issues where science held the promise of a solution, or an area of cutting edge science involving disruptive technologies warranting further consideration or articulation. The first pilot reviews on Flood and Coastal Defences and Cognitive Systems and developments in neuroscience got underway in April 2002, with a consultation period over the summer.

24. At the September 2002 meeting of CST, members were asked to consider topics for a further round of Foresight studies. Members suggested that the following topics had potential: technology and being a citizen; Cyber Trust; land use; untreatable diseases; and infrastructure. Cyber Trust was subsequently chosen as a further Foresight topic.

(e) INNOVATION REVIEW

25. In December 2002, members were introduced to a review of innovation to be undertaken by the DTI. The review was to try and identify systemic high and low points within skills knowledge and technology with a view to closing the productivity gap with some competitors. Members were invited to meet Alistair Keddie and David Hughes, acting and incoming Directors General of the Innovation Group.

26. A further meeting with the team heading up work on the Lambert Review of Business Links with Universities elicited information and advice for the review team concerning IPR and relationships between the service sector and Universities.

27. CST provided further advice relating to emerging issues and conclusions from the review at the Council's June and September meetings.

(f) LAMBERT REVIEW

28. During June 2003, CST received a presentation on the scope of this new review of University links with business. A number of members subsequently met with the review team and discussed emerging conclusions from the review. CST members provided advice on possible follow-up work, and the results of the services study were offered as input to the review.

(g) EUROPEAN RESEARCH AREA (ERA) AND FRAMEWORK PROGRAMME 7 (FP7)

29. During June 2003 CST discussed what views to take to the meeting of European Science and Technology Advisory bodies in Paris. International data is difficult to collect, but members advised that an ongoing Royal Society study might help inform the process. Members had commented on the varied expectations of some countries concerning how an ERA might affect local funding, and the focus and 'critical mass' that should be striven for as part of FP7.

(h) FUNDING RESEARCH in UK UNIVERSITIES

30. During 2003, CST discussed the mechanisms in place for distributing research funding to UK universities. Several consultation papers outlining proposals for amendments to various parts of the system had been published by government. The CST shared the government's view that there is a need for change and, in October, submitted advice on this area to government.

FUTURE WORK

30. At the end of 2003, the future work programme of the Council had not been agreed, pending appointment of new members to the Council. Government is now considering the areas where it would like to seek advice from CST. In addition, government expects CST itself to develop its own work programme; this will be a matter for the new CST membership.

CST
February 2004