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Science & Technology Committee

ANNUAL REPORT 2002


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Science & Technology Committee

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Science and Technology Committee

The Science and Technology Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Office of Science and Technology and its associated public bodies.

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Publications
The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at www.parliament.uk/parliamentary_committees/science_and_technology_committee.cfm

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td>COMMITTEE ACTIVITIES AND OBJECTIVES</td>
<td>6</td>
</tr>
<tr>
<td>Objective A: To examine and comment on science and technology policy</td>
<td>6</td>
</tr>
<tr>
<td>Objective B: Government expenditure on science and technology</td>
<td>9</td>
</tr>
<tr>
<td>Objective C: Administration of the Office of Science and Technology and the Research Councils</td>
<td>10</td>
</tr>
<tr>
<td>Objective D: To assist the House in debate and decision</td>
<td>12</td>
</tr>
<tr>
<td>OTHER COMMENTS</td>
<td>13</td>
</tr>
<tr>
<td>Government Replies</td>
<td>13</td>
</tr>
<tr>
<td>Working methods</td>
<td>14</td>
</tr>
<tr>
<td>Relations with OST</td>
<td>16</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>16</td>
</tr>
<tr>
<td>ANNEX A: LIST OF COMMITTEE OBJECTIVES</td>
<td>17</td>
</tr>
<tr>
<td>ANNEX B: LIST OF COMMITTEE PUBLICATIONS AND GOVERNMENT REPLIES IN 2002</td>
<td>19</td>
</tr>
<tr>
<td>ANNEX C: MEMORANDUM FROM THE SCIENCE AND TECHNOLOGY COMMITTEE TO THE LIAISON COMMITTEE</td>
<td>21</td>
</tr>
<tr>
<td>PROCEEDINGS OF THE COMMITTEE RELATING TO THE REPORT</td>
<td>25</td>
</tr>
</tbody>
</table>
SECOND REPORT

The Science & Technology Committee has agreed to the following Report:

ANNUAL REPORT 2002

INTRODUCTION

1. In its recent Report on the select committee system, the Select Committee on Modernisation of the House of Commons recommended that departmental select committees should agree a statement of core tasks, against which their activities could be measured, in order to provide greater clarity and consistency in parliamentary scrutiny.\(^1\) The House passed a resolution adopting the Committee's Report on 14 May 2002 which invited the Liaison Committee to establish common objectives for select committees, based upon the illustrative model set out in the Modernisation Committee's Report.\(^2\)

2. The Science and Technology Committee considered the guidance and illustrative template subsequently provided by the Liaison Committee and adopted a set of objectives on 24 July, published as an Annex to this Report. These are based upon the Liaison Committee template, but adjusted to take account of the unique position of the Office of Science and Technology (OST) as a part of the Department of Trade and Industry (DTI), and to reflect the Committee's function of scrutinising science policy in a broader sense, the use of science and technology and the provision of scientific advice across Government. In fulfilling our remit, we have been careful to liaise with other select committees when our inquiries focus on the work of other departments.

3. This Report is the successor to the two Special Reports on the work of the Committee published by our predecessors in the last Parliament, subsequently updated by a memorandum to the Liaison Committee covering the few remaining weeks of 2001 following the present Committee's establishment on 12 November 2001.\(^3\) The Report is structured so as to place our work over the year in the framework of our agreed objectives and core tasks. Inevitably, many of our activities contribute to more than one of our core tasks, so categorisation is by no means hard and fast. We also include other comments about our activities and working methods and on Government Replies to our Reports. We have found the exercise of agreeing objectives and core tasks a useful one. They largely cover work in which we were already engaged and also serve to formalise some informal objectives we had previously adopted. For example, we agreed early in the year to hold scrutiny evidence sessions with each Research Council over the course of the Parliament. Nonetheless, the core tasks provide a more coherent structure to our activities without impinging upon our ability to maintain a flexible approach and to react to developments at short notice. We will produce a similar Report on our activities in each calendar year.

4. In what has been an extremely busy year, we would like to record our thanks to all those who have contributed to our inquiries, by submitting written and oral evidence, hosting visits or briefing the Committee. All these activities make a valuable contribution to parliamentary scrutiny. We are grateful to the Parliamentary Office of Science and

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\(^1\) Select Committee on Modernisation of the House of Commons, First Report of Session 2001–02, Select Committees, HC 224–1, paragraph 33
\(^2\) Votes and Proceedings, 14 May 2002, pp 864–5
\(^3\) Printed as Annex C.
Technology (POST), whose staff have not only assisted us with specific individual queries, but also provided considerable help to us throughout our inquiry into science education from 14 to 19. In our examination of the Science Budget allocations and the DTI estimates we made use of the Scrutiny Unit, recently established to provide a range of specialist advice to select committees. We are grateful for the assistance it has already provided in the examination of DTI and Research Council budgets. We welcome the contribution to effective scrutiny that this Unit will make and, in this context, we look forward to the outcome of the current review of select committee resources, to which the Chairman has contributed. We would also like to place on record our thanks to the specialist advisers who have assisted us throughout the year: Professor Michael Elves for his advice across the range of our activities; Professor Jonathan Osborne and Ms Becky Parker in respect of their help during our inquiry into science education; and Mr Nick Otter and Professor Dennis Anderson for their contribution to our ongoing inquiry into a non-carbon fuel economy.

COMMITTEE ACTIVITIES AND OBJECTIVES

Objective A: To examine and comment on science and technology policy

Task 1: To scrutinise government policy on science and technology, examining policy proposals from the UK Government and the European Commission and other outputs from the Office of Science and Technology.

5. Much of our activity during 2002 can be categorised under this task. The major policy initiative concerning science and technology was the Investing in Innovation strategy document, published jointly by the Treasury, DTI and the Department for Education and Skills (DfES) in July. This sets out the Government's strategy for using the funding announced in the 2002 Spending Review to promote the UK science and engineering base. We briefly considered this document in our 2002 Scrutiny Report and took up some of the issues it raised with the Science Minister when he gave evidence on the Science Budget allocations on 11 December.

6. Following the strategic review of energy policy conducted by the Performance and Innovation Unit, the Government published a consultation document on energy policy in May. In July we announced a major inquiry into progress towards a non-carbon fuel economy, in which we have been examining the research, development and demonstration aspects of evolving energy policy. This inquiry will complement the recent work of the Trade and Industry Committee and the Environmental Audit Committee on energy policy. A White Paper on energy policy is expected to be published in early 2003. We will hold an oral evidence session with Ministers on the White Paper and other matters as soon as possible after its publication and will publish a Report in the early part of 2003.

7. A Green Paper on genetics is expected to be published shortly. The Science and Technology Committee has taken a close interest in medical genetics research since 1995. We sought to build upon this earlier work by looking at current issues in an area in which Government policy has had to respond to the rapid pace of scientific developments. In

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4 Investing in Innovation: A strategy for science, engineering and technology, July 2002
6 The Science BudgetAllocations, Minutes of Evidence, Session 2002–03, HC 160-1
7 Department of Trade and Industry, Energy Policy: Key issues for consultation, May 2002
July, we published a Report on Developments in Human Genetics and Embryology. It included a number of recommendations on the regulation of medical genetics, embryology and reproductive medicine. The Government agreed to consider these recommendations in developing the Green Paper. We will monitor developments in this area very closely.

8. As part of our scrutiny session with the Medical Research Council, we looked at the Government's proposals for a UK Biobank and Stem Cell Bank. The Biobank is set to be the world's biggest study of the role of nature and nurture in health and disease, while the establishment of a Stem Cell Bank will permit pioneering research in the UK into the development of novel treatments for serious diseases using stem cells from various sources, including some from early human embryos. We will comment upon these initiatives as part of our scrutiny Report on the MRC, to be published in the first half of 2003.

9. On 11 November the European Commission launched the Sixth Framework Programme. This will provide €17.5 billion of funding to research projects between 2002 and 2006 to EU Member States and other countries. We announced an inquiry the following week into UK science and Europe. This will examine whether the UK gets value for money from the EU funding system and consider UK policy on the system itself and on the development of a European Research Area. Initial work on the preparation for Framework 7 will begin in the latter part of 2003. Our intention is to produce a report by the summer of 2003 in order to help the Government use the lessons of Framework 5 and to ensure that the science community is well placed to benefit from Framework 6 and future programmes.

Task 2: To conduct inquiries as appropriate, identifying and examining areas of emerging policy, or where existing policy is deficient, and making proposals.

10. In choosing subjects for inquiries we have sought to pay careful attention to timing in order to maximise the potential impact of our Reports. Our inquiry into the Research Assessment Exercise (RAE)—the mechanism by which the Government allocates university block grants—was timed to enable us to feed in our views on the 2001 RAE to the Government's review of it which began in the autumn. We published our Report on The Research Assessment Exercise in April. This drew attention to major problems for universities caused by the funding system and included a proposal for a new model of research funding. In a constructive Reply, the Government acknowledged the usefulness of the Committee's Report and agreed to consider the model RAE which we put forward.

11. The adequacy of science education in schools is not a new concern, but it is an issue that the Government revisited in 2002. A Green Paper entitled 14–19, extending opportunities, raising standards, was published in February. Sir Gareth Roberts then reported in April the results of his review into the supply of science and engineering skills in the UK. In conducting a major inquiry into science education from 14 to 19 in the early part of the year, we sought to contribute our own analysis and ideas at a time when policy was being reshaped. We identified major problems in science education in schools which had serious consequences for the supply of young scientists. We concluded that measures being taken to rectify the problems did not go far enough and made a number of recommendations in support of more radical action. We understand that our comments

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9 Fourth Report, Session 2001–02, Developments in Human Genetics and Embryology, HC 791
10 Government Response to the Report from the House of Commons Science and Technology Committee: Developments in Human Genetics and Embryology, Cm 5693, November 2002, paragraph 1
13 HM Treasury, SET for success: The supply of people with science, technology, engineering and mathematical skills (Report of Sir Gareth Roberts), April 2002
14 Third Report, Session 2001–02, Science Education from 14 to 19, HC 508–1
on the way science is taught and our recommendations on the content of the national curriculum have influenced the development of a new pilot for GCSE science.\footnote{See, for example, The Independent, 9 January 2003, p 1.}

12. The Roberts Review also considered the position of short term contract research staff in universities and brought forward proposals for more structured career options for them. These proposals were broadly accepted by the Government in July.\footnote{Investing in Innovation, July 2002, Annex A} We announced an inquiry in May in order to examine whether action being taken to promote and develop careers in science and engineering was likely to be sufficient. We were pleased to receive over 80 written submissions in this inquiry, many from individual researchers, to support one very full session of oral evidence. Whilst supporting some of the analysis of Sir Gareth Roberts, we identified a need for a far more radical approach to the situation involving a significant change of attitude on the part of universities, Research Councils and Government. Our Report was published in time for its conclusions to be considered by Government as it takes forward the recommendations of the Roberts Review. We await with interest the outcome of the current review of higher education.

13. One area in which Government policy is evolving at some pace is in the combatting of potential terrorist attack by biological and chemical weapons. New legislation to provide the necessary powers to respond urgently to any attack is reported to be in preparation.\footnote{See, for example, The Daily Telegraph, 15 January 2003, p 4.} A new Health Protection Agency is to be established in the spring to combine the functions of some of the existing organisations involved in the detection and response to the occurrence of infectious diseases and chemical incidents. On December 19 we announced a new inquiry into the scientific response to terrorism. This will seek to build upon the work of the Defence and Foreign Affairs Committees on this subject by concentrating on the scientific issues and advice relating to the development of policy.\footnote{See Second Report from the Defence Committee, Session 2001–02, The Threat from Terrorism, HC 348–1, and Sixth Report from the Defence Committee, Session 2001–02, Defence and Security in the UK, HC 51, First Report from the Foreign Affairs Committee, Session 2002–03, The Biological Weapons Green Paper, HC 150 and Second Report from the Foreign Affairs Committee, Foreign Policy Aspects of the War on Terrorism, Session 2002–03, HC 196.} We hope that the evidence we gather and the Report we produce will inform debate on policy and on any relevant legislation which is brought before Parliament.

\textbf{Task 3: To scrutinise legislation and proposed legislation on science and technology matters}

14. The Committee did not identify primary legislation with a significant bearing on science and technology matters during 2002. We recognise that any proposed bill sponsored by a Government department would naturally be subject to the scrutiny of the relevant departmental select committee. That is not to say that we will never have an interest: there may be subjects on which we might be the best placed committee to conduct pre-legislative scrutiny. For example, should the Government decide to move the Arts and Humanities Board from the Department for Education and Skills to the OST—something that would require primary legislation—it would be logical for us to consider any draft bill brought forward. The same might apply to any new legislation in the field of genetics and embryology, where we have already made some recommendations\footnote{See Government Response to the Committee’s Fourth Report, Cm 5693, paragraphs 30 and 34.} and, although the Government has rejected the case for one at the moment, any future national cancer bill. As indicated in paragraph 13 above, there may be elements of a new bill concerning civil contingencies which we might want to comment upon in our inquiry into the scientific response to terrorism. We will liaise with other select committees as appropriate when considering how to respond to the introduction of new legislation with a direct bearing on science and technology.
15. We have taken an interest in secondary legislation relevant to our inquiries. We drew attention to the Government's delay in bringing forward regulations under the Health and Social Care Act 2001 governing cancer registration and criticised the consequent interim guidance issued by the General Medical Council on confidentiality.\textsuperscript{20} We also highlighted the conflict between the Human Fertilisation and Embryology (Research Purposes) Regulations 2001 with the Council of Europe Convention of Human Rights and Biomedicine, and urged the Government to consider whether to sign the Convention with an appropriate reservation.\textsuperscript{21} In our inquiry into Short-term research contracts in science and engineering, we considered the impact that the implementation of the European Commission Fixed Term Work Directive through secondary legislation would have on the costs to universities of employing contract research staff and the consequent implications for researchers.\textsuperscript{22}

**Objective B: Government expenditure on science and technology**

**Task 4: To examine the expenditure plans and outturn of the Department of Trade and Industry, so far as it relates to science and technology, and of the Research Councils**

16. Our 2002 Scrutiny Report contained an examination of those parts of the DTI Annual Report which relate to science and the impact of the spending review 2002 on UK science. We followed this up with an oral evidence session with the Science Minister on 11 December, immediately after the announcement of the science budget allocations on 9 December. In addition, we sought written memoranda from the OST on the significant changes to spending plans in both the spring and winter supplementary estimates.\textsuperscript{23} Both our evidence sessions with the two Research Councils we have scrutinised so far (MRC and PPARC) have looked at past expenditure and future spending plans.\textsuperscript{24} We also conducted an inquiry into Government funding of the scientific learned societies, some of which are effectively NDPBs and are largely financed by the Science Budget.

**Task 5: To examine other Government Departments' expenditure on research and advice on science and technology**

17. The dual funding system for science research in universities means that we keep a close eye on the spending plans of the Department for Education and Skills. In our major inquiries involving the DFES, on science education, the Research Assessment Exercise and on short term contracts, we considered expenditure and made recommendations with significant financial implications.\textsuperscript{25} The National Endowment for Science and Technology and the Arts (NESTA) comes under the wing of the Department for Culture, Media and Sport: our Report on that organisation examined how effectively the Department's funds had been used and considered the case for additional funding.\textsuperscript{26} In our follow-up Report on cancer research we considered in some detail, and were critical of, the expenditure and administration of the Department of Health in this area.\textsuperscript{27} The funding of the Human Genetics Commission, which reports jointly to the Department of Health and OST, and of the HFEA was considered in our inquiry into human genetics and embryology. Our current inquiry into a non-carbon fuel economy will examine the adequacy of Government expenditure—mainly by DTI and Defra—on renewable energy sources. We covered the issue of departmental scientific advice in more general terms during our evidence session.

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\textsuperscript{20} First Report, Session 2001–02, Cancer Research—A Follow-up, HC 444, paragraphs 34 and 35
\textsuperscript{21} HC (2001–02) 791, paragraph 20
\textsuperscript{22} Eighth Report of Session 2001–02, HC 1046, paragraphs 58–62
\textsuperscript{23} Not printed.
\textsuperscript{24} See paragraphs 20–21.
\textsuperscript{25} For example, HC (2001–02) 508, paragraph 130; HC (2001–02) 507, paragraph 79.
\textsuperscript{26} Sixth Report of Session 2001–02, The National Endowment for Science, Technology and the Arts, HC 1064
\textsuperscript{27} HC (2001–02) 444
with the Government's Chief Scientific Adviser, Professor David King, in May and reported to the House on this in our Scrutiny Report.  

**Task 6: To monitor European Union expenditure on scientific research**

18. The multinational nature of much of the funding of scientific research makes effective scrutiny of EU expenditure on science very difficult. In our 2002 Scrutiny Report we called on the Government to publish a detailed analysis of spending in the EU Framework 5 programme which ran from 1998 to 2002. We will use this and other new information in the inquiry we announced in November into UK science and Europe. We will examine, amongst other issues, the effectiveness of the Framework Programme in allocating money to scientific research in Europe and consider how the UK can derive maximum benefit from future programmes. We will also try to secure the establishment of mechanisms which will assist future evaluation exercises.

19. As well as looking at EU expenditure, we have monitored Government expenditure on European and multi-national research programmes and organisations, such as the European Space Agency. Such spending is mainly channeled through the Particle Physics and Astronomy Research Council (PPARC). Our Report on this Research Council, published in December, followed up some long standing concerns about the management of the CERN (European Organisation for Nuclear Research) and monitored the UK's involvement with other multi-national projects.

**Objective C: Administration of the Office of Science and Technology and the Research Councils**

**Task 7: To examine the Office of Science and Technology's objectives and performance**

20. The scrutiny of the OST's performance involves the examination of an ever-increasing number of documents produced by the DTI. Some selected information on performance against targets is provided in the annual expenditure plans for DTI. The DTI's Public Service Agreements (PSAs), published with each Spending Review, contain specific objectives and targets relating to the work of the OST. Technical Notes to the PSAs provides more information on how these targets will be measured and a Service Delivery Agreement (SDA) provides more detail on how the Department intends to meet them. We looked at these objectives and targets in some detail in our 2002 Scrutiny Report. However, we were hampered by the unavailability of some of the necessary information. The SDA for 2003-06 had been expected to be published by the end of October 2002, but had still not been published by the end of the year. We found that the published targets "are too general and high-level to allow judgement of OST's performance" and have undertaken to pursue with the Department ways of monitoring more detailed targets. The publication of the DTI's first Annual Performance Report, expected in the autumn, should have been a helpful tool for us in monitoring performance. This was finally laid before Parliament on 21 December, the day after the House rose for the Christmas recess. The Committee received no warning of publication nor copies of the document from the Department, despite prior enquiries as to its likely publication date. **It is difficult to plan the effective monitoring of performance against targets when the Department does not meet its own targets for the publication of relevant information, nor warn us of when it is expected to be delayed or likely to be published. We aim to**

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28 HC (2001–02) 860, paragraph 27
29 As above, paragraph 31
31 Department of Trade and Industry, Government Expenditure 2002–03 to 2003–04, Cm 5416
32 HC (2001–02) 860, paragraph 11
33 Department of Trade and Industry, Autumn Performance Report 2002, December 2002, Cm 5731
produce a Scrutiny Report each year which will focus in part on the OST's performance against its published targets. We look to the Department to provide us with the necessary information—whether or not it is published—to enable us to perform this important task.

Task 8: To monitor the work of the Research Councils

21. The combined annual expenditure of the seven Research Councils will amount to more than £1.8 billion in 2003–04: the monitoring of this expenditure is therefore one of our key core tasks. We took evidence from Dr John Taylor, Director General of the Research Councils twice in 2002: in May alongside the Chief Scientific Advisor, as part of our OST scrutiny inquiry, and in December when he appeared with the Science Minister to give evidence on the Science Budget allocations. These sessions allow us to probe the Government's thinking on the direction of science policy and on the prioritisation of resources. We will be taking a more detailed look at each of the seven Research Councils in separate inquiries over the course of the current Parliament, as mentioned in paragraph 3.

22. We published our first such scrutiny Report, on The Work of the Particle Physics and Astronomy Research Council, on 17 December.\textsuperscript{34} We announced the second inquiry, into the Medical Research Council (MRC), in September, and invited comments from interested parties on their experiences of the MRC and, in particular, on the proposed UK Biobank and Stem Cell Bank. The memoranda we received helped to focus a very constructive oral evidence session with the MRC on 4 December. \textbf{We value very highly the evidence we receive from the Research Councils' stakeholders for these short inquiries. We intend to solicit their views in advance of evidence sessions with the other Research Councils.}

In addition to this rolling programme of scrutiny sessions we will be looking closely at the performance of all Research Councils through their annual reports and following up as appropriate.

Task 9: To scrutinise major appointments made by the Secretary of State for Trade and Industry

23. We regard it as a useful exercise to see senior public servants in charge of major organisations in the science world early in their term of office. Such meetings not only serve to develop our links with the science community and improve our understanding of the key issues facing each organisation, they also remind public servants of their ultimate accountability to Parliament. In this context we were pleased to take evidence during our inquiry into Developments in Human Genetics and Embryology, from the new Chair of the Human Fertilisation and Embryology Authority, Suzi Leather, alongside the departing Chair, Ruth Deech. We believe that this has been a useful exercise for the HFEA, which has been in need of reform, and we are pleased to see evidence of progress made under the new Chair.

24. The DTI underwent some restructuring during the year. As a result, the establishment of a Science, Technology and Innovation Group, outside the OST, was announced to provide a sharper focus on technology transfer. The Director General of the new Group, eventually named just the Innovation Group, was appointed in October. We decided in November to hold a short introductory evidence session with the new Director General, Mr David Hughes, in January 2003 and to hold a similar session with Professor Ian Diamond, the new Chief Executive of the Economic and Social Research Council.

\textsuperscript{34} HC (2002–03) 161
Task 10: To examine the implementation of legislation and major policy initiatives, following up earlier Reports by the Committee

25. We have already referred to our work in monitoring legislation governing human genetics and embryology and major policy initiatives such as the Roberts Review and the *Investing in Innovation* strategy. A significant part of our work in 2002 followed up and built upon the work of our predecessor Committees. We have chosen to monitor progress on subjects we have covered by means of short follow-up inquiries at regular intervals. Our first inquiry of the session was follow-up to the previous Committee's Report on Cancer Research—A Fresh Look, published in July 2000. We found evidence that the money promised for cancer research by the Government following our earlier Report was not getting through to its intended target quickly enough. We subsequently held a further oral evidence session with the Minister responsible, Ms Hazel Blears, on 15 July, following the publication of the Government's response.

26. Our inquiry into NESTA also followed up the work of our predecessor Committee in session 1998–99 to examine NESTA's performance in advance of its first quinquennial review. We will seek written memoranda from the OST asking for an update on the implementation of some of our recommendations relating to it and other parts of the DTI, as appropriate. This information may then be used as the basis for further oral evidence and a short inquiry, or might form part of our annual Scrutiny Report.

Task 11: To hold Ministers to account

27. Our trans-departmental role involves taking evidence from Ministers in other departments as well as the DTI. In 2002 we held oral evidence sessions with five Ministers, from OST, DfES and DoH. We aim to hold an annual oral evidence session with the Secretary of State for Trade and Industry. We held our last such session on 19 December 2001, shortly after the Committee was nominated in the new Parliament. As it has now been over 12 months since this session, we have invited the Secretary of State to appear before us before Easter. As the Science Minister is presently in the House of Lords, we do not get the opportunities enjoyed by members of other select committees to hold their respective Ministers to account in debates and parliamentary questions. We therefore aim to take evidence from the Science Minister at least once each year, in addition to any appearances in the context of our specific inquiries.

Objective D: To assist the House in debate and decision

Task 12: To produce Reports informing the House on science and technology matters and of the science perspective on public policy issues, some of them being suitable for debate in the House, including Westminster Hall, or in debating committees.

28. We published nine Reports in 2002 covering a wide range of issues relating to science in the fields of health, education, innovation and research. We succeeded in having two of our Reports debated in Westminster Hall during the year. On 10 January four members of the Committee took part in a debate on our predecessor's Report on Wave and Tidal Energy, published in April 2001. Our second Report of the Session 2001–02, on The Research Assessment Exercise, was debated on 27 June. Eight members of the

36 HC (2001–02) 44, paras 6-18
37 Department of Health, Government Response to the House of Commons Science and Technology Committee: Cancer Research—A follow-up, Session 2001–02, Cm 5335; Government Response to the Cancer Research Follow-up Report, Minutes of Evidence, Session 2001–02, HC 1101–1
39 Listed at Annex B.
Committee participated in a well attended debate, which was replied to by the Minister for Lifelong Learning, Margaret Hodge. We also applied for a debate on our Report on Science Education from 14 to 19 and hope that this might be held early in 2003.

29. Like all debates in Westminster Hall, the two debates we secured were held on Motions for the adjournment of the House. We would have preferred the House to have had an opportunity to express a view by voting on a substantive Motion. In our Report on the Research Assessment Exercise we recommended the subject be debated and included a proposed text for such a Motion.\textsuperscript{41} Although the Government welcomed the suggestion of a debate, there was no apparent enthusiasm for a substantive Motion. We took this up with the Leader of the House and were disappointed to receive a reply which referred to "formidable obstacles" to changing the existing rules.\textsuperscript{42} One reason cited was the practical difficulties of providing for a division in Westminster Hall. However, the Modernisation Committee clearly envisaged that substantive motions would be taken in Westminster Hall, with the objection of any Member resulting in the recording of a "not decided" outcome, and the decision referred to the main Chamber, if necessary.\textsuperscript{43} The House has accepted this proposal and Standing Orders provide for any question so referred "to be put forthwith upon a motion being made in the House."\textsuperscript{44} We believe that debates in Westminster Hall would be more meaningful, and better attended, if they focused on a substantive Motion. The current rules do not, contrary to the impression given by the Government, preclude this. We aim to pursue this matter with the Leader of the House and appropriate House Committees.

OTHER COMMENTS

Government Replies

30. We received seven Government Replies during 2002. Not one of these was received within the two month deadline for Replies. The gap between Report and Reply ranged between nearly three months (Cancer Research) to ten months (Scientific Advice on Climate Change), with the average being four and a half months. We accept that there may be difficulties in responding to lengthy and complex Reports within two months and we have suggested that this rule might be reconsidered.\textsuperscript{45} As we make clear below, we would rather receive a full, considered Reply than a hurried one. For shorter, straightforward Reports, we would still expect the two month deadline to be met. \textit{Whatever the timing of Government Replies, we would expect as a matter of courtesy to be kept informed of progress and to be given reasons for any anticipated significant delays.}

31. In terms of the quality of the content, we have found the Government's Replies to be mixed.\textsuperscript{46} Some, such as those on the Research Assessment Exercise and the Scientific and Learned Societies were comprehensive and considered. However, too often the Replies do not respond directly to the arguments put forward, or do not give reasons why a particular recommendation is rejected. For example, the Government responded to our arguments in favour of a National Cancer Act by simply re-stating its view that "an Act is not needed here".\textsuperscript{47}

\textsuperscript{41} HC (2001–02) 508–1, paragraph 140
\textsuperscript{42} The correspondence is published as Annex D
\textsuperscript{44} \textit{Standing Orders of the House of Commons}, January 2003 edition, SO 10 (9)
\textsuperscript{45} See Annex C, Memorandum to the Liaison Committee, paragraph 8.
\textsuperscript{46} See HC (2001–02) 44, paragraphs 8–9 and HC (2001–02) 476, paragraphs 5–6.
\textsuperscript{47} Department of Health, \textit{Government Response to the House of Commons Science and Technology Committee: Cancer Research- A Follow Up}, Session 2001–02, Cm 5532, paragraph 39
32. More disappointing was the Government's complacent response to our predecessor Committee's comments on the low profile of the Government's strategic advisory body on science and technology, the Council for Science and Technology (CST), and its recommendation that more should be done to raise its profile. 

(We subsequently endorsed this view in our 2002 Scrutiny Report.) In its Reply, published in November 2001, the Government disagreed with the Committee, arguing that:

"The Council has made a distinctive and influential contribution to science, technology and innovation policies ... The Council's standing profile will continue to strengthen as its role and work develops, and its interactions with external organisations become more extensive."

Less than 12 months later, however, the Government's own review of the CST supported the Committee's concerns, and went further. Stage 1 of the Government's quinquennial review of the CST found that "CST seems to have run out of steam ... it is difficult to believe that CST is currently having much impact on Government policy." It would be surprising if the influence of CST could wane so dramatically in such a short space of time. We suspect that the Government made no real attempt to examine the concerns of our predecessor Committee. A neutral response in advance of the quinquennial review would have been preferable to the instinctive confidence expressed on this occasion. It is bland reassurances such as these, in contradiction to the available evidence, that devalue the authority and trustworthiness of Government Replies.

33. We were particularly disappointed by the Government's Reply to our Report on Science Education from 14 to 19. Although lengthy, the Reply from the Department for Education and Skills simply set out existing policy and initiatives rather than engaging with the detailed arguments and recommendations we advanced in the Report. Consequently, we invited the Schools Minister, Mr David Miliband, to give oral evidence to us in November on the Government Reply. This proved a useful session in clarifying certain responses and exploring areas of genuine disagreement. We will repeat this exercise where necessary in future. The separate response to the Report from the Qualifications and Curriculum Authority addressed our criticisms directly, taking issue with many of them but always seeking to explain the reasons for disagreement. We welcome this type of response, which can only help to move the debate forward. As a general point, we welcome the responses we have received from non-Government organisations we have scrutinised, such as the Royal Society and the Royal Academy of Engineering, and we will continue to publish these alongside the relevant Government Reply. We do not expect the Government to agree with all of our recommendations, nor accept all of our criticisms. Where it disagrees, however, we do expect it to set out the reasons why and to show some evidence of having assessed the evidence presented. The responses received from non-Government organisations manage to do this.

**Working methods**

34. The Committee has generally sought to conduct short, focussed inquiries. In order to cover the breadth of opinion and interests on a given subject we have found it both stimulating and time efficient to take evidence from many sets of different witnesses consecutively at a single session, backed up, if necessary, by subsequent questions and

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49 HC (2001–02) 860, paragraph 42
51 Quinquennial Review of the Council for Science and Technology, Report on Stage 1, October 2002
52 Sixth Special Report, Session 2001–02, Science Education from 14 to 19: Government Response to the Committee’s Third Report, HC 1204
memoranda. On three occasions in 2002 we used introductory private seminars with appropriate experts to explore areas of interest and terms of reference for forthcoming inquiries. These have proved extremely helpful.

35. We have also supplemented the formal and informal evidence sessions with more informal contacts with interested parties. The day before a very successful day of hearing oral evidence at the Science Museum in connection with our science education inquiry we met groups of students for informal discussions at Westminster. The Committee undertook visits to two London schools and a further education college and members of the Committee visited schools in respective constituencies for similar informal discussions. We also visited universities and further education institutions on an individual basis during our Research Assessment Exercise inquiry. We believe that such visits are vital elements of some inquiries and contribute significantly to the authority of our Reports.

36. We also made use during the science education inquiry of the Foreign Office Science and Technology Unit, which can draw on the recently expanded network of officials concentrating on science in British Embassies around the world. The Unit provided extremely useful information on science education policy in a number of countries which we used for comparative purposes.\textsuperscript{53} We also saw at first hand during our visit to Japan in connection with our energy inquiry the valuable work that a science section in an Embassy can do for UK industry and higher education establishments.

37. This policy is in line with our desire to engage with the science community in the UK as much as time permits. We have sought to encourage scientists to engage with the political process in order to get their message across. Committee members participated in an event organised by the Royal Society of Chemistry aimed at increasing the awareness of young scientists about Parliament. We specifically invited the Youth Parliament to contribute views in connection with our science in education inquiry.

38. During the year we visited the Royal Society, the Royal Academy of Engineering, the offices of the OST and UK Atomic Energy Authority facilities at Culham. During a visit to Scotland for our science education inquiry, we took the opportunity to meet our counterpart committee in the Scottish Parliament. We have held two press conferences to launch Reports outside the confines of Westminster, at the Royal Marsden Hospital and the Science Museum. Three members of the Committee formed part of the UK delegation to the annual Inter-Parliamentary Conference in Athens organised by EUREKA, a Europe-wide network on industrial research and development co-operation.

39. During the year we have received some outside requests for comments on documents and to supply nominations for certain appointments. For example, the Human Genetics Commission invited us to comment upon its work plan and we were invited to supply comments on the quinquennial review of the Council for Science and Technology. Whilst we appreciate such invitations, the nature of select committee work—based upon the gathering and testing of evidence of interested parties—does not readily lend itself to producing the rapid response that is usually required. We would not wish a reluctance to respond to be interpreted as a lack of interest; it is more a reflection of our working patterns and priorities. Given greater notice, we could consider a subject worthy of an inquiry and provide an informed response to a consultation exercise.

\textsuperscript{53} HC (2001–02) 508–1, Annex 2
Relations with OST

40. We have been helped throughout the year by a positive and co-operative relationship with the OST. We appreciate that it is a relatively small organisation and our scrutiny can generate a considerable amount of work. We look to Ministers to ensure that adequate resources are in place to respond to the growing demands of parliamentary scrutiny. There have been occasions when we would have welcomed a little more prior warning of announcements or the publication of documents of direct concern to us. Such notice helps us to plan our future work more effectively. We have already referred to the lack of prior warning on the publication of the DTI Autumn Performance Report. 54 We have had to work hard on occasion to secure the full publication of certain documents. The Cross-Cutting Review of Science and Research and the Transparency Review on the costing of university are examples, although we recognise that the OST is not always in sole control of such cross-cutting reviews. 55 Good scrutiny requires good communication. We expect OST to use its best endeavours to keep us informed of major policy announcements concerning UK science and to provide us with the raw material necessary for us to do our job.

CONCLUSION

41. We sought to cover a wide range of important issues in 2002. The incessant pressures on Parliamentary time meant that it was not always possible to cover every subject in the detail we would have liked. But we have not sought to produce weighty tomes purporting to be the last word on the subject of our inquiries. Rather, we have sought to engage directly with the communities we are scrutinising and to produce timely Reports which spark, contribute to or influence debate. We see scrutiny in terms of an ongoing and frank dialogue, with OST, Research Councils, NDPBs and Government departments which make use of UK science. We have sought to give credit where it is due but to be direct in our criticisms where they are warranted. We hope that the Government has the confidence to engage with the arguments and to acknowledge when performance has been below par. Equally, we are prepared for Government to tell us when it believes we are wrong and to consider the reasons given. We look forward to developing further this open dialogue as we scrutinise the OST and science policy across Government during 2003.

54 See paragraph 20.
LIST OF COMMITTEE OBJECTIVES

Objective A: To examine and comment on science and technology policy

Task 1: To scrutinise government policy on science and technology, examining policy proposals from the UK Government and the European Commission and other output from the Office of Science and Technology

Task 2: To conduct inquiries as appropriate, identifying and examining areas of emerging policy, or where existing policy is deficient, and making proposals

Task 3: To scrutinise legislation and proposed legislation on science and technology matters.

Objective B: Government expenditure on science and technology

Task 4: To examine the expenditure plans and outturn of the Department of Trade and Industry, so far as it relates to science and technology, and of the Research Councils

Task 5: To examine other Government Departments' expenditure on research and advice on science and technology

Task 6: To monitor European Union expenditure on scientific research.

Objective C: Administration of the Office of Science and Technology and the Research Councils

Task 7: To examine the Office of Science and Technology's objectives and performance

Task 8: To monitor the work of the Research Councils

Task 9: To scrutinise major appointments made by the Secretary of State for Trade and Industry

Task 10: To examine the implementation of legislation and major policy initiatives, following up earlier Reports by the Committee

Task 11: To hold Ministers to account.
Objective D: To assist the House in debate and decision

Task 12: To produce Reports informing the House on science and technology matters and of the science perspective on public policy issues, some of them being suitable for debate in the House, including Westminster hall, or in debating committees.
LIST OF COMMITTEE PUBLICATIONS AND GOVERNMENT REPLIES IN 2002

Committee Reports

Session 2001-02

First Report: Cancer Research - A Follow-Up (HC 444)

Second Report: The Research Assessment Exercise (HC507)

Third Report: Science Education from 14 to 19 (HC 508-I)

Fourth Report: Development in Human Genetics and Embryology (HC 791)

Fifth Report: Government Funding of the Scientific Learned Societies (HC 774-I)

Sixth Report: National Endowment for Science, Technology and the Arts: A Follow-Up (HC 1064)

Seventh Report: The Office of Science and Technology: Scrutiny Report 2002 (HC 860)

Eighth Report: Short-term Research Contracts in Science and Engineering (HC1046)

Session 2002-03

First Report: The Work of the Particle Physics and Astronomy Research Council (HC 161)

Government Replies

Session 2001-02

Fourth Special Report: Scientific Advisory System: Scientific Advice on Climate Change: Government Response to the Committee’s Third Report, Session 2000-01 (HC 493)

Fifth Special Report: The Research Assessment Exercise: Government Response to the Committee’s Second Report, Session 2000-02 (HC995)

Sixth Special Report: Science Education from 14 to 19: Government’s Response to the Committee’s Third Report, Session 2000-02 (HC 1204)

Government Response to the First Report from the House of Commons Science and Technology Committee: Cancer Research - A Follow Up (Cm 5532)

Government Response to the Fourth Report from the House of Commons Science and Technology Committee: Developments in Human Genetics and Embryology (Cm 5693)

Session 2002-03

First Special Report: Government Funding of the Scientific Learned Societies: Government Response to the Committee’s Fifth Report, Session 2001-02 (HC35)

Minutes of Evidence

Session 2001-02


Session 2002-03

Minutes of Evidence for Monday 4 November 2002: Science Education from 14 to 19: The Government’s Response (HC 1273-i)

Minutes of Evidence for Wednesday 11 December: The Science Budget Allocations (HC 160-i)

Minutes of Proceedings, Session 2001-02 (HC 1334)
ANNEX C

Memorandum from the Science and Technology Committee to the Liaison Committee

1. The Liaison Committee has asked for annual activity reports from each Select Committee. This memorandum describes the activities of the Science and Technology Committee in the current Parliament. The final report of our predecessor Committee, published last May, described the Committee’s activities in the first part of 2001.¹

Delay in nomination

2. The Committee was nominated on 12 November 2001. This was almost four months after the other departmental Select Committees were appointed (on 16 July 2001) and four full weeks after the House returned from the Summer Adjournment. We greatly regret the delay in our nomination, which lost us a valuable period of work. It was as if, once the target of setting up the Committees before the Summer appeared to have been achieved, interest was lost in finishing the job. We ask the Liaison Committee to urge the Government to ensure that, after the next General Election, all Committees be nominated without delay.

Activities to date

3. Because of the delay in our nomination, we have little more that one month’s activity to report. We have held six meetings. We have undertaken a short follow-up inquiry into our predecessor Committee’s 2000 Report on Cancer Research², with one evidence session in December and another planned for January. We have launched two inquiries for the New Year, on the Research Assessment Exercise (which informs the funding of Higher Education) and on Science Education from 14 to 19. We have had a “scrutiny” evidence session with the Secretary of State for Trade and Industry, the Minister for Science and Innovation and the Director General of Research Councils. We have obtained a memorandum from the Department of Trade and Industry on the implications of the DTI review for the Office of Science and Technology. We have made plans to visit the Office of Science and Technology in London and the Research Councils (our main “associated public bodies”) in Swindon, in January.

4. After our first meeting, we took the innovative step of issuing a press notice inviting interested organisations in the field of science and technology to suggest topics for investigation. We received an extensive and very useful response, which has informed our decision on future inquiries.

5. We have held a meeting to discuss our objectives and our method of working. We have plans for another, informal, meeting, away from Westminster, in January, when we will discuss further how we can be most effective in scrutinising Government.

Government Replies

6. We have received Government Replies to three Reports of the Committee in the last Parliament (on the Scientific Advisory System, Are We Realising Our Potential?, and Wave and Tidal Energy) and published them as Special Reports.³ These Replies were received, respectively, six to 12 months, almost seven months, and six months

after publication of the related Report. Worse, we are still awaiting a Reply to our predecessors' Third Report of Session 2000–01, on Scientific Advice on Climate Change, which was published on 21 March 2001 (nine months ago). We have written in complaint to the Minister responsible, Mr Meacher, but have had no response. We appreciate that this is an evolving policy area, but we do not believe that this justifies such a long delay in replying.

7. We ask the Liaison Committee to consider the procedures for Government Replies following a General Election. There is little point in Departments sending memoranda to Committee clerks in advance of the nomination of the Committee, but this should not be an excuse for long delay. We suggest that, where the nomination of a Committee is delayed, beyond, say, four or five months after the publication of a Report, the Department should be expected to publish the Reply itself, as a Command Paper.

8. The Liaison Committee might also like to reconsider the two month rule. We wonder whether it is realistic to expect Departments to reply to complicated reports within two months: it is better to get a considered reply after four, or even six months, than something short and hasty within two.

Joint working

9. We are continuing to explore opportunities for joint working with the Lords. Our Chairman has held informal meetings with the Chairman of the Lords Science and Technology Committee and with the Chairman of the Lords Committee on Stem Cell Research.

Debates

10. There was a well-attended debate in Westminster Hall on our predecessor Committee’s Report on Genetics and Insurance\(^4\) on 25 October 2001. We have obtained another debate in Westminster Hall in January 2002 on our predecessor Committee’s Report on Wave and Tidal Energy.\(^5\)

January 2002

ANNEX D

Exchange of Correspondence Between Dr Ian Gibson, MP, Chairman of the Committee and the Rt Hon Robin Cook, MP, Leader of the House and President of the Council

LETTER FROM THE CHAIRMAN OF THE COMMITTEE TO THE LEADER OF THE HOUSE

The Science and Technology Committee is pleased to have been allocated a debate in Westminster Hall on Thursday 27 June on our recent report on the Research Assessment Exercise.

In our report, and in accordance with the suggestion of the Liaison Committee, we suggested the terms of a substantive Motion for debate:

“That this House commends the higher education sector for the marked improvement in research quality demonstrated by the Research Assessment Exercise 2001; takes note of the conclusions and recommendations in the

\(4\) Fifth Report from the Science and Technology Committee, Session 2000–01, Genetics and Insurance, HC 174.

Second Report of the Science and Technology Committee on the Research Assessment Exercise (HC 507); notes the concerns reflected in that Report on the impact of the RAE on research priorities and on universities’ other functions; acknowledges the vital contribution which higher education research in science and technology makes to society and to the economy; and calls on the Government to fund the RAE results fully in the forthcoming Spending Review.”

We appreciate that, until now, debates in Westminster Hall have been on a motion for the adjournment. We would ask you to reconsider this. Westminster Hall has been instigated in part to allow more opportunities for debate on Select Committee reports, yet restricting them to adjournment debates diminished their impact.

LETTER FROM THE LEADER OF THE HOUSE TO THE CHAIRMAN OF THE COMMITTEE

Thank you for your letter about the forthcoming debate in Westminster Hall.

As you rightly state in your letter, all debates in Westminster Hall are held on a motion for the adjournment. The question therefore is not whether one particular debate should take place on a substantive motion, but whether the general rule that all such debates that are on a motion for the adjournment should be changed.

I am afraid that there would be formidable obstacles to changing the general rule. The report of the Modernisation Committee, which set up the Westminster Hall sitting was explicit in recommending its use for adjournment debates only. One reason for this position is that a substantive Motion by definition must be open to amendment and division. A division in Westminster Hall would raise a host of difficulties—where would the division take place, would it be whipped, and would all Members be entitled to take part?

Westminster Hall in its present format has been a great success and is very popular with Members. I would be reluctant to depart from a format, which has proved so successful. Nevertheless, it is likely that there will be a debate about the future of Westminster Hall before the end of the year in which you might wish to express any view you wish to press on its use for substantive Motions.

17 June 2002

LETTER FROM THE CHAIRMAN OF THE COMMITTEE TO THE LEADER OF THE HOUSE

Thank you for your letter of 17 June, which we discussed in Committee today. As you know, we are due to have our debate in Westminster Hall tomorrow, on 27 June. In the circumstances we accept that there is nothing to be gained by pressing the point, although I will of course refer to the terms of the Committee’s draft Motion in opening the debate.

I must, however, put on record the Committee’s dismay at the argument you advance against the debate being held in Westminster Hall on a substantive Motion. In our view, it seems to be based on a misconception as to the rules for debates in Westminster Hall as originally proposed by the Modernisation Committee and as agreed by the House.

The Modernisation Committee’s Second Report of 1998–99 explicitly allowed for the possibility of substantive Motions: for example, in noting that “the principal difference between the Chamber and Westminster Hall is that in Westminster Hall there can be no divisions. Substantive Motions, if objected to even by a single Member, will be recorded as not decided” (paragraph 47). The Committee also declared in
paragraph 33 that even the possibilities of second reading of a non-controversial Government Bill or a relatively non-controversial prayer against a statutory instrument should not be ruled out.

The Modernisation Committee’s Fourth Report of 1999–2000 on sittings in Westminster Hall recorded that the Sessional Order had provided for a motion in the House to refer an order of the day to Westminster Hall; for any item of business other than an adjournment motion not to be proceeded with if six Members rose to object; and for decisions in Westminster Hall to be taken by unanimity (paragraph 13).

The current Sessional Order for Westminster Hall also explicitly provides at paragraph (7) for a Minister to move that an order of the day be proceeded with at a sitting in Westminster Hall, and at paragraph (6) for orders made or resolutions come to in Westminster Hall to be reported to the House and be deemed to be on order or resolution of the House.

We would contend that the “obstacles to changing the general rule” are therefore not as formidable as suggested in your letter. It was plainly envisaged by the Modernisation Committee and by the House that there could be substantive Motions moved in Westminster Hall, and I cannot think of a better case for such a motion than one unanimously agreed by a Select Committee.

I am copying this to the Chairman of Ways and Means, the Government Chief Whip and to the Chairmen of the Liaison and Procedure Committees, and hope to raise the issue at the next meeting of the Liaison Committee.

26 June 2002
PROCEEDINGS OF THE COMMITTEE RELATING TO THE REPORT

WEDNESDAY 15 JANUARY 2003

Members present:

Dr Ian Gibson, in the Chair

Mr Parmjit Dhanda       Dr Andrew Murrison
Mr Tom Harris            Geraldine Smith
Mr David Heath           Bob Spink
Dr Brian Iddon          Dr Desmond Turner
Mr Tony McWalter

The Committee deliberated.

Draft Report (Science and Technology Committee: Annual Report 2002), proposed by the Chairman, brought up and read.

*Ordered*, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 41 read and agreed to.


*Ordered*, That the list of Committee objectives be an Annex to the Report.—(*The Chairman.*)

*Ordered*, That the list of Committee publications and Government replies in 2002 be an Annex to the Report.—(*The Chairman.*)

*Ordered*, That the memorandum from the Committee to the Liaison Committee be an Annex to the Report.—(*The Chairman.*)

*Ordered*, That the exchange of correspondence between the Chairman of the Committee and the Leader of the House be an Annex to the Report.—(*The Chairman.*)

[Adjourned till Wednesday 22 January at Four o’clock.]