

House of Commons  
Science and Technology  
Committee

**THE WORK OF THE  
PARTICLE PHYSICS AND  
ASTRONOMY RESEARCH  
COUNCIL:  
GOVERNMENT  
RESPONSE to the  
Committee's First Report of  
Session 2002-03**

Fifth Special Report of Session  
2002–03

---

*Ordered by The House of Commons to be printed 12 March 2003*

---

HC 507  
Published on 14 March 2003 by authority of the House of Commons  
*London* : The Stationery Office Limited  
£0.00

## 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.

### Current Membership

Dr Ian Gibson MP (*Labour, Norwich North*) (Chairman)  
Mr Parmjit Dhanda MP (*Labour, Gloucester*)  
Mr Tom Harris MP (*Labour, Glasgow Cathcart*)  
Mr David Heath MP (*Liberal Democrat, Somerton and Frome*)  
Dr Brian Iddon MP (*Labour, Bolton South East*)  
Mr Robert Key (*Conservative, Salisbury*)  
Mr Tony McWalter MP (*Labour, Hemel Hempstead*)  
Dr Andrew Murrison MP (*Conservative, Westbury*)  
Geraldine Smith MP (*Labour, Morecambe and Lunesdale*)  
Bob Spink MP (*Conservative, Castle Point*)  
Dr Desmond Turner MP (*Labour, Brighton Kemptown*)

### Powers

The Committee is one of the departmental select committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No.152. These are available on the Internet via [www.parliament.uk](http://www.parliament.uk) .

### 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](http://www.parliament.uk/parliamentary_committees/science_and_technology_committee.cfm)

### Contacts

All correspondence should be addressed to The Clerk of the Science and Technology Committee, Committee Office, 7 Millbank, London SW1P 3JA. The telephone number for general inquiries is: 020-7219-2794; the Committee's e-mail address is: [scitechcom@parliament.uk](mailto:scitechcom@parliament.uk) .

# FIFTH SPECIAL REPORT

**The Science and Technology Committee has agreed to the following Special Report:**

## **THE WORK OF THE PARTICLE PHYSICS AND ASTRONOMY RESEARCH COUNCIL: GOVERNMENT RESPONSE TO THE COMMITTEE'S FIRST REPORT OF SESSION 2002-03**

1. The Science and Technology Committee reported to the House on The Work of the Particle Physics and Astronomy Research Council in its First Report of Session 2002-03, published on 17 December 2002 as HC161.
2. The Government's response to the Committee's Report was received on 3 March 2003 in the form of a memorandum to the Committee. It is reproduced as an Appendix to this Special Report.
3. We publish this response without comment, so that it is publicly available

## APPENDIX

### GOVERNMENT RESPONSE TO THE HOUSE OF COMMONS SCIENCE AND TECHNOLOGY COMMITTEE REPORT ON THE WORK OF THE PARTICLE PHYSICS AND ASTRONOMY RESEARCH COUNCIL

**1. In order to meet our responsibility for scrutinising the seven Research Councils, we have decided to hold a rolling programme of scrutiny sessions with each Research Council, with the objective of calling them all in over the course of the Parliament.**

The Government welcomes the interest of the Committee in the work of the Research Councils and is happy to offer any assistance as may be required.

#### *Objectives*

**2. We welcome PPARC's ready assent to our suggestion that it publish its Operating Plan 2002 and look forward to this undertaking being met. We also commend its commitment to publish targets in future, unless they are either commercial in confidence or prejudicial to negotiations. We recommend that other Research Councils follow suit.**

The Government notes that PPARC have now published their Operating Plan for 2002. The Government has agreed with all the Research Councils that from 2003 onwards their Operating Plans will all be published. These plans will include targets. Only information that is exempt under the Code of Practice on Access to Government Information will be withheld.

**3. The Accounts for 2000-01 were laid before the House on 11 July 2001 but not published until 2 November 2001. This delay is regrettable. PPARC's Annual Report and Accounts for 2001-02 were laid before Parliament on 23 July 2002 and published on the website immediately thereafter. We welcome this improved performance and trust that it will become the norm in future years.**

The Government's aim is that the Annual Report and Accounts of PPARC should be published in hard copy and web format at the same time as or, where the printers cannot immediately supply a large volume of copies, very shortly after they have been laid before the House.

#### *Spending Review*

**4. We particularly welcome the additional flexibility that the increase in the baseline figure will provide: a focus on certain priority areas should not be allowed to tie the hands of PPARC too tightly. The increase in investment in space science is also very timely. We will be interested to see the extent to which it enables the UK to increase the benefits it derives from membership of the European Space Agency and European Southern Observatory.**

The Government's allocation to PPARC was a carefully considered combination of baseline uplift and funding for specific programmes. The Government recognizes that the UK pays some large subscriptions to participate in international science facilities and that sufficient flexibility must be provided to ensure we gain maximum value for money from this investment.

### *CERN*

**5. We note the improvements being made in the management of CERN. Yet we remain concerned that a body which receives £65 million a year of UK taxpayers' money appears to have been so appallingly managed. We recommend that the Government and PPARC monitor closely the implementation of the External Review Committee's implementation plan, if necessary, with the assistance of the National Audit Office, and report back to the Committee.**

The Government is closely monitoring the implementation of the External Review Committee's recommendations and is content with the progress made on this to-date. Changes in the management accounting processes, the appointment of a new Director General and the agreement on an Independent Audit Committee are three of the recent developments. The UK will continue to work with the CERN management and other CERN member states to ensure that satisfactory management processes remain in place.

### *European Space Agency*

**6. In considering the level of future participation in ESA programmes, the benefits for the UK academic space science community are very important, but at least equal weight should be given to the wider benefits of these investments to industry.**

The Government acknowledges the need to foster links between academia and industry; this is reflected in the recently published draft UK Space Strategy ([www.bnsc.gov.uk/assets/draft\\_strategy.pdf](http://www.bnsc.gov.uk/assets/draft_strategy.pdf)).

**7. We trust that under the new arrangements the space research budget will be maintained at least at the present level and that the overall management of the budget will be noticeably better.**

The new funding arrangements were implemented as a result of the review of the British National Space Centre. The intention was to combine the management responsibility for funding with that for the scientific programme. There is every anticipation that this will result in better management of the programme. The space research budget will be determined according to PPARC's scientific priorities and, of course, taking into account the outcome of future Spending Reviews.

### *European Southern Observatory*

**8. We support a policy designed to maximize UK involvement in the next generation of telescopes, even if this means giving a lower priority to some existing facilities in which the UK enjoys considerable influence.**

The Government welcomes this recognition and has been supportive of PPARC's restructuring of its ground-based astronomy programme.

### *Future Collaborations*

**9. Hosting a global facility like the Neutrino Factory would bring substantial scientific and commercial benefits to the UK. While we acknowledge the uncertainty of international decisions many years ahead, we recommend that the Government or PPARC consider developing a long-term strategy for bringing this facility to the UK.**

The strategy for participation in future facilities of this sort has involved the funding of key areas in which the UK has a particular strength or can make a significant contribution. The £9 million joint programme between CCLRC and PPARC on Accelerator Science

announced in SR2002 is an example of this. It will underpin the UK's ability to contribute technically to a future Neutrino Factory, will allow the UK to make intelligent decisions about participation and will maximize the benefit we gain from such a facility.

**10. It would be unfortunate if PPARC was reluctant or unable to set money aside for major commitments in the future for fear of the Government reclaiming these unspent resources. We recommend that a mechanism be developed outwith the standard rules on carry forward of voted expenditure to allow Research Councils to put money aside for specified future uses.**

On future commitments for major items such as large scientific facilities, the Government works closely with Research Councils UK (RCUK) and individual Research Councils to ensure that requirements and priorities are identified early, that strategies are developed and that these are reflected in Spending Review bids and Council's Operating Plans. An example of this is the Large Facilities Strategic Roadmap which presents a ten-year picture of future requirements.

#### *PPARC Overseas Facilities*

**11. We note that the first phase restructuring has still not been announced. In conducting this restructuring we hope that PPARC will not shy away from making potentially unpopular decisions on decommissioning if that is the best way of concentrating resources on the most scientifically useful facilities.**

The Government agrees with this recommendation and recognizes that PPARC has demonstrated the ability to take difficult decisions on the restructuring of facilities, for example as part of the UK accession to the European Southern Observatory.

#### *UK Domestic Research Programmes*

**12. The £9 million dedicated to gravity and planetary exploration in the 2002 science budget allocations represents a welcome, if belated, opportunity for the UK to enhance its international reputation in these fields.**

The Government welcomes this comment. The SR2002 allocations were a carefully considered combination of baseline uplift and funding for specific priority programmes.

#### *Research Manpower*

**13. Other Research Councils have adopted more constructive policies on contract researchers than PPARC. We fail to see any reason why PPARC should not follow the prevailing best practice.**

The Research Councils do have different policies at present but are working together through RCUK to maximise the opportunities for learning from each other's best practice. The Government is working with all the Research Councils to implement the main recommendations of the Roberts Review. The Government is also providing £120 million per year from 2005-2006 to increase the Research Councils' contribution to indirect costs of research projects, which by increasing the resources available to institutions should also provide more flexibility around the employment of contract researchers across all the Research Councils, including PPARC.

As stated in the Government response to the Committee's report on Contract Research Staff (CRS), the group examining dual-support system reform will consider the issue of CRS applying for Research Grants and how it is addressed in the future. The implementation of the Fixed-Term Regulations may also have an impact, as the numbers of researchers on short-term contracts should reduce.

**14. We welcome PPARC's efforts to plan its student and post-doctoral training policies but urge it to give closer attention to the career development of its present and future PhD students and post-doctoral fellows.**

The Government announced significant extra resources in SR2002 to assist career development and prospects of PhD students and post-doctoral fellows. The extra resources will have a significant impact on PPARC's, and other Research Councils', ability to train, develop and reward research staff.

#### *Public Communication*

**15. If implemented, there is likely to be plenty of scope for PPARC, along with other Research Councils and organisations, to collaborate and co-ordinate their activities to obtain far better value for its spending on public communication. We hope that the Government will respond positively to the British Association's report.**

The Government welcomes the British Association's report, which contains many sensible proposals. The response to the report will be in the form of a draft implementation plan on which we will be consulting shortly. PPARC and the other Research Councils collaborate on some public outreach activities, especially those targeted at schools, but we agree with the Committee that there is scope for further collaboration and co-ordination amongst Research Councils and with other organisations.

#### *Knowledge Transfer*

**16. We welcome the work that PPARC is doing to increase the commercial exploitation of research in its area of science, and we will be looking to see evidence of results. We recommend some form of regular analytical reporting to OST/DTI, and to Parliament, of the outcome of knowledge transfer schemes supported by Research Councils, rather than the current piecemeal reporting of arbitrarily selected highlights.**

The Government agrees on the importance of Research Councils providing a good account of their work to increase commercialisation and of the outcomes of knowledge transfer programmes with which they are involved. The Research Councils already provide OST annually with a range of Output Performance Indicators, a number of which are relevant to knowledge transfer. Further work on metrics is being carried out, within RCUK, by both the Performance Evaluation Group and the Knowledge Transfer Group. As part of the implementation of the Quinquennial Review, RCUK is developing a new management framework, which will include knowledge transfer as an important element. As part of this, consideration is being given to how best to align measures on knowledge transfer in Research Council institutes and higher education institutions. The Higher Education Business Interaction Survey is already providing comprehensive data on exploitation activity across the higher education institution sector. Some progress has been made in considering the effectiveness of individual programmes, for example through recent reviews of LINK and TCS, although in many cases, exploitation outcomes are the cumulative result of a number of complementary support mechanisms.

#### *Research Infrastructure*

**17. We commend PPARC for its recognition of the infrastructure crisis in UK universities, which has affected some of its areas of research, and for its work through JIF and other funding schemes to remedy the deficits and to ensure that its academic community is in a better position to carry out world class research. We believe that it is now important that the universities themselves put measures in place to ensure**

**the rebuilding and maintenance of their infrastructure for the physical sciences through investment and by better management of their research funding. The implementation of the Transparency Review should encourage universities to establish and charge for the full costs of their research programmes. The dedicated funding stream for science research infrastructure of £500 million per year from 2004-05 announced in the Spending Review will also provide welcome assistance to redressing long-term under investment.**

The Government welcomes these comments and agrees with the recommendations. The major additional funding available for science research infrastructure under the new round of the Science Research Investment Fund is conditional on institutions developing long-term research infrastructure investment strategies.

### ***Conclusion***

**18. If the UK is to host a major international science facility, it will be necessary for the Government to show a greater willingness to co-operate with PPARC at an early stage to carry out the necessary development work to put together a serious bid, and then to commit the necessary resources over the long term to see it through. We believe that an ambitious and far sighted approach is needed to secure maximum benefit for UK science.**

The Government works closely with PPARC and the other Research Councils to develop strategies for future major investments. The Large Facilities Strategic Roadmap is one way in which we identify future requirements and their likely financial implications. Some of the initiatives announced as part of SR2002 demonstrate the Government's willingness to fund 'pump priming' activities for future developments, such as the joint CCLRC and PPARC Accelerator Science programme highlighted previously.