



House of Commons
Innovation, Universities,
Science and Skills Committee

**Science Budget
Allocations:
Government Response
to the Committee's
Fourth Report of
Session 2007–08**

Seventh Special Report of Session 2007–08

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The Innovation, Universities, Science & Skills Committee

The Innovation, Universities, Science & Skills Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Department for Innovation, Universities and Skills.

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The current staff of the Committee are: Dr Lynn Gardner (Clerk); Glenn McKee (Second Clerk); Dr Edward Waller (Second Clerk); Dr Christopher Tyler (Committee Specialist); Dr Joanna Dally (Committee Specialist); Ana Ferreira (Committee Assistant); Camilla Brace (Committee Secretary); and Jonathan Olivier Wright (Senior Office Clerk).

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Seventh Special Report

On 30 April 2008 the Innovation, Universities, Science and Skills Committee published its Fourth Report of Session 2007–08, *Science Budget Allocations* [HC 215-I]. On 3 June 2008 the Committee received a memorandum from the Government which contained a response to the Report. The memorandum is published as an appendix to this Report.

Appendix: Government response

Introduction

1. The Government welcomes the report of the Select Committee's inquiry into the science budget allocations. This response has been coordinated by the Department for Innovation, Universities and Skills (DIUS). It takes account of contributions from the Treasury (HMT), and the Research Councils. This introductory section sets out the Government's views on how the broad thrust of future allocations should be made, learning lessons from CSR07. It provides the context for the responses to individual recommendations in the rest of this document.

2. The science budget has doubled in real terms since 1997 from £1.3bn to £3.4bn in 2007/08. The CSR07 allocation sees the science budget increase to almost £4bn in 2010/11. This is an average increase of 2.7% a year in real terms over the next three years. Within a tight fiscal framework, this strong settlement highlights the Government's long standing support for science and research in the UK as set out in the 10 Year Science and Innovation Investment Framework¹. The Framework recognises the advantages of providing stable and predictable funding to ensure the research base can provide the best value for the nation.

3. In allocating this budget, the Government's overriding objective was to ensure the continued excellence of the UK research base. The Government is absolutely committed to supporting excellent fundamental research, which expands the frontiers of our knowledge. In addition, it is important to recognise the wider benefits fundamental research brings. It produces highly skilled people; attracts inward investment; and can be translated into many successful products and services. It is critically important that every possible benefit is extracted from our world class research base. As such, driving up the economic impact of the research base goes hand in hand with supporting excellent science.

4. By operating within this overarching policy framework, Government support has helped the UK research base sustain a strong global performance. The UK is second only to the US in global scientific excellence. With 1% of the world's population, we carry out 4.5% of the world's research and claim 8% of scientific publications. The UK has increased its share of highly cited papers to 13.3%. The proportion of uncited papers produced by the UK continues to fall. At the same time, knowledge transfer between research and business continues to grow. UK universities are now producing spin-out companies of equivalent number and quality to some of the US's top institutions. Since 2003 there have been 30

1 *"Science and Innovation Investment Framework 2004-2014"*, HM Treasury, DTI, DfES July 2004

companies floated on stock exchanges at a value of £1.5bn at initial public offering (IPO). Furthermore, there have been a number of high profile trade sales—seven of these in the last two years have raised £1.9bn. University income from business and user engagement has risen rapidly, now standing at around £2bn per year.

5. It is the duty of Government to set the strategic direction for the research base. To do this, the Government took a number of high level decisions when allocating the CSR07 science budget. For example over CSR07: research will be funded at 90% of its full economic cost; the Sainsbury and Cooksey reviews will be implemented; and work in collaboration with the Technology Strategy Board and Energy Technologies Institute will be supported. The Government also decided certain broad areas of research were of strategic importance to the country, for example medical research and research addressing the key challenges facing the nation (such as energy supply and the environment).

6. For many years, the British Government has been guided by the Haldane Principle, believing that detailed decisions on how research money is spent is for the science community to make through the Research Councils, once the Government has set some overarching parameters. The basis for funding research is also enshrined in the Science and Technology Act 1965. The allocation of the CSR07 science budget has been consistent with the Haldane Principle.

7. John Denham, Secretary of State for Innovation, Universities and Skills, recently restated the Government's position on the Haldane Principle in his speech at the Royal Academy of Engineering on 29th April. He made clear that:

- it is researchers, through their participation in peer review, who are best placed to determine detailed research priorities;
- the Research Councils act as the "guardians of the independence of science"; and
- the Government's role is to set the over-arching strategy and framework.

8. The Haldane Principle is underpinned by the peer review process. Research Councils fund research on a competitive basis following independent expert peer review. This system is regarded as an international benchmark of excellence in research funding, and thus provides a guarantee of the quality of UK research.

9. The peer review processes employed are designed to be sensitive to the different needs and cultures that exist within the academic community. They reflect the variety of mechanisms employed to support different types of research and the need to encourage adventurous or multidisciplinary research. The Government refers the Committee to the RCUK report *Peer Review Benchmarking of Grant Review in the UK*.²

10. The Government understands how those whose work is not funded may well question those who gave it a lower priority. This is particularly the case when, as will so often be the case in a scientifically strong nation, rejected research proposals are themselves of real scientific quality. However, it is hard to conceive of an alternative that does not shift the

responsibility away from scientists themselves. The Government does not want the success or failure of detailed lines of research to be determined by political lobbying.

11. For the peer review system to work, senior researchers must give up their time to provide valuable expertise. A number of eminent scientists have assisted STFC in its peer review process. This involved making difficult decisions. Peer review lies at the heart of the research decision making process and it is important for the Government and researchers to defend it robustly. The Government regards the Committee's criticism of the outcome of STFC's peer review process, and of those researchers who have undertaken it, to be unhelpful and damaging.

12. The relationship between DIUS and the Research Councils balances the Government's duty to set the strategic direction of the research base with the Research Councils' responsibility for prioritising research spending through peer review. DIUS and the Research Councils work hard to optimise this balance, avoiding inappropriate direction of Research Council priorities whilst ensuring high level strategic objectives are sufficiently aligned.

13. To ensure a robust allocation process, the Government asked all Research Councils to submit detailed draft delivery plans. These set out detailed plans under a number of different funding scenarios. The rationale for this was to ensure that each Council undertook a vigorous prioritisation process. Coupled with the Research Council delivery plans, the Government also collected independent evidence on other funding lines, such as Science Research Investment Fund (SRIF). Through bodies such as the Funders' Forum and through bi-lateral meetings with the Research Councils, the Government regularly communicated with the community. This body of evidence underpinned the allocation of the science budget.

14. Research Councils have a duty regularly to review their activities in the light of changing priorities and the resources available to them. The Government made clear from the outset that rigorous reprioritisation would be of particular importance in the context of the CSR07 allocations.

15. DIUS Ministers considered that the final Delivery Plan drawn up by STFC following the receipt of its allocation in October 2007 raised two strategic issues, which merited further independent advice. They therefore asked Sir Tom McKillop to extend his work with the North West Development Agency to advise on the future development of the Daresbury Campus, and asked Research Councils UK to initiate a review of the health of physics as a whole, given the interest of a number of Research Councils in this subject. This review is being led by Professor Bill Wakeham of Southampton University. In due course, RCUK will carry out a series of similar reviews of individual disciplines.

16. The Government is working with STFC to review the way in which this allocation was handled and to ensure all the relevant lessons are learnt for the future. In particular, STFC have recognised that it could have communicated its plans better, and is taking steps to address this. STFC will take account of these lessons as it takes forward an organisational review. The review will cover strategy and planning, customer and stakeholder engagement, governance and risk management processes, delivery, value for money and management of change.

17. Further detailed information on the science budget allocations can be found in the DIUS publication “*The Allocations of the Science Budget 2008/9 to 2010/11: December 2007*”.³

3 “*The Allocations of the Science Budget 2008/9 to 2010/11*”, DIUS, December 2007.
<http://www.dius.gov.uk/publications/URN07114.pdf>

The Government Response

18. This document sets out the Government's response to the IUSS Select Committee report on the science budget allocations. Each conclusion of the report is followed by the Government's response, sometimes drawing on contributions from the Research Councils. For ease of reference this response follows the order of the IUSS Select Committee report.

Research Council contribution to this response

19. As part of this response the Government has asked the relevant Research Councils to respond to those conclusions addressed to them. Following the convention adopted by Government in recent years, responses from Research Councils are italicised.

The Science Budget

Conclusion 1: Given the range of programmes and disciplines covered by the Science Budget, the name is somewhat misleading, especially since the transfer of AHRC into the budget in 2005. We recommend that DIUS change the name of the Science Budget to the Science and Research Budget to reflect the inclusion of arts, humanities and knowledge transfer which we note matches the welcome change in title of the DIUS official in charge of the budget to the Director General for Science and Research (DGSR). (Paragraph 11)

20. The Government accepts the Committee's recommendation that the name of the 'Science Budget' be changed to the 'Science and Research Budget' to reflect the inclusion of the arts and humanities.

Conclusion 2: We welcome the Government's decision to maintain its commitment in the ten-year framework to increase the science budget by 2.5% per annum in real terms. (Paragraph 13)

21. The Government welcomes the Committee's support for the commitment outlined in the science and innovation investment framework 2004–2014. The ten year framework stated that the science budget should increase at least in line with the trend growth rate of the economy through the ten year period.

22. The commitment to increasing the science budget reflects the high aspirations of the Government for science and research. It is a result of the Government's continued support for science and research over the past 10 years that the UK has a world class research base, which delivers a high level of impact on the economy.

Sainsbury and Cooksey agenda

Conclusion 3: We welcome the evidence within the Science Budget Allocations of the Government's commitment to the Sainsbury and Cooksey agenda. (Paragraph 14)

23. The Government allocated resources from the CSR07 settlement to implement the recommendations of Lord Sainsbury's review of UK science and innovation policy. This included increasing the Higher Education Innovation Fund to £150m p.a. by the end of the

CSR07 period and a commitment from the Research Councils of £120m for collaborative work with the Technology Strategy Board over the CSR period.

24. Funding was also provided for the new Office for the Strategic Co-ordination of Health Research (OSCHR)—a recommendation of the Cooksey Review. OSCHR is jointly funded with the Department for Health. The creation of OSCHR will accelerate the translation of the significant advances in fundamental biomedical research into clinical practice.

The Science Budget allocations process

Conclusion 4: We are concerned that a structure of independent expertise such as suggested by the Royal Society may be too bureaucratic. However, it is clear that more and better information needs to be passed from the Research Councils to the DGSR on the potential implications of projected allocations from the Science Budget in order that Ministers can be made fully aware of the consequences of those decisions. We note that the documents prepared by STFC for use in the bilaterals with DIUS have been made available through the Freedom of Information process and we recommend that the Director General of Science and Research and the Research Councils publish such documents as a matter of course to increase transparency and accountability. (Paragraph 18)

25. After due consideration, the Government agrees with the Committee that the proposal of the Royal Society for an external expert panel on the allocations would be overly bureaucratic.

26. Government accepts that information flows between Research Councils and their communities could be improved, as could information flows between Research Councils and Government. DIUS will encourage Research Councils to consider how best to communicate with the Government and their communities about the choices they have to make when setting priorities.

27. During the allocations process the Government holds regular, and detailed, discussions with Research Councils. The bilateral meetings between DIUS and the Research Councils are part of an internal management process leading up to advice to Ministers.

28. Government agrees that wherever appropriate there should be more transparency. However, it is important to recognise the allocation stage is a process of negotiation. Incentives must be in place to ensure thorough analysis of the options to allow clear and accurate advice to Government. Research Councils need to consult their communities effectively on the strategic choices they face on priorities. However, some of these are commercially confidential as they concern negotiations with international partners and suppliers. The Government has strong reservations about making the allocations process more public. Like the CSR process itself, the allocations have been conducted without continuing public disclosure to promote candid discussion and a robust appraisal of the various cases. Accordingly, the Government's view is that the preparation of advice to Ministers on the allocations, and the specific interactions between Government and Councils which lead up to this, should be kept confidential.

29. The Government continually strives for good practice, and recognises the importance of learning lessons from this allocation. Ministers will work with the new Director General

of Science and Research and others to consider the ways in which the Government could draw more directly on strategic insights from the science community.

Full Economic Cost

Conclusion 5: In view of the importance of attaining sustainability and transparency for ongoing and future research in the UK, we welcome the Government's commitment to FEC. (Paragraph 20)

30. The long term financial sustainability of the research base is of great importance, and the Government welcomes the Committee's support for the move to full economic costing.

31. In 2005, after extensive consultation with universities and the research community, it was decided that Research Councils would fund all research at 80% full economic cost (FEC). This was necessary to ensure the long term financial sustainability of the research base. Fulfilling this commitment had an impact on the allocations for CSR07 and meant that some re-prioritisation of existing activity was required. However, this should not distract from the significant benefits that moving towards full economic costing brings or the fact that this investment is still funding for research.

32. Money from the Science Budget provided for FEC is vital for the health of the research base. Ministers are determined that the infrastructure and capacity for research in universities should be properly funded. FEC makes a major contribution to that goal. It provides funding that directly supports the costs of undertaking basic research and employing the researchers involved. This commitment towards research has been welcomed and supported by the university sector.

33. In parallel with the move to full economic costing, a new capital funding stream for universities has also been introduced. The new capital fund provides a more predictable, strategic approach to capital investment in the research base, and replaces the Science Research Investment Fund (SRIF) which had done its job making good the backlog of under-investment in the research base. Over the CSR07 period there will be a transition from SRIF to the new capital fund. This additional capital component means that Research Councils are now paying 90% of the full economic cost of research.

Haldane Principle

Conclusion 6: The increase in the Science Budget does not fully cover increased expenditure on FEC and the new bodies (OSCHR, ETI and TSB), which means that Research Councils will have to redirect money previously earmarked for research grants. Additionally large parts of the budget are tied to cross-council programmes that largely follow a Government agenda. It is of course acceptable for the Government to set priorities for UK research but not for it to micromanage individual Research Council budgets. We recommend that the Government make a statement on its application of the Haldane Principle. (Paragraph 27)

34. The Government is pleased to provide a statement on the application of the Haldane Principle. Continued adherence to the Haldane Principle is important to the research community, and the Government shares this view.

35. For many years, the British Government has been guided by the Haldane Principle believing that detailed decisions on how research money is spent is for the science community to make through the Research Councils. The basis for funding research is also enshrined in the Science and Technology Act 1965. In practice, the Act respects the spirit of the Haldane principle.

36. John Denham, Secretary of State for Innovation, Universities and Skills, recently restated the Government's position on the Haldane Principle in his speech at the Royal Academy of Engineering on 29th April. He made clear that:

- It is researchers, through their participation in peer review, who are best placed to determine detailed research priorities;
- the Research Councils act as the "guardians of the independence of science"; and
- the Government's role is to set the over-arching strategy and framework.

37. The Science Budget for CSR07 was allocated in line with the Haldane Principle. Key priorities were set by the Government, such as funding research at 90% full economic cost to ensure the long term health and relevance of the research base. Detailed decisions on funding will be made by Research Councils.

38. The Haldane Principle is underpinned by the peer review process. Research Councils fund research on a competitive basis by employing independent expert peer review. This system is regarded as an international benchmark of excellence in research funding, and thus provides a guarantee of the quality of UK research.

39. The Government understands how those whose work is not funded may well question those who gave it a lower priority. This is particularly the case when, as will so often be the case in a scientifically strong nation, rejected research proposals are themselves of real scientific quality. However, it is hard to conceive of an alternative that does not shift the responsibility away from scientists themselves. The Government does not want the success or failure of detailed lines of research to be determined by political lobbying.

40. For the peer review system to work, senior researchers must give up their time to provide valuable expertise. A number of eminent scientists have assisted STFC in its peer review process. This involved making difficult decisions. Peer review lies at the heart of the research base and it is important for the Government and researchers to defend it robustly. The Government regards the Committee's criticism of the outcome of STFC's peer review process, and of those researchers who have undertaken it, to be unhelpful and damaging.

41. As set out above, DIUS Ministers only take those strategic decisions which, in the modern world, have to be the responsibility of government. Beyond that, it is for the research community itself—Research Councils and researchers—to set priorities and to distribute funds. Ministers do not, and should not in any way, micromanage Research Council budgets.

Impact of the Science Budget allocations

Conclusion 7: We are concerned that the Government has failed to protect both the existing and planned research base by allocating insufficient funds to cover FEC and

the new bodies. The large increase in MRC's budget means that the effect of this near cash deficit is concentrated on the other Research Councils. (Paragraph 29)

42. The Committee has welcomed the Government's commitment to FEC and the Cooksey and Sainsbury agendas. It is entitled to argue that there should have been an even bigger increase but the Government regard that an average increase of 2.7% per year in real terms over the next three years is a strong settlement in a tight fiscal environment.

43. It is the role of Government to encourage the research base regularly to assess and adjust funding to take into account shifting priorities. It would not be appropriate to adopt an approach that only funded new initiatives after all existing activity is maintained. The scale of funding made available to Research Councils enables them to fund the activities outlined by the Committee as part of their overall priorities. As stated previously, it is the duty of Research Councils to review priorities regularly and make funding decisions on that basis.

44. It is the sign of a healthy research base to reprioritise spending in line with demand. Research operates in a fast moving world. Being at the very top requires making tough decisions. Countries which lead the world in research make difficult choices in order to ensure their future success. If we do not make these decisions, we will fall behind the pack. So it is important Government and Research Councils review activities to ensure a vibrant research community, where research is targeted at cutting edge activities.

45. In the Government's view, the cross-Council programmes and research with the new bodies, are just as much Research Council activities, as any other, and cannot be correctly portrayed as a reduction in volume.

46. The Research Councils were keen to respond positively to the strategic challenges outlined by the Treasury [footnote 4] as part of the Comprehensive Spending Review. The Government welcomes their constructive approach. The Councils recognised that they were already active in the areas identified, and that they wished to increase their collective contribution to them. The Councils identified six cross-Council programmes to respond to those challenges, and developed these in bilateral discussions with a number of Government Departments and other public bodies. These programmes give a focus and a cross-disciplinary emphasis to part of the Research Councils' budget. Within those programmes, the majority of the work funded will be in responsive mode. Moreover, the scope, definition and allocation of spending is still determined by the Research Councils.

47. The Medical Research Council will receive almost £2 billion over the next three years, an increase in budget of 30% over the CSR period. This increase is recognition of the national importance of medical research. The Government is pleased the Committee supports an increase in the MRC's funding (IUSS Select Committee Conclusion 33) and the creation of OSCHR (IUSS Select Committee Conclusion 3).

Science and Technology Facilities Council

48. The Government continues to attach considerable importance to STFC's activities and to physics and scientific research more generally. Research Council expenditure on physics is already in excess of £500m, and is expected to increase over the CSR period.

49. In October 2007, STFC received an overall budget of £1.9 billion for the CSR period, an additional £185 million compared to the 2007/08 baseline. This represents an overall increase in funding of 13.6%.

50. There has been much speculation about an alleged £80 million reduction in STFC's budget. This figure appears to have been derived from STFC's aspirations for the three-year CSR period (2008/9–2010/11), which it drew up before it received its budget from the Department. These aspirations never constituted an agreed set of activities or funding for them. The suggestion that £80m has been cut from its budget is simply wrong.

51. Overall, STFC's level of funding is being maintained. Taking into account the widely supported move towards paying the full economic costs (FEC) of research in universities, investments in key areas have grown considerably since 2005/06. Between 2005/6 and 2008/9 there has been:

- A 43% increase in funding for Particle Physics grants;
- A 78% increase in Nuclear Physics grants; and
- A 67% increase in overall funding for Astronomy grants

52. Like all Research Councils, the STFC's Science Board, and its advisory peer review committees, has undertaken a programmatic review and prioritisation exercise, the results of which are now available for public consultation. On 7 February 2008, the STFC Council announced that the underlying funding for physics exploitation grants would remain broadly level in the next financial year. This follows large increases in funding in recent years.

53. The Government is working closely with STFC on the lessons learnt from this allocations process. *STFC has agreed with DIUS that it will commission an organisational review in the near future. This will comprise both a self-assessment and an external scrutiny. The review will cover strategy and planning, customer and stakeholder engagement, governance and risk management processes, delivery, value for money and management of change. The timetable for this review has still to be finalised but we expect it to be complete by September 2008.*

Legacy Issues

Conclusion 8: We remain concerned that the former PPARC community has been saddled with a £75 million (at 2006/07 prices) funding deficit derived from CCLRC to meet the additional running costs of Diamond and ISIS TS2, despite assurances from the Government that STFC would be formed without any legacy issues. We conclude that the combined budget of PPARC and CCLRC was never going to be sufficient for STFC to manage Diamond, ISIS TS2, the other large facilities and all the PPARC research programmes. This was noted by the National Audit Office in January 2007, and therefore the Government should have known and should have acted upon it. The fact that it did not has had unfortunate consequences. We believe that the Government should ensure that its original commitment to leave no legacy funding issues from the previous Councils is honoured. (Paragraph 39)

54. The Government welcomes the Committee's recognition in paragraph 36 of its report that STFC did not inherit a deficit from CCLRC, when the new Council was formed on 1 April 2007. In addition STFC was able to access the accumulated underspends of the previous Councils—CCLRC and PPARC—and has subsequently drawn these down. The Government considers that this fully meets the commitment given at the time of STFC's creation.

55. The Government notes that both CCLRC and PPARC, like all Research Councils, had long-term funding commitments, which extended beyond the SR04 spending review period, and these included the running costs for Diamond and the ISIS second Target Station. In managing forward commitments such as these, the Government has agreed with Research Councils that they can plan on the assumption that their annual budget in any future spending review period is their existing baseline (that is, there will be no increase in their budget in cash terms). The Government does not believe that it should exempt the running of new facilities from these overall planning assumptions; in the event the Government provided STFC with £185m in excess of flat cash over the CSR period.

56. STFC is a single Council, and has to manage its commitments across the full range of its activities, and it is under no obligation to maintain the balance between the expenditure of its two predecessor Councils. It would be natural to expect that this would change over time, as priorities change. That said, it is not accurate to contend, as the Committee has done, that increased commitments inherited from CCLRC have had to be funded from the PPARC research programmes. The Committee referred to the NAO's report of January 2007. The STFC does not accept the assertion that the former PPARC community was "saddled with a £75m deficit" (that is £25m per annum) derived from CCLRC to meet the additional costs of Diamond and ISIS2. STFC's current plans for the CSR07 period show that the costs of operating these new facilities will be absorbed within that part of the STFC's budget which was previously the responsibility of the CCLRC.

Conclusion 9: The timing of the formation of STFC was not propitious. It takes time to set up a new organisation, especially one as large and complex as STFC. The Government's expectation that STFC would be ready for a new CSR was overly ambitious. (Paragraph 41)

57. The Government announced in the 2006 Budget its intention to consult about the possible creation of STFC (then known as the Large Facilities Council). 125 responses to the consultation were received, a substantial majority of which were in favour of the creation of the new Council, but against the Government's original suggestion that PPARC's grants for particle physics and astronomy should pass to the Engineering and Physical Sciences Research Council. The Government modified its original proposals in the light of these comments and announced in July 2006 that it intended to create the STFC in its present form.

58. Both PPARC and CCLRC urged the Government to proceed to create the new Council as quickly as possible, once the decision to create it had been taken. It was agreed that the first practical date was the start of the following financial year, 1 April 2007, and this target was achieved. Importantly this gave the new Council, which had been operating in shadow form for some months, time to participate directly in the allocations process, which started

before the announcement of the CSR settlement for Science in March 2007. The Government does not agree with the implication that further delay would have helped.

Delivery Plan

Conclusion 10: We welcome STFC's decision to support its major facilities to the extent set out in its Delivery Plan and recognise the valuable role that these facilities currently play, and will play in the future, in maintaining the excellence and continuing the growth of UK science. However, we are concerned that the decision to support the large facilities has come at the expense of research in fields where the UK excels and in which STFC and its predecessor Research Councils have made significant investments. (Paragraph 46)

59. The Government allocates funding to individual Research Councils on the basis of their Delivery Plan as a whole, and does not divide the money between research and the running of facilities. The balance between expenditure on these two types of activity is for the Research Councils to decide.

60. In the particular case of STFC, the Government notes that proposed expenditure on particle physics, astronomy and nuclear physics, including the facilities that underpin these, such as the UK investment in CERN, the European Southern Observatory and the European Space Agency, will continue to rise over the CSR period. The increased emphasis on facilities such as those provided through our membership of CERN reflects their key role in ensuring the continued excellence of UK science, and the UK's strong performance in these areas.

Ground-based solar-terrestrial physics

Conclusion 11: We find Keith Mason's explanation for the withdrawal of funding from ground based solar-terrestrial physics (STP) facilities to be inaccurate, unconvincing and unacceptable. PPARC did not decide to cut funding to all ground-based STP facilities, but intended to maintain a reduced capacity in this field. We urge STFC to suspend its decision on ground-based STP so that the issue can be revisited with proper peer review and in full consultation with the community, including NERC. (Paragraph 59)

61. *The PPARC strategy for ground based Solar Terrestrial Physics envisaged continued investment in EISCAT but withdrawal from all other facilities. This was repeated in STFC's Delivery Plan. STFC agrees with the Committee that future investment in ground-based solar terrestrial physics should be subject to discussion with a broader set of interested parties including NERC. STFC does not agree that it should suspend the implementation of the policy previously agreed by PPARC in March 2006.*

Daresbury and Harwell Campuses

Conclusion 12: We do not see a major distinction between Keith Mason's proposal of 2 November 2007 to move major facilities from Daresbury to RAL and the situation in which Daresbury currently finds itself. SRS is closing, 4GLS has been postponed and the future of ERLP/ALICE is uncertain; the establishment of a computational science

centre—important and welcome as this development is—and the influx of industry R&D teams do not amount to the presence of a national facility. (Paragraph 71)

Conclusion 13: It is clear that Daresbury’s future under the current vision is as a technology and business park. This cuts across previous Government assurances and pronouncements about the importance of Daresbury in Britain’s overall strategy of scientific excellence. We urge STFC either to commit fully to science at Daresbury, which would include confirmation of at least one large national facility and a concrete programme of future activity and scientific excellence at Daresbury, which can then be the subject of proper scrutiny and review, or to make an honest assessment of, and statement on, the future of Daresbury as a technology and business park. (Paragraph 73)

Conclusion 14: We have no doubt of the desire of the Government to see a thriving Daresbury campus and we note from previous announcements that this would include major science facilities. However, the Government must make clear, in line with previous commitments, how it intends to deliver future large-scale science facilities on the Daresbury campus. (Paragraph 74)

62. Ministers have made it clear that they are fully committed to developing Daresbury and Harwell as world class Science and Innovation Campuses. This commitment was set out in the 2006 Budget, and has been repeated on a number of occasions since then (most recently in *Innovation Nation*⁴, the DIUS White Paper on science and innovation). Having set this strategic objective for Daresbury and Harwell Ministers look to Research Councils and other public bodies to help deliver the campuses.

63. The Government’s specific vision for the Daresbury Campus is that it should become a partnership between STFC, NWDA, the private sector and regional universities. This will build on the excellent start that has been made by these parties and Halton Borough Council under the framework of Daresbury Science and Innovation Campus Ltd (DSIC Ltd). Ministers have asked Sir Tom McKillop to extend his work with the North West Development Agency to advise on the future development of the Daresbury Campus. The Daresbury Science and Innovation Campus will continue to provide a location for collaboration in scientific research, technology development, knowledge exchange and the cultivation of a highly skilled workforce. A recent example of the practical implementation of that vision is the £25m private sector investment in a new Innovation Centre that the Minister for Science and Innovation, announced on 2 April.

64. While there has been no previous commitment to locate future large scale facilities at Daresbury irrespective of the scientific or economic case for doing so the Government has and continues to wish to strengthen science investment at Daresbury. The implementation of the Government’s vision will reinforce the case to locate future large scale facilities at Daresbury. These decisions will be taken on the merits of each particular case, taking full account of scientific and technical assessments, and the Government’s campus strategy.

65. In line with the Haldane Principle, outlined in paragraphs 34–41 above, it is for Research Councils, rather than the Government, to make the detailed decisions about

4 *Innovation Nation*, DIUS, March 2008
<http://dius.dialoguebydesign.net/bgo/Innovation%20Nation%20White%20paper%20download%20page.asp>

research facilities and associated programme funding. The Government sets the overall strategic direction.

66. The Government and STFC are committed to maintaining Daresbury's capacity to carry out basic scientific research. STFC will continue to invest at Daresbury to provide global leadership in key technologies building on the world class science currently at the Campus.

67. Specifically, STFC has it in mind to create a national technological capability in computational science at the Hartree Centre, and to support accelerator and detector research and development for next generation large scale facilities at the Cockcroft Centre. The proposal for a Detector Systems Centre will build on STFC's world-class detector capabilities and knowledge base. The intention is for academic and industrial collaboration to develop sensors both for research and commercial applications. Ministers are currently examining STFC's proposals for these capital investments at Daresbury as part of the allocation of DIUS' Large Facilities Capital Fund (LFCF)

68. STFC announced on 10 March that its New Light Source (NLS) project would draw on the substantial scientific expertise and technology capability at Daresbury, as well as involving experts from throughout the UK.

Regional Development Agencies and Science in the regions

Conclusion 15: We recommend that the Government make clear its role in regional science policy and how this fits with the Haldane Principle. We also recommend that the Government clarify whether it regards its regional policy as a relevant criterion when the STFC or other Research Councils make decisions about capital projects or programmatic funding. We further recommend that the Government publish a White Paper on Regional Science Policy as a basis for discussion as a matter of urgency. (Paragraph 77)

69. The Regional Development Agencies (RDAs) provide additional resource and capacity within their regions in support of science and innovation. In the case of Daresbury the North West RDA and the Science and Industry Council have been particularly valuable in their support of the campus.

70. The RDAs and Science Cities will play a key role in bringing together key partners to develop shared priorities where science and innovation drive economic development. These bodies understand the importance of place in achieving a critical mass of science and innovation excellence.

71. The Government is committed to excellent science and research, wherever this may be in the United Kingdom. Research Councils will fund the very best research and facilities, wherever they are located in this country. This fits entirely with the Haldane Principle as set out at paragraph 34–41 above. The Government does not plan to publish a white paper on regional research policy. The ten year framework⁵ provided a clear statement on Government policy in this area:

⁵ *Science and Innovation Investment Framework 2004-2014*, HM Treasury, July 2004. http://www.hm-treasury.gov.uk/spending_review/spend_sr04/associated_documents/spending_sr04_science.cfm

Public funding of research at a national level, through the Research Councils and funding bodies, is dedicated to supporting excellent research, irrespective of its UK location. The ‘excellence principle’ is fundamental to safeguarding the international standing and scientific credibility of the UK science and research and supporting an excellent, diverse, expanding and dynamic science base, providing value for money for public investment.” (9.52 p146, Science and Innovation Investment Framework 2004–2014)

This policy remains firmly in place.

72. The ten year framework made clear that regional and national bodies need to co-ordinate their funding and strategies. This reflects the importance of research and innovation in improving economic performance at both a regional and national level. The Research Councils and RDAs are working closely together at a strategic and operational level to align funding and strategies where appropriate. Ministers further highlighted the importance of innovative places in the Innovation Nation White Paper of March 2008.

73. In line with the recommendations in Lord Sainsbury’s review of Government science and innovation policies, Research Councils will be committing £120m, over the next three years, to research programmes in collaboration with Technology Strategy Board initiatives. This aligns with the £180m commitment from the Regional Development Agencies to work with the Technology Strategy Board.

74. The Government, in the Next Steps⁶ document, specifically set an overarching vision for science and innovation campuses (SICs). The Government made a commitment to two campuses because of their potential value to science and innovation, rather than to favour one campus over another. The Daresbury and Harwell SICs play an important strategic role for the UK research base. The Government also recognises that there are other clusters of research excellence which attract innovative business. Science, innovation and business work closely together in clusters around the country, for example in Norwich, Cambridge and Edinburgh.

STFC Site Management

Conclusion 16: We recommend that STFC install a Campus Director at Daresbury and at RAL. (Paragraph 79)

75. The decision to designate Daresbury and Harwell as Science and Innovation campuses was made by Government in the 2006 Budget, and Ministers look to the Research Councils, and other public bodies, to support their development. It is important that the wider development of these campuses is promoted effectively. Accordingly, Ministers have asked Sir Tom McKillop specifically for advice on this in the case of Daresbury. This is distinct from the management of the STFC facilities located on the two campuses, which is a matter for STFC itself. STFC’s current view is that such facilities should be managed coherently across the Council, as a whole.

⁶ *Science and innovation investment framework 2004-2014: next steps*, HMT, March 2006 http://www.hm-treasury.gov.uk/budget/budget_06/assoc_docs/bud_bud06_adscience.cfm

Cuts to the grant line

Conclusion 17: Given the anxiety that grant cuts are causing to the physics and astronomy community, we are dismayed that STFC has been attempting to play down the effects of the cuts on the grounds that reductions in future grants are not problematic. We consider cuts to grants that had already been promised a major problem. We urge STFC to take immediate steps to communicate clearly and comprehensively to its research community the impact of its grant cuts. (Paragraph 83)

76. Ministers recognise the importance of predictable funding trajectories to ensure the research base can provide the best value for the nation. Ministers also recognise the anxiety in the astronomy and particle physics communities about STFC's plans and have already commissioned the Wakeham Review to look at the health of physics as a whole. STFC has made it clear that its rolling grants to universities for astronomy research will remain broadly unchanged for 2008–09, and the level of rolling grants for particle physics will be unaffected until at least 2010–11. The number of postdoctoral awards provided by STFC in 2010–11 will be broadly comparable to the number in 2005–6. The Wakeham Review will be available in September 2008, which gives STFC time to consider its conclusions before its next review of astronomy grants in late 2008.

Communication

Conclusion 18: We deplore STFC's failure to consult on ILC, Gemini and STP, a failure that has cost it the trust of the scientific community. We conclude that STFC's communications are inadequate, particularly its internal communications, which are deficient both in terms of top down communication (for example, alerting staff to proposed changes) and bottom up communication (for example, engaging the community over decisions). We recommend that STFC pursue urgently the appointment of a permanent Communications Director with appropriate skills and experience. (Paragraph 87)

77. *STFC has recognised that it could have communicated better with its community. STFC has already advertised for a new Director of Communications. It has completed external reviews to identify how best improve its communications structure and capability and stakeholder engagement and are producing an action plan for early implementation. It has also implemented a number of changes to improve internal communications.*

Impact on non-STFC research facilities

Conclusion 19: We have grave concerns about the impact of the cuts proposed in the Programmatic Review upon renowned institutions such as Jodrell Bank. This illustrates the extent to which the STFC's decisions affect research and facilities beyond those that it directly funds or owns. (Paragraph 89)

78. *STFC released on 3 March the advice it received from its Science Board which had been asked to peer review all approved STFC programmes, including the e-Merlin project that would upgrade the scientific facilities at Jodrell Bank. The Programmatic Review is aimed at evaluating the scientific priority of each project, facility, or activity and assessing its likely productivity. STFC announced that the release of the Science Board advice was to be followed*

by a period of consultation which ended on 21 March during which the views of the scientific community were sought.

79. The Committee is rightly keen that STFC should do robust peer review and consultation where possible before reaching decisions. However, that puts an onus on the community to treat the process responsibly and to try to avoid fomenting media headlines which undermine the consultation process and damage the presentation of their science.

80. STFC has not taken any decision on the funding of e-Merlin. Decisions on the future evolution of STFC's programmes will be made once the input from the consultation exercise has been considered. STFC has however made clear that the e-Merlin project is part of its strategy for radio astronomy. It will discuss the issues raised in the review with its partners to support the UK's competitiveness in radio astronomy for the next decade and beyond. The future of Jodrell Bank as a whole is for the University of Manchester to decide.

Peer Review

Conclusion 20: Community consultation is key to peer review. This issue should have been addressed at the outset using models from the previous PPARC and CCLRC structure. We conclude that STFC's peer review system is inadequate and recommend that DIUS review the make up of STFC's peer review committees. (Paragraph 93)

81. The Government rejects the recommendation that DIUS should review the make up of STFC peer review committees. As stated previously, the Haldane principle draws a clear line between the Government's role to set strategic direction and the Research Council's role to make detailed funding decisions, of which peer review forms an important part. Research Councils are responsible for establishing peer review structures and appointing people to serve on the relevant committees.

82. STFC considers that the science peer-review structure, which has been operating since July 2007, has demonstrated its capacity to evaluate and recommend investment priorities across the breadth of the STFC programme. This structure evolved from that which operated, and was seen to be effective, in PPARC. It has been developed to incorporate the nuclear physics programme and supplemented by a new committee, the Physical and Life Sciences Committee, which evaluates the ex-CCLRC facilities programme. There was no such formal peer review body tensioning the investment in facilities in CCLRC.

83. STFC considers the information on which the committees based its recommendations to be sufficient. The committees were asked to make recommendations on two separate sets of programmes. The first in the context of the Delivery Plan was whether or not STFC should ramp up its investment in the International Linear Collider, and the Gemini Telescopes and whether it should invest further in ground-based solar-terrestrial physics facilities. In reaching its recommendations PPARC and the Science Board was fully apprised of the history of support for these projects, the options and the impact.

84. The second was the programmatic review. Here the committees were asked to review existing projects and facilities, assess their existing and future scientific impact and prioritise them. The committees used a common set of criteria in assessing each project or facilities and were provided with information from the project leaders or facility Directors. The members of the committees were also encouraged to consult with members of the community.

85. *The STFC has now opened up the recommendations of the peer-review committees to further consultation to ensure that any additional material information is available before final decisions are made.*

86. *STFC agrees with the Select Committee that wider community consultation is valuable, and are committed to finding an appropriate way of achieving effective consultation across the STFC's programme.*

Conclusion 21: We are at a loss to understand how Professor Mason could think that secretive reviews would have anything other than a divisive effect on the community and undermine confidence in any of his future decisions. (Paragraph 95)

87. *Research Councils use peer review processes to assess funding bids from university researchers. They may use other approaches for in-house expenditure.*

88. *STFC note that these reviews of in-house research were commissioned by the Chief Executive to assess and benchmark the relative strength of the Council's in-house research capability (not the research capability of university groups) and as such were not part of the normal peer-review process. These reviews were carried out by national and international experts.*

89. *STFC does not agree that these reviews were 'secretive'. However, to enable these panels to carry out their reviews objectively it was made clear they would report initially directly to the Chief Executive. STFC always intended to publish these reports in a suitably anonymised form and has done so. Their recommendations will be taken forward with the departments involved in decide how best to invest in in-house research in the future.*

90. *The Committee repeats criticism made by Professor Chattopadhyay to the effect that the process the CCLRC adopted when setting up the review of its light source strategy was "flawed". STFC strongly disagrees with this criticism. The Light Source Review Panel comprised four of the most eminent international scientists in the field, and sought and received expert advice from those involved in developing ideas for the next generation Light Source facility. The Council is concerned that the Committee's remarks may make it more difficult in future to secure the participation of eminent scientists in similar reviews in future.*

International regulation

Conclusion 22: In the context of ILC, Gemini and ground-based STP, we do not believe that proper consideration was paid to the impact of the UK's international reputation on two counts. First, DIUS did not allocate enough money to STFC, forcing it to make undesirable cuts. Second, STFC did not handle the cuts well: it failed in its duty to consult with the community prior to making a decision and in the case of Gemini made more than one announcement on which it had to renege. (Paragraph 96)

Conclusion 23: We are concerned that withdrawal from ILC has made the UK look like an unreliable international partner and that indecision over Gemini and the withdrawal of funding for ground-based STP facilities while the UK is engaged in a long term commitment to EISCAT has made the UK look like an incompetent international partner.

91. The Government disagrees with the Committee's comment that it did not allocate enough money to STFC. STFC's budget will increase by £185 million over the three years of the Comprehensive Spending Review, which provides the Council with resource to continue its investment in world class research and facilities. It is the duty of Research Councils to review regularly their investments to determine whether they remain of high priority are on track to deliver their objectives and represent value for money. The Government supports STFC's decision to evaluate its activities in this light, and to include international investments within the review.

92. *STFC regrets that, in the case of Gemini, it had to make an early announcement of its intentions for future participation. However, peer review of Gemini, in both 2005 and 2007, concluded that the productivity of the telescopes was such that funding at existing levels was no longer justified. Early discussion with the Gemini Board was necessary because STFC's international partners were pressing for a commitment in relation to future funding. It was and remains STFC's view that in these circumstances the Council had a responsibility to its partners to inform them of the Council's position.*

93. The Government believes that the UK remains a reliable international partner. The UK research community will continue to be able to carry out international research, through access to a range of world-class facilities, including CERN, as well as the European Southern Observatory, ESRF and ILL, and programmes of the European Space Agency. Major new facilities in the UK such as Diamond and the ISIS Second Target Station will also provide opportunities for world-leading scientific research.

94. The Government does not consider that a decision to withdraw from a particular project on the grounds that it no longer remains a priority can justifiably be described as putting into question the UK's reliability as an international partner.

95. STFC has honoured all of its existing commitments to its international partners but decided to reduce future investments in some. Although, it is true STFC has chosen not to ramp-up investment in the current International Linear Collider project, STFC will continue to participate in developing global strategies for future Linear Colliders and continues to honour its commitments to the common development fund. These decisions have been taken on the basis of peer-review evidence. This ensures that the UK's substantial investment in the Large Hadron Collider at CERN is exploited before embarking on a further facility of such scale. The US Congress seems to share this analysis and has massively cut US spending on the ILC.

96. There has also been considerable speculation about UK access to the Gemini telescopes, Contrary to statements made by the Gemini Board, STFC has never issued formal notice to withdraw from the project and continues to negotiate the terms under which UK researchers have access to Gemini telescopes in future. Consistent with this strategy STFC has paid the UK's 2008 contribution to maintain UK access to the Gemini telescopes for the February – July 2008 semester, and will make a further payment by the end of July for the rest of 2008.

Wakeham review

Conclusion 24: We recommend that STFC wait for the results of the Wakeham review before implementing the cuts proposed in the Delivery Plan and that it use this time to consult with its stakeholders. (Paragraph 102)

97. Ministers note that STFC provided an undertaking at its Council meeting on 28 and 29 January 2008 that it would not reduce significantly the number of Post Doctoral Research assistants supported under its rolling grants for universities before the results of the Wakeham review are known.

98. *The STFC has carried out a major consultation exercise on its programmatic review. This exercise will inform its future programme investment decisions and strategy that will be considered by Council in July. STFC cannot delay unduly the implementation of its Delivery Plan without seriously damaging other critical elements of its programme. However, STFC does recognise the impact on Physics Departments of any changes in the level of its rolling grant funding. STFC has already announced that it will not implement any changes to rolling grants provided to universities until after the result of the Wakeham Review is known.*

Solar-terrestrial physics

Conclusion 25: We hope that STFC can liaise with NERC and the STP community to find a favourable solution for all parties. (Paragraph 103)

99. The Government encourages STFC to try to find a favourable solution in liaison with NERC and the research community.

100. *The STFC agrees that future investment in ground-based solar terrestrial physics should be subject to discussion with a broader set of interested parties including the NERC.*

Astronomy Technology Centre

Conclusion 26: We welcome news that STFC, ATC and the University of Edinburgh have entered talks about a possible transfer of ATC from STFC ownership to the University. We anticipate that ATC would be able to retain its identity as a world class technology centre and continue to thrive within the University. (Paragraph 105)

101. The Government also welcomes the news of these discussions, and encourages STFC, ATC and the University of Edinburgh to reach a mutually satisfactory agreement.

102. *The STFC is committed to sustaining the UKATC as a world class technology centre and is working with interested parties including the University of Edinburgh on how this can best be achieved.*

Management

Conclusion 27: We do not have any confidence that rearranging the responsibilities of the existing staff will solve STFC's problems. There is, as noted earlier, immediate need for a Communications Director. However, the management failings at STFC go deeper than this. The events of the past few months have exposed serious deficiencies within

STFC's senior management, whose misjudgements could still significantly damage Britain's research reputation in this area, both at home and abroad. (Paragraph 107)

Conclusion 28: STFC's problems have their roots in the size of the CSR07 settlement and the legacy of bringing CCLRC and PPARC together, but they have been exacerbated by a poorly conceived delivery plan, lamentable communication and poor leadership, as well as major senior management misjudgements. Substantial and urgent changes are now needed in the way in which the Council is run in order to restore confidence and to give it the leadership it desperately needs and has so far failed properly to receive. This raises serious questions about the role and performance of the Chief Executive, especially his ability to retain the confidence of the scientific community as well as to carry through the necessary changes outlined here. (Paragraph 108)

103. The Government is working closely with STFC on the lessons learnt from this allocations process. Changes to the leadership of the STFC, at this formative stage, would only be disruptive. STFC agreed with DIUS, that it should undertake an organisational review in the near future. The review will cover strategy and planning, customer and stakeholder engagement, governance and risk management processes, delivery, value for money and management of change. The review will also include scrutiny by a panel independent of STFC. In addition to the organisational review, the Government has asked STFC to consider how it can consult and communicate more effectively with its stakeholders and make demonstrable improvements in these areas over the coming months.

104. *The STFC is a more complex organisation than its predecessors, and this has required both continuity and change in its management structures. The initial priority was to achieve an effective transition to the new Council, and in doing so, the Council chose to build on the considerable management experience which existed within both predecessor organisations. STFC has, however, recognised from the outset that there was also a need to strengthen the management team and structure, and the Council took an initial set of actions in February 2008. Since then we have also introduced further changes in the overall governance of the STFC.*

105. *STFC has agreed with DIUS that it should be subject to an organisational review in the near future. This will comprise both a self-assessment and an external scrutiny. The review will consider strategy and planning, customer and stakeholder engagement, governance and risk management processes, delivery, value for money and management of change. The timetable for this review has still to be finalised but we expect it to be complete by September 2008.*

106. *The independent members of STFC Council have considered the Committee's observations about the Chief Executive, and have publicly stated that Council is determined that STFC continues to move forward in addressing these challenges. It fully supports the Chief Executive and his management team in doing so.*

Arts & Humanities Research Council

Conclusion 29: We are concerned that AHRC's reduced share in the science budget sends out a negative message to the arts and humanities community. (Paragraph 112)

107. AHRC has received an increase in its funding in CSR07 of 12.4% which, following the 43% increase received in SR04, amply demonstrates the Government's commitment to arts and humanities research.

108. The level of near cash that the AHRC received, having taken account of funding for FEC, was comparable to other Research Councils.

109. The ARHC has a far lower requirement for non-cash and capital compared to other Councils. This is due to the type of research which the Council funds.

110. As a result of these lower requirements for other types of resource, AHRC received a slightly lower share of the overall science budget than before (by 0.2%). The Government believes that it is unhelpful and misleading to label this a 'reduced' share. The type of resource, required and received by AHRC in this settlement was comparable to that of most other Councils, as explained above.

Conclusion 30: We are concerned that reducing the number of postgraduate places will discourage younger researchers from entering academia in the arts and humanities. This is of particular importance at a time when the economic impact of the sector is becoming increasingly recognised as significant. (Paragraph 114)

111. Some 90% of funding for postgraduate students in the arts and humanities comes from sources other than AHRC. AHRC are putting greater emphasis on strategic research programmes where they have a distinctive and valuable role to play. The impact of AHRC's reprioritisation on younger researchers entering academia will therefore be limited.

112. *AHRC currently fund about 10% of the total number of arts and humanities postgraduates in UK HEIs at any one time. The reduction in the number of AHRC new awards from 1450 in 2007–08, to 1000 in 2008–09 and thereafter to 1325 per annum, will not have a significant impact in discouraging younger researchers from entering academia in the arts and humanities, especially given the increased numbers of doctoral awards attached to strategic programmes. AHRC, like the other Research Councils, each compile a health of disciplines report on its academic community, which would enable it to monitor the impact of these plans.*

Communication with Government

Conclusion 31: It seems to be a breach of the Haldane Principle that the Government should direct a Research Council to switch funding from postgraduate awards to programme funding merely on the basis of it being out of step with other research councils, or indeed for any other reason. (Paragraph 116)

113. All Research Councils were asked to prepare Delivery Plans for publication which reflected the activities that the Council proposed to support once it knew its actual allocation. The draft Delivery Plans were subject to discussion between the relevant Research Council and the Government, to check that they reflected the plans submitted by

Councils in response to the scenarios commissioned earlier in the allocations round, and the terms of the Councils' specific allocation letter, including the contribution to cross Council programmes. A number of comments were offered to all Councils during the development of Delivery Plans.

114. As the AHRC's evidence makes clear, it made the decision to change the number of postgraduate awards supported, and it was not directed to do so by Government.

115. *AHRC always intended to be entirely open with the arts and humanities academic community about these budgetary decisions and the Council announced this decision on the Web on 15th January 2008 (not 7th February 2008 as stated in the Committee report).*

Conclusion 32: We are concerned that the lines of communication between AHRC and the Government are not clear enough. We recommend that there be an urgent review between DIUS and the AHRC as to whether the scale of the proposed reductions in postgraduate awards should be moderated, in the light of the concerns we have expressed here. While respecting the Haldane Principle, we recommend that DIUS review its working relations and communication strategy with the Research Councils, so that the process of decision-making should be more clearly in line with overall strategy and Government policies. (Paragraph 117)

116. The allocation of the science budget is a negotiation. However, it is one underpinned on evidence gathered from the Research Councils. The Government had a clear approach to allocating the science budget for the CSR07 period. Each Research Council was asked to plan for four different scenarios (-5%, flat cash, +5% and +10%). It was on the basis of these scenarios that the allocations were made. It was made clear to Research Councils that accurate information was required on how they would go about a re-prioritisation of existing and planned activities at these different scenarios. The Government recognises that there are lessons to be learnt from this allocation, as there have been from previous spending rounds. In particular, DIUS will encourage Research Councils to consider how best to communicate with the Government and their communities about future funding.

117. AHRC determined the proportion of its budget that it allocates to postgraduate awards, and it would not be appropriate for this to be jointly reviewed by Government and AHRC.

Medical Research Council

Conclusion 33: We welcome the large increase in MRC's budget and a sharpening of its focus on knowledge transfer. (Paragraph 118)

Conclusion 34: We ask the Government to justify the Treasury rules on the treatment of excess on shortfalls or surpluses on predicted revenue by Research Councils and in particular the effect it has on higher risk innovation and on the accuracy of revenue predictions. (Paragraph 121)

Conclusion 35: We are concerned that the Treasury's decision to take £92 million from MRC's commercial fund will act as a disincentive for the Research Councils to be entrepreneurial. This outcome goes against the Government's aim, which we applaud, to improve the translation of research into wealth. We urge the Treasury to commit to a

set of rules that encourages the kind of entrepreneurship that DIUS is attempting to foster. (Paragraph 122)

118. The Government is pleased the Committee supports an increase in the MRC's funding.

119. The rules about the treatment of income apply to the Science Budget in the same way as they apply across the public sector. In preparing for the next spending review, Departments are required to provide forecasts of income to Treasury. These income forecasts are one of the factors Treasury takes into account in determining the level of funding provided to departments in each spending review period.

120. Departments are permitted to retain all the income they generate up to the level of the forecast for each year. Recognising the difficulty of making precise estimates of future income, the standard rules allow departments to automatically retain income in excess of forecast amounts up to a limit of 20% of forecast income. Approval to retain income above this level is judged by the Treasury on a case by case basis. The intention of these rules is to achieve a balance between encouraging the generation of income whilst maintaining overall control of public expenditure. The Government believes that these general rules on income retention set out in the Consolidated Budgeting Guidance provide the correct incentives. In the normal course of events the operation of these rules is expected to mean that Research Councils would be able to retain all of the income they generate.

121. One source of income for some Research Councils is royalties from the exploitation of intellectual property rights arising from research carried out within Research Council Institutes.

122. The recent decisions regarding the MRC Commercial Fund were taken in response to a specific issue which emerged in discussions between the Treasury and the DTI during the spring of 2007, where it became clear that the long-standing arrangements for the MRC Commercial Fund were not in accordance with the Government's public expenditure rules. This was due to a genuine misunderstanding. As a consequence, the MRC did not have the authority to spend the cash surplus it had accumulated. It was important to put that right and in a way which did not affect the overall CSR07 settlement for the Science Budget reached in March 2007. The Science Budget Allocation to MRC, announced in October 2007, took full account of these points.

123. Under the agreement reached between the Department and the Treasury, the MRC will now be allowed to gain access to a large part of the Commercial Fund accumulated cash surplus—resources that it would otherwise not have the authority to spend. Going forward, the MRC will be subject to the same income rules as the other Research Councils.

June 2008

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2007–08

First Report	UK Centre for Medical Research and Innovation	HC 185 (HC 459)
Second Report	The work and operation of the Copyright Tribunal	HC 245 (HC 637)
Third Report	Withdrawal of Funding for Equivalent or Lower Qualifications (ELQs)	HC 187-I
Fourth Report	Science Budget Allocations	HC 215
First Special Report	The Funding of Science and Discovery Centres: Government Response to the Eleventh Report from the Science and Technology Committee, Session 2006–07	HC 214
Second Special Report	The Last Report: Government Response to the Thirteenth Report from the Science and Technology Committee, Session 2006–07	HC 244
Fourth Special Report	Investigating the Oceans: Government Response to the Science and Technology Committee's Tenth Report of Session 2006-07	HC 506 [incorporating HC 469-i]