

From The Select Committee Press Release:

Management at the newly created Science and Technology Facilities Council (STFC) then compounded the problem with ineffective and secretive management.

In addition, the Committee found the STFC poorly managed, with a weak peer review system and lamentable communications. It has left many in the science community in the dark about their employment prospects and some of the UK's most respected science institutions, such as the Jodrell Bank observatory and the Daresbury laboratory in Cheshire, facing an uncertain future. The Committee concludes that there are "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".

The Committee is also concerned about the influence Government appears to have on the use of the science budget, even though the cornerstone of science funding in the UK, the Haldane Principle, asserts that detailed decisions on how to spend the Science Budget should be made by scientists rather than politicians.

The Committee is calling for: Substantial and urgent changes to the way the STFC is run in order to restore confidence and to give the Council the leadership it desperately needs. No decision to be made on where cuts should occur until a Government Commissioned review of physics, the Wakeham Review, has reported. STFC to take immediate steps to communicate clearly and comprehensively to its research community the impact of its grant cuts. The Government to publish a white paper on regional science policy as a basis for discussion as a matter of urgency.

MPs are particularly critical of the way the STFC's management has handled decisions to withdraw from, or reduce involvement in, projects, such as the International Linear Collider Gemini Observatories and ground based solar terrestrial physics facilities. The Committee finds these decisions have been taken without proper peer review or full consultation with the scientific community.

The Committee also fears that the UK's international reputation has suffered as a consequence of these decisions and the UK has been left looking like an "unreliable" and "incompetent" international partner.

Chairman of the IUSS committee Phil Willis MP said: "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."

"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."

Of all STFC's sites, most concern has been raised about the future of Daresbury, in Cheshire.

Mr Willis said: "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 want to know how the Government is going to deliver on its promises."

Extracts (from 59 pages) of the key STFC statements

The Science Budget increases do not fully cover Government-determined spending commitments, such as the requirement for Research Councils to cover 80% of the full economic costs of research (FEC)

We have reservations about the influence Government appears to have on the use of the budget and the extent to which the Haldane Principle has been upheld.

Regarding the Science and Technology Facilities Council (STFC), we conclude that its formation was untimely and poorly conceived. First, the Government's expectation that STFC, having been formed in April 2007, would be ready for the 2007 CSR was overly ambitious. Second, in merging two Research Councils, one research community has been saddled with the debt of another, despite assurances from the Government that STFC would be formed without any legacy issues.

In STFC itself, we found weaknesses in its peer review system, its communications and its management. We are concerned about some of the decisions made in its Delivery Plan and how those decisions were made. We recommend that STFC wait for the results of the Wakeham review of physics before implementing the cuts proposed in the Delivery Plan and that it use this time to consult with its stakeholders. Further, we conclude that substantial and urgent changes need to be made to the way in which the Council is run in order to restore confidence and to give the Council the leadership it desperately needs.

However, upon announcement of the inquiry, we received a substantial volume of correspondence from within the particle physics and astronomy community, which raised concern about the funding and delivery plan of the Science and Technology Facilities Council (STFC). Therefore, we decided to explore the allocation to STFC more closely than we had originally planned.

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.

Of the approximately £1 billion increase in funding over the CSR period compared with the 2007/08 baseline figure, £748 million has been allocated to FEC uplift.

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. 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.

All the other Research Councils have marked increases in near cash over CSR07 while STFC does not (Figure 1). In other words, STFC has received a flat near cash allocation that will erode against inflation.

Therefore, it follows that STFC has been left with a bill for the operating costs of Diamond and ISIS that is £75 million (across the CSR period at 2006/07 prices) above the sum that was allocated in its budget

following the merger.

As we will discuss later, it is the former PPARC programmes that have been cut rather than the former CCLRC programmes. In other words, the former PPARC community is being penalised by the merger with CCLRC. This is a situation that the Government had promised would not come about. Sir Keith O’Nions told the Science and Technology Committee on 17 January 2007, in reference to the CCLRC and PPARC merger, that:

“the budgets of those two councils have to be left without any legacy difficulties at the time the new council starts in April [...] What I am saying is that if there are any holes in the road that need to be filled in we will have to make sure they are filled in. We do not want to start a new Council with legacy issues.”

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.

A further legacy issue has to do with timing rather than funding. STFC began life as a new Research Council on 1 April 2007, which means that not only did the merger take place during the CSR allocation process, but that STFC was asked to provide a draft delivery plan only three months after its formation.

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.

[ON LHC] the two smaller ones, LHCb and ALICE, are medium-low and low priority, respectively. This low priority for LHC experiments is surprising given that they are about to come on stream this year. 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.

[ON ILC] We will not comment on the scientific justification for withdrawal, since this falls within the remit of experts in the area; however, we are concerned by the manner in which this decision was taken.

The ongoing saga over Gemini raises questions about the competence of STFC’s communications. As with the decision taken over the International Linear Collider, there was no consultation with the astronomy community before decisions over Gemini were taken.

We find Professor 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.

However, ATC’s chances of winning that work must be reduced following the poor handling of the Gemini issue and future uncertainty of UK’s involvement in the project.

Of all STFC's sites, most concern has been raised about the future of Daresbury. Reports of 350 job losses (out of a total staff of 500) were circulating soon after the Delivery Plan was published, although the actual numbers are not yet decided. 80 jobs are set to be lost this year with the closure of SRS, and a further 30 will be lost next year following decommissioning. Additionally, funding for ERLP/ALICE89 has been placed on the 'low priority' list in STFC's Programmatic Review, a decision that threatens not only jobs on that project, but the accelerator skills base at Daresbury. This could potentially damage work on a range of projects, including EMMA, which uses ERLP/ALICE as a particle source and has already secured funding, and undermine the position of the Cockcroft Institute.

When we visited Daresbury we found a demoralised workforce concerned that without a major facility the site was not viable.

This concern for the future of Daresbury has not sufficiently been addressed by STFC.

We share the concern of members of the staff that in the absence of a major facility at Daresbury, like a fourth generation light source or ERLP/ALICE, it will lose the scientific critical mass that STFC is so keen to foster and it will cease to be a science campus. The announcement of the Hartree Centre for computing and a detector centre, and the Minister's preference for the fourth generation light source to be based at Daresbury, are probably insufficient to prevent Daresbury, under the current strategic plan, from becoming merely a technology/business park. These concerns are reinforced by the recent announcement of £25m private sector funding for building with no clear plan about who or what is to occupy the buildings.

There is an acceptance that there is a "structural imbalance between Daresbury and RAL in terms of facilities", which STFC inherited. However, there have also been recent decisions, for example to postpone funding for 4GLS and put ERLP/ALICE on the low priority list, that will add to this imbalance between the two sites. Consequently, the future for Daresbury looks to be based on technology rather than science.

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.

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.

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.

The Government's message is confused about whether it has a regional policy for science, and specifically whether it should influence or dictate where STFC should spend its money, be it on the

Daresbury Laboratory or elsewhere. This current confusion over the Government's regional policy is unacceptable given that so little is spent on research and development outside the south and the south-east, in particular. If the Government has a regional policy, this percentage spend represents a failure of that policy. 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. We will return to this matter in the future.

The communication between the STFC Executive and its staff at Daresbury and RAL is inadequate. We dispute the idea that having site directors should negate the ability of the two sites to work together. Elsewhere it is the norm to have national laboratories with their own directors working together to deliver Government's strategic goals. We recommend that STFC install a Campus Director at Daresbury and at RAL.

In the case of physics and astronomy, the Director General's assurance that more money will go into universities because of FEC, may not hold, even if universities allow departments to retain the whole FEC increment, rather than remove it to cover central overheads.

Second, we are concerned about the nature of the cuts themselves. Professor Mason told us that STFC was planning a 25% cut on what it had "aspired to fund". However, this can be sub-divided into two categories: (a) the money that STFC told DIUS it wanted to spend on grants over the course of CSR07; and (b) the money that STFC promised in agreed research grants that had not been issued by the time of the allocation. The 25% cut applies to both of these categories, yet the practical impact is not the same on both.

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.

The common theme that links the problems outlined above—from cuts in grant lines and specific projects to the impact on STFC sites—is poor communication. We discovered that those with a clear interest in the outcome of funding decisions and with evident expertise to contribute to debate were not consulted over decisions to withdraw funding from the International Linear Collider, from Gemini and from ground-based solar-terrestrial physics facilities. Aside from the damage done to the UK's international reputation (which we discuss further below), a lack of consultation leads to poor decisions, as the fiasco over Gemini has demonstrated. Similarly, the communication with the staff at ATC, Daresbury and RAL has been woeful, with many staff finding out that their jobs are in jeopardy via the publication of the delivery plan. Communication of the cuts in the grant line has also been poor, since the initial claims of 25% cuts were misunderstood and it is not entirely clear why a figure of 25% was used in the first place: it would have been less sensational and more useful to separate out estimates of cuts to sub-disciplines in physics and astronomy against funding aspirations and existing projects.

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.

These Committees [SB,PPAN,PALS] have a difficult job to do considering the broad remit of STFC, and we do not doubt the integrity of the individuals who make up those Committees.

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.

Our main concern, however, is the lack of consultation that appears to have taken place between these Committees and the physics and astronomy community in the run-up to the budget allocations. We have already seen that consultation with the community in relation to the decisions over ILC, Gemini and ground-based STP was inadequate. We have additionally heard claims about the quality of the peer review [for accelerator research]

Professor Mason has accepted that the community has not been adequately consulted, and asserts that this is an area in which STFC is working to improve. We are less convinced by Professor Mason's excuse for the current situation.

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.

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.

The final common thread to the issues discussed is international reputation. Science is an international pursuit, but STFC plays a particularly important role internationally since it is responsible for some of the largest subscriptions on behalf of the UK. 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.

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.

Even at CERN, where the UK is a major and hitherto consistent partner in major international collaborations, the proposal in the programmatic review to de-prioritise the two smaller (ALICE and LHCb) of the four LHC experiments just as they are about to deliver results is a cause of consternation and embarrassment for the UK staff at CERN, especially in the context of the ILC and EISCAT situations described above.

We are not satisfied with this response [KM that delaying STFC cuts until after Wakeham "Was not an Option"], especially in the light of the short time remaining until Wakeham is due to report, and believe

that it cuts across the intention signalled by the Department and Secretary of State to reassure the physics and astronomy community when the Wakeham review was announced in the first place. Furthermore, it is unfortunate that the Government did not request a moratorium on the STFC cuts until Wakeham reported. 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.

We hope that STFC can liaise with NERC and the STP community to find a favourable solution for all parties.

During the process of this inquiry, STFC altered its management structure. It introduced the role of Chief Operating Officer (Professor Richard Wade), Director of Campus Strategy (Professor Colin Whitehouse) and Director of Communications (Jim Sadlier, who is soon to retire). This was partly in response to an Investors in People report that, as reported in the Guardian in March 2008, concluded that changes needed to be made to STFC senior management to ensure “a more robust and transparent management process” since “confidence in senior managers and across senior managers needs to improve”. Professor Mason explained that the structural changes were something that he had intended to do all along.

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.

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.

[the CSR] has been marred by a few poor decisions. Broadly speaking, DIUS left STFC with a large hole in its budget, and STFC managed its allocation poorly. Additionally, the headline increases in the science budget, after commitments to FEC and the new bodies have been taken into account, translate broadly into flat cash for all the Research Councils except MRC, which means fewer grants can be funded. Consequently, the PR fanfare turned into a PR disaster for the Government.

We have raised concerns about DIUS’s attitude towards the Haldane Principle and its communication with the Research Councils. We have also uncovered in STFC an ineffective and secretive management team, with poor communications.