



KAVLI INSTITUTE FOR COSMOLOGY
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Lord Drayson
Department for Business, Innovation and Skills
Castle View House
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Dear Lord Drayson

I would like to make a few comments concerning your structural review of STFC. I was a member of the Astronomy and Planetary Sciences Board of SERC (1991-1993) and a member of PPARC Council (2001-2004) and so I have some experience of previous funding systems.

Overall, I support the proposals put forward by the Royal Astronomical Society Forum and the Institute of Physics. It is extremely important that research grants remain in a reorganized Council rather than transferred to EPSRC. A transfer of the grants line to EPSRC, particularly at a severely reduced level following the STFC prioritization exercise, would recreate the difficulties experienced in the days of SRC/SERC that PPARC was designed to solve. (Namely, the long-term nature of Particle Physics and Astronomy projects and their reliance on large international organizations).

In analysing the nature of a restructured Council, it is worthwhile reviewing some of the reasons for the difficulties at STFC, and the role of the Chief Executive in exacerbating those difficulties.

Firstly, Keith Mason has openly pursued a policy of transferring funds into areas with potential for short term economic impact *at the expense of grant funding to Universities*. STFC funds have therefore gone into facilities, innovation campuses and initiatives such as the Aurora programme. Together with a sympathetic Chairman and a Council that included three members of the Executive, this policy went (largely) unchallenged for the first two years of STFCs existence, though I know of not a single research scientist who agreed with it. Financial mismanagement of this policy finally caught up with STFC last year, leading to savage cuts of more than 35% in the grants line (the only 'flexible' part of the STFC budget). These cuts are more savage than the deepest cuts experienced during the Thatcher years. Mason's attempt to downplay these cuts by referring to previous low points in grant funding is, frankly, risible. Government should be indignant at Mason's attempt to write-off the investment in science between the years 2002--2007, which was intended (and succeeded) in improving the volume and quality of research in Universities.

As an example of the tension between economic impact and scientific excellence, BNSC published the *Space Exploration Review* recommending an increase in funding of £150m per annum and highlighting the MoonLITE bilateral mission. A few days later, the STFC prioritization exercise ranked MoonLITE 'below alpha'. Any restructuring must tackle the difficulties of tensioning projects which

may have economic benefits but little scientific merit against academic excellence. In my view, academic excellence should be the priority for any restructured Research Council.

Secondly, Mason has held the view (most recently expressed at the Astronomy Forum meeting earlier this month) that the UK has too many scientists involved in exploiting facilities in comparison to the number engaged in developing, building and operating facilities. Again, I know of not a single research scientist who agrees with this view. The science budget has increased significantly over the last decade. The expansion of astronomy and particle physics in UK Universities has been a rational response to the increased availability of funding. As a member of the 2008 RAE Physics panel I was able to see at first hand how this investment has translated into research of the highest international quality. The deep STFC cuts to the grants line will inevitably weaken the research base in UK Universities and may even threaten the viability of some Physics departments. The shock wave following these cuts will eventually be felt across the entire UK science base. Any restructured Research Council must sustain an acceptable balance between support of UK Universities and investment in facilities.

STFC has not given high enough priority to scientific excellence. This is the primary cause of the problems over the last three years. It is why scientific excellence will suffer following the STFC prioritization exercise. This unfortunate outcome has been achieved during a period of increased funding to STFC and despite the allocation of financial bailouts.

Any restructured Research Council must have academic excellence at its core. It must also have a Chief Executive who recognises and values academic excellence.

Yours sincerely



George Efstathiou

cc Professor Michael Sterling, Chairman STFC
Phil Willis, Chair, House of Commons Science and Technology Select Committee