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The Rt Hon David Cameron Esq MP
Prime Minister
10 Downing St
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22 September 2010

Dear Prime Minister

THE SPENDING REVIEW: OUR RESEARCH BASE

We are writing to you on behalf of your advisory body on science and technology, the Council for Science and Technology, to urge you to give careful thought to the position of UK research, and its role in our nation, when decisions are being taken in the Spending Review. The Council includes academic, business and economic expertise.

We fully accept the need to cut public sector debt; this is unarguable. But pressure to cut public spending could result in decisions based too much on what is politically achievable and too little on a rigorous analysis of how best to achieve longer term success in an ever more competitive world.

The UK is at an historic crossroads. The decisions taken in the next few weeks are likely to determine our place in the world for decades to come. Laying the foundations for sustainable growth, while transforming the roles of Government and society, will involve – as Nick Clegg has said – shifting horizons. Research is critical to this.

Research is one of the key drivers of economic prosperity and social development in the longer term, as well as delivering shorter-term benefits. Success in the twentieth century was built on science and engineering: economic growth, the reduction of poverty and the improvements in human health and well-being could not have happened without them. This will be even more the case in the twenty-first century.

All this is potentially at risk. Substantial cuts to the research budget will mean that the best researchers and innovators in the world will no longer seek to work in the UK. This

will lose us those businesses which seek to locate, and to draw upon, the best research communities in the world; they will simply move elsewhere. Those are the businesses which spearhead the knowledge economy which fuels our economic and social development, in areas such as health, information technologies, security and others which will be based on future scientific breakthroughs.

We recognise the extreme financial pressures on Government at the present time. But the best and most successful knowledge-based companies know that investing in research and innovation in a downturn means that they will have a critical competitive edge in the upturn. The same applies to countries.

Our competitors – the US, China, France and Germany – understand this. They are continuing to commit to long-term funding increases for their research bases. This is one challenge the UK cannot afford to walk away from. If it does, the position may well not be recoverable for decades to come.

There are many areas where privately funded activity can be substituted for publicly funded activity, as for example with higher and further education. There are other areas where, even though the opportunity for substitution is limited or absent, short term spending reductions can be reversed later as the economy grows, without irreparable harm having resulted.

Neither is true of public spending on the research base.

Reductions in public spending on research will inevitably result in reductions in private spending, given the leverage that operates in many areas of private research funding. Private (including philanthropic) funding may also be transferred to other countries.

The UK's public spending on research is already low by G8 standards. Despite that, the quality of our research base is second only to that of the United States. That is a tribute to the long-standing policy of focusing on excellence as the over-riding criterion for research funding.

Our position is therefore extremely fragile. Substantial cuts to research funding now will have a devastating effect for decades. Once a significant element of the research base is lost, and if the UK were to lose its reputation as one of the best places in the world to do research, then this position would be very difficult to retrieve. The effect of cuts on research and researchers in the UK will be magnified in relation to young researchers by the fixed treaty commitments to international facilities, which mean that a higher proportion of reduced funding would have to go to support these facilities, leaving even less to support researchers. There will also be a regional impact in the UK. Substantial cuts will mean loss of critical mass in universities, especially outside south-east England.

We need – as other countries have – a long-term science and research investment plan to set direction and inspire confidence. We set out our proposals for this in our latest report: *A vision for UK research*, published earlier this year.

Finally, alongside sustainable public spending on research, the UK needs to be more effective in translating research into benefits through key business sectors and technologies which have the greatest potential for the UK. Government has a vital role to play in this, if sufficient private investment is to be attracted. This is not about picking

winners, but about picking the right races. We have recommended a mechanism for this in our report *Strategic decision-making for technology policy*. The proposed Technology Innovation Centres as proposed by the *Hauser Report* should also be an important component of the strategy, as well as the recommendations of the Dyson report.


We are united in our advice and concern. We stand ready to help in any further way we can at this uniquely critical time.

We are copying this letter to Nick Clegg, George Osborne, William Hague, Vince Cable, Danny Alexander, David Willetts, Oliver Letwin; and to Gus O'Donnell and Philip Rutnam.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'John Beddington' in a stylized, cursive script.

Professor Sir John Beddington
co-Chair CST

A handwritten signature in black ink, appearing to read 'Janet Finch' in a cursive script.

Professor Dame Janet Finch
co-Chair CST