

The Prime Minister  
10 Downing Street  
London SW1A 2AA

3 December 2008

Dear Prime Minister,

In October 2007 Lord Sainsbury published his review of the UK's science and innovation policies, which you asked him to undertake while Chancellor of the Exchequer. DIUS published a report on the implementation of the Sainsbury Review alongside the White Paper, *Innovation Nation*, in March. At that time, I promised to provide a further update on progress in Autumn 2008. I am writing now to meet this commitment.

We are making good progress on David's review. I am now in a position where the implementation of every recommendation is either complete or on track for future completion. Most of the recommendations have already been fully adopted and others, that require action over a longer period, are well in hand. David's review set us a challenging and ambitious set of objectives. I am therefore grateful to Ian Pearson for taking the implementation of the review forward and for providing a solid basis for future work. I am keen to make sure that progress monitoring on these recommendations is properly integrated into my Department's work. I therefore propose that, where necessary, future progress reports on individual recommendations are incorporated into DIUS' Annual Innovation Reports.

In March, we were able to report that we had successfully implemented many of the key recommendations. In particular:

- Research Councils have committed £120m for collaborative work with the Technology Strategy Board (TSB). This funding will support the research and development of high-value added technologies so that the UK can be a leader in these fields. Research Councils and the TSB have made an excellent start to this collaboration and are forging a strong relationship, further increasing the economic impact of Research Councils' investments. Research Councils and the TSB are working

together to reach into important sectors of the economy. For example, the Arts and Humanities Research Council and the TSB are now jointly funding research with firms from the creative industries. Furthermore, £3m of the recently announced call for research in High Value Manufacturing, announced as part of the Government's Manufacturing Strategy, will be allocated to work in the Value Systems area. This is an area specifically identified for investigation in Lord Sainsbury's report and one which the Engineering and Physical Science Research Council (EPSRC) and the Economic and Social Research Council (ESRC) will also support. EPSRC and ESRC will each provide up to £1m additional funding for projects that involve high quality physical and social science. I have included a description of the collaboration between Research Councils and TSB in the Annual Innovation Report which I am publishing today.

- The 4<sup>th</sup> Round of the Higher Education Innovation Fund (HEIF) has been allocated to English Universities entirely on the basis of a formula, rather than a burdensome competition. This creates a stable and predictable funding stream for knowledge transfer, raising its status within universities and providing the resource for a critical mass of professional capability within Institutions. The level of funding will rise to £150m per annum by the end of the CSR07 period, thereby meeting a key recommendation in the 2003 Lambert Review. Universities have published Strategies for Knowledge Transfer. These show that our increased investment in HEIF was more than justified. A report on the strategies by the consultancy firm PACEC shows that 80 per cent of universities have working with businesses and the community as a key part of their mission, and that a similar number are offering their services to small and medium sized enterprises.
- UK-IPO has consolidated its Patent Informatics Team to deliver patent database analysis services to stakeholders. The Team is co-operating with the TSB to identify and assess disruptive emerging technology using a patent analysis toolkit. The Team are currently co-operating with a number of Knowledge Transfer Networks to facilitate an accessible, responsive patent analytics service for UK researchers and innovators.

Since March, the Government has made a great deal of progress on the delivery of other recommendations that require action over slightly longer timescales. For example:

- The TSB has carried out analysis of future technology developments and market needs ("roadmaps") for two important fields - Low Impact Buildings and Bioscience – which will enable companies working in those areas and the public sector to focus their research where it will have the most value. I have already discussed this recommendation in the Innovation Nation White Paper.

- A reformed Small Business Research Initiative (SBRI), focused on procurement of technology development, is being piloted in the Ministry of Defence and the Department of Health, coordinated by the TSB. The reformed SBRI will be rolled out more widely to other Departments from April 2009. The programme will offer opportunities for early-stage, high-technology businesses to supply innovative products and services that meet public sector needs, supporting these companies through a critical stage in their development.
- We announced further support for the commercialisation of research carried out by organisations in the public sector in another round of funding under the Public Sector Research Exploitation Fund earlier this year. For the first time, applicants to the fund were required to raise co-funding from other sources. A total of £68m was allocated to commercialisation of research in Public Sector Research Establishments including £38m from co-funding. This is a significant step forward.
- The Newton International Fellowship Scheme, with an associated alumni engagement programme, was launched on 4 June. This will attract the best overseas researchers to the UK.
- In July, we published a prospectus inviting proposals for pathfinder projects to develop the Further Education system's capacity to drive business innovation through knowledge and technology transfer. Work on selected projects will begin in November 2008. Improving the FE system's capacity to engage with the business community will help FE colleges and training providers to provide business innovation services in addition to skills for business.
- To raise awareness amongst HEIs of the value of design to the development and commercialisation of technology projects, the Design Council will launch a competition early in 2009, with funding from DIUS. HEI Technology Transfer Offices which are successful in the competition will gain access to expert design advice.

I would like to highlight in particular, the progress we have made in activities to improve the teaching of Science, Technology, Engineering and Mathematics (STEM) subjects in schools, further and higher education:

- Considerable progress has been made to improve teacher recruitment, retention, retraining and continuing professional development through the introduction of the financial incentive for teachers retraining to specialise in mathematics, physics or chemistry, the development by Training Development Agency for Schools of the mentoring scheme for STEM teachers which will be piloted from next year, and the commitment to continue funding the network of science learning centres, now managed by the National Science Learning Centre, over the next three years.

- The Learning and Skills Network will deliver the triple science support programme over the next three years. This support will help to increase the number of young people studying biology, chemistry and physics as separate subjects. This will encourage the flow of able students into STEM subjects at graduate and post graduate levels. This in turn will lead to an increased flow of STEM graduates into the workforce.
- In parallel to this, the Government is piloting a further 250 after schools science and engineering clubs from September 2008. These aim to provide an engaging and stretching programme of activities to key stage 3 pupils with an interest in science, increasing their potential to continue to study STEM post-16.
- I have agreed to fund a project bringing together a working group of experts from academia and industry, co-ordinated by the Royal Academy of Engineering, to review current approaches to engineering education and to develop an experience-led engineering degree. This project will help to develop engineering qualifications which give graduates a broader base of skills that are required in the workplace.

The achievements of the past ten years would not have been possible without our commitment to funding the 10 Year Framework.

In partnership with the community, we have transformed the research base over the last decade and revolutionised its relationship with business. In the 1990s, there was a history of serious underfunding of research – with dilapidated facilities, low morale and inadequate relationships with business. Investment in the research base during the early years of this decade repaired the physical infrastructure, created professional capacity in knowledge transfer and put research funding on a financially sustainable footing. Continued investment in recent years has made research base fit for the 21<sup>st</sup> Century with exciting new organisations and alliances (such as the Office for Strategic Co-ordination of Health Research, the *Energy Technologies Institute* and cross-Council programmes on climate change and global security) that deliver major benefits to the economy and society. We have also developed much greater collaboration between the Research Councils and the TSB.

Your support for investment in science and technology during your press briefing on the 3<sup>rd</sup> of October was widely welcomed. As you said that day, we face new challenges that did not exist ten years ago and we must meet these challenges in a new way. David's first recommendation is that we continue to fund increases in basic science in line with the 10 Year Framework.

I am copying this letter to Alastair Darling, members of the DA committee and Sir Gus O'Donnell.

A handwritten signature in black ink that reads "John Denham". The signature is written in a cursive style with a large initial 'J'.

**JOHN DENHAM**