

3. What's New?: 2002 S&T Policies and Program Developments in the UK

A major landmark in UK science policy came in 1993 with the Government's publication of the "Realising Our Potential" White Paper – Britain's first major review of science for over twenty years. This strategy introduced some big ideas and major changes in Government machinery and is still regarded by many as the defining statement of UK science policy. However, the Government's strategy towards science and innovation has taken a step forward through policy commitments and initiatives made in two recent White Papers. The July 2000 science and innovation White Paper, "Excellence and Opportunity" sets a framework for the Government's role as a key investor in the science base; a facilitator of collaboration between universities and business; and a regulator for innovation, including the promotion of public confidence in science. The February 2001 enterprise, skills and innovation White Paper "Opportunity for all in a world of change" emphasised the importance of science and innovation to regional (and national) economic growth, with the need to raise skills being a key issue. These two policy documents therefore set out current Government thinking and initiatives in this regard.

Excellence in Science

If the UK is to maintain and enhance the excellence of its science base, the Government must play a key role in funding basic and strategic research. World-class science needs world-class facilities and people and recent government initiatives to tackle these issues include: A £250 million funding boost to three key areas of science – genomics, e-science and basic technology (e.g. nanotechnology, photonics, quantum computing and bioengineering); A new £1 billion *Science Research Investment Fund*, in partnership with the Wellcome Trust, to renew the infrastructure for science in UK universities – this builds on the earlier £750m Joint Infrastructure Fund and Government is working to ensure that infrastructure is funded on a sustainable basis in the future; A Science Roadmap for large facilities with an international dimension, to provide a long-term vision of future requirements; A substantial increase to the basic support provided to PhD students, where stipends will rise from £6,800 in 2001/02 to £9,000 by 03/04, a 23% increase in real-terms; A £4 million annual fund to provide fellowships to attract and retain up to 50 of the world's top scientists; and The 2001/02 academic year has been designated *Science Year* which aims to raise the profile of S&T in schools and with teachers and parents – a new Science and Engineering Ambassadors programme has been launched as part of science year to encourage the uptake of science careers, and the Government has committed £2m per year for three years for the delivery of additional science, technology, engineering and maths activities in schools.

Opportunities for Innovation

The Government also has a crucial role to play in providing the incentives, mechanisms and resources to exploit the science base and to enhance demand for technology and investment in R&D from business. A flurry of initiatives have been introduced in recent years, aimed at universities, business, government departments and regional development agencies alike. These include: The *University Challenge Fund* which provides seed venture funding for spin-out companies; The *Science Enterprise Challenge* which brings business and entrepreneurial skills into the science curriculum – the new Cambridge-MIT institute plays a key role in this respect; The *Higher Education Innovation Fund which is worth £140 million over three years, to develop the capacity in universities to interact with business and the community*, and The *Public Sector Research Establishments Fund* which encourages exploitation of S&T and