Britain embraces 'knowledge economy'

[LONDON] The British government has pledged to put the commercialization of scientific knowledge at the heart of its industrial policy. The move comes in an ambitious and wide-ranging series of initiatives announced last week, including a white paper on how science can enhance economic competitiveness.

But implementing the initiatives is likely to be controversial. Some ministers in the Labour government are concerned that some proposals clash with the priorities of other government departments.

The white paper (policy document) includes a new £150 million (US$252 million) national venture capital fund to help finance small businesses with the potential to grow, such as high-technology companies. It also includes a £20 million annual Higher Education Reach Out fund to reward universities in England that work with businesses. Universities in Scotland will receive £34 million over three years.

Existing schemes encouraging academics to work with industry are also being expanded, while £75 million for equipment is being given under the Joint Research Equipment Initiative (see *Nature* **396,** 607; 1998).

Some of the thinking behind the white paper is borrowed from the United States. For example, the science minister, Lord David Sainsbury, is to coordinate a series of studies into the extent to which high-technology companies in Britain can benefit by being located in clusters such as those to be found in Silicon Valley or around Boston.

The white paper includes a government-sponsored review of whether publicly funded research establishments are making the best use of intellectual property rights to maximize the commercial returns from research.

Launching the initiatives, Peter Mandelson, Secretary of State for Trade and Industry, said that, as a high-wage economy with high land and transport costs and few raw materials, the United Kingdom's best hope of raising economic growth rates is by exploiting the potential of 'knowledge industries'.

Many see the white paper as a significant step in the Labour party's shift away from its traditional socialist roots to its present position as a party of the centre-left, comfortable both with increased public investment and free markets. This is a shift that Mandelson personally helped to engineer, and he has strong backing from Sainsbury.

In a newspaper article published the day after the white paper's launch, Mandelson wrote that he was a politician "confident that his white paper marks a turning point in ideology and policy for his party and his country". The message was plain, he wrote: "Labour has dumped its interventionist past."

This language, and the emphasis on relying on science to create wealth, concerns ministers with more traditional socialist leanings. These include Michael Meacher, the environment minister, and his boss, John Prescott, the deputy prime minister.

Mandelson and Sainsbury will face one of their first tests over the development of high-technology clusters. These businesses are likely to be subjected to rigorous and lengthy planning applications, particularly if they are to be built in or near rural areas.

Mandelson says he wants planning applications from high-technology industries to be dealt with such that "the national economic interest is taken into consideration". But the environment department, which oversees the planning system, is anxious that environmental considerations should not be downgraded, according to officials.

A key test of this is likely to be an application by the Wellcome Trust to build a science

Making a case in the corridors of power

[LONDON] Britain's corridors of power last week witnessed a rather unusual gathering of scientists and senior ministers who – in the company of some potted plants – assembled in 10 Downing Street to brief the prime minister, Tony Blair, on why science matters, the issues surrounding public investment in science and its policy implications.

The presentations were made in a series of tightly orchestrated, four-minute slots, delivered around the long, boat-shaped Cabinet table. The potted plants, reputedly the first to be placed squarely on the Cabinet table in front of the prime minister, arrived with Caroline Dean from the John Innes Centre in Norwich, who talked about her work on the genes in the plant *Arabidopsis*.

Dean was among those whose talk came under the heading, "A Taste of Science". Any resonance with the billing found on the back of pre-prepared supermarket meals – "A Taste of India" – was a reminder that for most government ministers, science might as well be a far-flung foreign land.

But the scientists present left the meeting rather pleased. "I felt that science had moved to the top of the agenda," says Paul Nurse, director-general of the Imperial Cancer Research Fund.

"I'm prepared to be as cynical as the next person, but I came away feeling fairly impressed and upbeat about the whole thing," says Matthew Freeman of the Medical Research Council's Laboratory of Molecular Biology in Cambridge.

According to the reports of those present, ministers talked of the recent success of the Research Assessment Exercise conducted on British universities, and there was cautious discussion of a possible new white paper on science.

It also appeared clear that senior ministers were not confident that the recent announcement of significant additional funds for science (see *Nature* **394,** 209; 1998) was likely to be sufficient to silence scientists, and they were expecting further calls for money.

The scientists in turn delivered some important messages about the difficulties of finding adequate funding for their work. One of those present was Polina Bayvel of University College London, representing the country's electrical engineering departments.

Already backed by a prestigious Royal Society University Research Fellowship, Bayvel has raised £1.5 million (US$2.5 million) for an optical communications laboratory – but the effort has involved writing more than 35 grant proposals over the past five years.

The need for long-term funding for good scientists was driven home by Matthew Freeman, who used his own highly successful laboratory as an example.

Despite being billed as a mix of young and old, and life and physical scientists, the meeting inevitably ruffled a few feathers. "The make-up of the meeting clearly reflected a life-sciences bias," said one physicist. "This is understandable, but what's worrying is there might be an ideology to fund life sciences more because they create more wealth."

For many, however, the surprise turn of the meeting was the widely distrusted trade and industry secretary Peter Mandelson, who, despite his reputation as the Labour party's 'spin-doctor', seems to have made something of a hit with the assembled academics. "I really liked Mandelson," said one. "I hadn't expected to, as his image is an alarming one. [But] he was intelligent and had a really sharp, black sense of humour."

Towards the end came discussion of how to improve science's poor public image. National Science Week, suggested one participant, needed some high-profile events – such as a minister bungee jumping off a tall building to demonstrate Newtonian dynamics and Hooke's law.

"Haven't you heard?" quipped Mandelson. "I'm doing that from the Millennium Dome". Such an event would certainly serve to attract visitors to the government's £758-million dome, which houses an exhibition celebrating the millennium. **Natasha Loder**

park next to its genetics research centre at Hinxton Hall near Cambridge. The planning inspector has rejected the proposal. But this decision has yet to be endorsed by Prescott.

Another battle looms over biotechnology regulation. The environment department plans to include more public representatives on its committee of scientists that advises the government on the safety of proposed genetically modified crops.

It also wants applications to grow such crops to be seen by an additional ethics committee. But the Department of Trade and Industry (DTI) is likely to oppose this on behalf of industry, which fears that further regulations will be time-consuming and a threat to economic competitiveness.

This battle will be fought out in a forthcoming review of the structure of Britain's biotechnology regulatory system, also announced last week. The review, to be carried out by the Cabinet Office and the Office of Science and Technology, will include public consultation on the regulatory process.

It has been set up partly in response to the collapse in public confidence in government science advice during the crisis over bovine spongiform encephalopathy, and partly to address public concern that regulations on the planting of genetically modified crops do not adequately address safety issues.

One senior environment civil servant says the spectre of a possible recession is one reason that the DTI is keen to help set up knowledge-based companies. But she says her department will face severe public criticism if environmental and safety considerations are relaxed.

Ehsan Masood

Foresight initiative goes for competitiveness

[LONDON] The British government last week chose the occasion of the publication of its white paper on industrial competitiveness (see left) to launch the second phase of its Foresight exercise.

The Foresight initiative was launched by the previous Conservative government with the aim of stimulating scientists and industrialists to think about how science can be better targeted at creating wealth and improving the quality of life.

The Department for Education and Employment has written to the higher-education funding councils saying that it expects them to promote Foresight, and to take appropriate steps "to maximize the commercial exploitation of university research".

This is among the first signs that Foresight priorities, which have come to dominate the allocation of the annual £1 billion (US$1.68 billion) research budget from the four scientific research councils, will also influence the education department's research allocations.

JOHN STILLWELL/PA

Admiring progress: Mandelson visits a cancer research lab.

The decision to launch the new Foresight exercise illustrates the government's commitment to its usefulness as a device for structuring research policy. But there is some unease within the Office of Science and Technology over the 'spin' given to it by Peter Mandelson and Lord Sainsbury in their presentation of the launch.

Both ministers emphasized Foresight's potential contribution to economic competitiveness. But the second phase had initially been designed under Mandelson's predecessor Margaret Beckett, to tone down this aspect and to increase the emphasis on finding ways of using research to raise the quality of life (*Nature* **393,** 8; 1998).

The emphasis is less on finding technologies that would benefit particular industrial sectors, and more on getting scientists and industrialists to focus on various interdisciplinary 'themes' such as ageing, healthcare and crime prevention.

E. M.

Canadian whistleblower row prompts broader code of conduct

[MONTREAL] The Medical Research Council of Canada (MRC) is to attempt to broaden the ethical code of conduct for research involving humans that it published in September (see *Nature* 395, 420; 1998). The decision follows a dispute between a clinical researcher, the pharmaceutical company funding her research, and the hospital where the research took place.

At present, the MRC code covers only research funded by itself and the two other principal fund-granting agencies, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. It now wants the code to cover all research involving humans, regardless of who funds it. This is becoming increasingly important as government funding for research is being replaced by funding from industry.

The move follows a request for help from Toronto's Hospital for Sick Children to Henry Friesen, president of the MRC, following the release of a report about the activities of Nancy Olivieri, a researcher who had been carrying out clinical studies of the drug deferiprone in the treatment of thalassaemia.

When Olivieri went public with warnings that the drug could cause liver fibrosis, Apotex, the drug's manufacturer which was paying for the research, disagreed with her findings and threatened her with legal action because she had signed a confidentiality agreement.

Olivieri claims that the hospital refused her legal aid to defend herself, a charge the hospital denies. When her research colleagues backed her, a public furore erupted. Olivieri and her supporters called for an independent inquiry into the affair but the hospital refused, agreeing only to set up an investigation of hospital policies and practices in general.

The hospital later changed its mind, and agreed to set up an inquiry into the affair itself. But Olivieri and her supporters refused to participate, claiming that the panel leader, Arnold Naimark, professor of medicine and physiology at the University of Manitoba, had previous links with Apotex funds and so was not impartial.

On 9 December, the hospital released the panel's report, which exonerated the hospital from improper conduct, and said that patient safety was not compromised and that there were no conflicts of interest. But the report acknowledged the need to improve some hospital policies.

The report also criticized Olivieri for failing to report her concern about liver toxicity promptly to its Research Ethics Board. But Olivieri calls the report a whitewash.

Olivieri says that she and her colleagues refused to participate in the inquiry because of conflicts of interest on Naimark's part that she says are a matter of public record. "All the people with intimate knowledge of what happened were never questioned," she said.

She and her colleagues are determined to get an independent investigation into the matter. Observers say the affair illustrates the dangers of increasing industrial support for research in Canada.

David Spurgeon