Britain rediscovers industry–academia LINKs

London. The Department of Trade and Industry (DTI) has lifted a temporary freeze on the LINK programme, the government-wide initiative that encourages industry to undertake collaborative research with universities and other publicly funded research institutions. The programme is expected to receive an enthusiastic endorsement in the government's forthcoming White Paper on science and technology, now destined for publication early in June.

LINK has had a chequered career since its formation in 1986. Although the principle of strategic research projects funded equally by government and industry is widely accepted, the programme was slowed by bureaucratic rules and complex review procedures. But new rules introduced in 1991 following a critical review of its progress by the consulting firm of Segal Quince Wicksteed in Cambridge (see *Nature*, **351**, 431; 1991) have made LINK into one of the Conservative government's most widely-quoted success stories. There are now more than 300 individual projects covering 30 programmes, ranging from protein engineering to (most recently) the biological treatment of soil and water.

Last autumn, however, the department put a temporary freeze on new initiatives and began a review of all research programmes after it experienced budgetary problems in the wake of the collapse in value of the pound and Britain's departure from the European Exchange Rate Mechanism. With respect to LINK, the DTI investigated concerns from industry that the results of individual projects did not meet the needs of the market place.

The review is expected to lead to more precise definitions of the goals on each project. And funding for LINK is likely to be held level for the near future after several years of rapid expansion.

Even so, the DTI believes that LINK provides both a politically acceptable and cost-effective way of bridging the gap between industry and the academic community by giving academic scientists the incentive and opportunity to work on problems of long-term interest to industry. It has also persuaded companies in industries not regarded as high-technology — for example, waste management or cake-making — of the value of collaboration with university research teams.

The DTI's decision pleases officials at the Science and Engineering Research Council, which has been the department's main partner in many of the individual LINK programmes. It has also been welcomed by Robert Malpas, chairman of the Cookson Group and of the LINK steering committee, which was concerned that the DTI's funding difficulties might damage LINK.

Malpas argues that LINK, which he describes as a "runaway success", has allowed academic institutions and small and large companies to develop a common language and purpose. He would like to see the programme move into a second phase, identifying neglected areas of strategic research and using government and private funds to prime the pump by sponsoring experiments in these areas.

James King-Holmes/SPL

IMAGE UNAVAILABLE FOR COPYRIGHT REASONS

This LINK project studies the three-dimensional structure of proteins.

Any such development would tie in with plans of the Office of Science and Technology (OST) to sketch out the anticipated areas of growth for high-technology industries. That information would help researchers to design initiatives to be funded through the research councils and government departments. Speaking last month at a meeting in London, William Waldegrave, the minister responsible for science, extolled a technique known as 'technological foresight' as a way of building a national consensus around areas of research and technology that would most benefit Britain.

OST officials, remembering that previous public backing for key technologies produced commercial failures such as the Concorde, emphasize that they are not trying to pick winners but are rather, according to Waldegrave, trying to generate a "shared perspective" between industry, the government and the academic community. A preliminary study of information storage technology has already demonstrated the potential effectiveness of such an approach.

Some are hoping that the promise of a full-blown assessment could become a central feature of the White Paper. But various government departments are cautious about the value of such an exercise and are concerned that an attempt by the OST to produce a single list of 'critical technologies' or generic technologies could be unduly influenced by the views of individual companies or universities.

The most likely outcome at present is a compromise under which the OST will use technological forecasting to help scientists to judge for themselves what types of research are the most likely to coincide with the longer-term interests of industry. That would leave individual government departments free to draw up their own lists and preserve OST's overall responsibility to target new areas of growth.

LINK, now responsible for "identifying generic science and technologies of wide applications and commercial relevance", already seeks to achieve such a goal. One option for Waldegrave is to bring LINK under the aegis of the OST and thus the cabinet office, a recommendation that the government rejected two years ago.

David Dickson

Cabibbo to lead pontifical science academy

Munich. Nicola Cabibbo, an Italian particle physicist, has been appointed president of the Vatican's Pontifical Academy of Sciences, a body of 80 or so international scientists who organize scientific conferences on ethical issues such as transplants, the use of global resources and even — at the risk of rummaging in God's territory — cosmology. Their conclusions are summarized for use by the pope's office.

Cabibbo, professor of theoretical physics at the Second University of Rome, was formerly head of Italy's nuclear physics institute and is a delegate to the CERN, European Laboratory for Particle Physics in Geneva. He discovered the phenomenon of current and quark mixing in weak interactions. He was elected as leader of the pontifical academy for a four-year period directly by Pope John Paul II. The academy selects its own members, and membership is not limited to Catholics.

Cabibbo

The pontifical academy, refounded in 1976, considers itself the direct descendant of the seventeenth century Accademia dei Lincei, which was itself often disbanded and recreated and which counted Galileo as a member. The secular Italian National Academy of Sciences claims the same lineage.

Alison Abbott