Information technology

Cheering on UK

The past week has been remarkably active for British thinkers on government policy on information technology, the technology which interfaces computers and telephones, and for some of the designers of the technology itself. The Advisory Council on Applied Research and Development (ACARD), an advisory body to government and counted amongst the thinkers, published a report on the subject; the government announced some changes in the organization of responsibility for it; and British Telecom's research centre at Martlesham Heath, a designer of information technology, opened up its laboratories for more or less public scrutiny.

Central to this activity seems to be an awareness that Britain needs to put more coordinated effort into adopting information technology if it is to be competitive among the industrialized nations not only in the technology itself but also in many aspects of industry and business. This feeling certainly seems to be the basis of the ACARD report, which is more an exercise in publicity for information technology than a detailed analysis of its potential. Written by six industrialists, a trades unionist and a member of ACARD, it is an exhortation to government to take note of information technology rather than a guide to how policies might be implemented.

The report's main recommendation, that one minister and government department should be responsible for coordinating information technology policy, has to some extent been pre-empted by the government's announcement. The former computer systems and electronics divisions of the Department of Industry is to become the information division. It will assume responsibility for government policy formulation on information technology, under one deputy secretary who also has responsibility for the Post Office and satellite communications. In future, responsibility for coordinating government policy will lie with an official committee of the Cabinet Office especially set up for that purpose.

In making an international comparison of the development and uptake of information technology, the ACARD report is not very encouraging for Britain. It finds that the French, West German, Japanese and American governments are spending more than Britain on research, development and promotion. It is particularly nonplussed by the French government which, it says, has succeeded in creating considerable public awareness of information technology through one or two innovative public demonstration projects and at the same time has successfully promoted in other countries the idea that it leads the world in the field on the basis of projects that are not yet operational. This impression has been achieved, says the report, through the skillful use of publicity.

The report does not suggest that Britain should follow suit by committing more public funds to research. However, it does suggest that a leaf could be taken out of France's book by setting up demonstration projects to increase public awareness. Suggestions for doing this include putting telex and facsimile transmision machines in Post Offices, putting Prestel receiving machines in schools and public libraries and providing telephone subscribers with black and white Prestel-like video terminals for directory information.

The government could also help develop information technology industries by buying equipment for its own departments — a move which would need to be carefully implemented to avoid creating artificial markets. The report does not mention this possible pitfall, but it does recommend that the government should help stimulate closer cooperation between users and supplies.

Despite the lack of public funds spent on information technology, Britain is by no means behind on all counts, a fact which was evident at last week's open days at British Telecom's research centre. In such an international business, however, there is strong competition between countries to have their own systems adopted as standard and Britain, says the ACARD report, has been particularly bad at promoting its own interests. It says that Prestel is suffering because extensive negotiations over viewdata standards have failed to get it accepted as an international standard despite its technological lead.

Moves should be taken, it says, to encourage pupils at school to enter this field and to encourage industry to provide its own training schemes. **Judy Redfearn**

Bulgarian science

Reaching out

Varna

An unusual approach to international cooperation lies behind the Third PCITRRA International Colloquium (Physical and Chemical Information Transfer in the Regulation of Reproduction and Ageing), now taking place in Varna, Bulgaria. By presenting the work of young Bulgarian researchers side by side with papers by leading international experts in the field, the organizer, Dr Julia Vassileva-Popova of the Laboratory for Rapid Spectroscopy and Biological Physics of the Bulgarian Academy of Sciences, hopes to stimulate fruitful international working visits.

The theme of PCITRRA, as an international and interdisciplinary colloquium, was selected by Dr Vassileva-Popova in the early 1970s on the grounds that to compete in genetics would be to attempt to break into a very crowded field. She felt there would be more elbow room in the area of non-genetic information transfer, the first stages of hormone action, and bioreceptor and neurotransmitter processes. Since her laboratory is more than self-financing, exporting sophisticated rapid-spectroscopy equipment primarily to the USSR, the funding of basic research is a smaller headache to her than to some other Bulgarian laboratory directors. Accordingly, Dr Vassileva-Popova has been able to gather together a large and keen team. Since East European etiquette normally calls for the laboratory head or research supervisor to be cited as a co-author, this meant that out of the 117 scheduled communications, Dr Vassileva-Popova was named as co-author of 23.

The third PCITRRA colloquium (they have been held at three-year intervals since 1974) was formally part of the celebrations of next year's 1,300th anniversary of Bulgarian statehood, and was in part supported by the State Committee for Culture — the first time apparently that this body has sponsored an international scientific event. Yet Dr Vassileva-Popova is adamant that she is not trying to found a "Bulgarian school" of biophysics/biochemistry. In her opinion, it is scientists and not their countries which matter. Indeed, had it not been for a small organizational error, she said, the participants' badges would not even have shown their countries' names. She even suggested to the international organizing committee that the fourth PSITRRA colloquium might be held outside Bulgaria — a proposal which they emphatically rejected.

Certainly, Dr Vassileva-Popova has been able to attract to Varna an impressive international gathering — including Henry Arnstein and J. R. Tata from the United Kingdom, Oscar Hechter and Elwood Jensen from the United States, Friedrich Jung from the DDR, Rostislav Sovicka from Czechoslovakia, Pushpa Bhargava from India and Andrei Tchernitchin from Chile. And this in spite of the relatively long duration of the colloquium (seven days, with working sessions of up to ten hours a day) — Dr Vassileva-Popova eschews poster sessions, and insists that all papers from her young collaborators which reach the required standard are read in full. In addition, all those foreign visitors who could spare the time were invited to stay on for a new feature of the PCITRRA colloquia, a summer school for young scientists at Burgas, further down the coast.

One notable figure was absent — Sir John Kendrew, who was detained at an EMBO meeting in Heidelberg. His encouragement of Bulgarian biophysics and biochemistry was, however, recognized earlier this year, when he was given the highest award of the Bulgarian People's Republic — the Order of the Horseman of Madara.

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