

introduce legislation that would reinstate the original objective.

The universities are also worried about a new bill passing through Congress which could require that up to three per cent of the federal government expenditure on research and development should go to small businesses.

David Dickson

Telecommunications

Gear on sale at last

Users of the British telephone network can now legally buy handsets from retail shops. This is the first tangible effect of the Telecommunications Act, passed last November to liberalize part of British Telecom's business. Users may, however, be disappointed that the choice of telephones on the market has not yet increased. So far, only four types of handset have been certified for sale through general retail outlets, all of which British Telecom also markets itself. Twenty-five further requests for certification are waiting in the wings.

The aim of the act is to encourage open competition between manufacturers of equipment for connection to the public network. British Telecom will still retain control of the network but will have the right to connect only the first instrument. The liberalization is to be phased over three years, starting with handsets and discrete modems (digital analog interfaces, as they are known in the trade), followed by integral modems this spring, equipment not using call switching or loudspeakers in July, simple telex-teleprinters in October and, finally, private automatic branch exchanges (PABXs) in July 1983.

The British Standards Institution (BSI) has been charged with the task of drawing up compatibility standards for each type of equipment. Certification of individual items will be taken over by a newly-created subsidiary of the British Electrotechnical Approval Board (BEAB) later in the year.

So far, the liberalization seems to be going according to plan. But users and manufacturers have been concerned that it may be too slow. The system cannot get into full swing until BSI, which must follow lengthy procedures under its charter, has drawn up standards and BEAB has set up the machinery required for certification. Moves by BSI, however, to reorganize existing staff and appoint more and to reduce the time taken for public comment on draft standards to one month seem to have quelled some fears. First drafts for seven standards including plugs, handsets, modems, teleprinters and appliances to be connected to private circuits leased from British Telecom, are due to be published within a few months. Earlier wrangles over the terms under which BEAB would operate also seem to have been resolved. It is now hoped that an independent subsidiary will go into business in July.

Meanwhile, manufacturers have little

alternative than to accept the role of British Telecom, one of their competitors, as the approval agency and that of the Department of Industry in selecting applications for consideration. These interim arrangements, however, do not seem to have been a deterrent. The department has already received applications for many types of equipment, the latest being for PABXs from Ferranti, GTE, Harris Systems, Mitel Telecommunications, ITT Business Systems, Philips Business Systems, and Plessey Office Systems. One company, International Business Machines, is planning to use the liberalization to introduce equipment new to the British market. It is installing an Integrated Networking System, which allows separate telephone switchboards to operate as one, at the American Express International Banking Corporation.

On terminal equipment at least, there seems to be continued optimism that the liberalization will work without destroying too many manufacturers' hopes.

Judy Redfearn

Soviet biotechnology

Keeping a secret

Last month's annual general meeting of the Soviet Academy of Sciences placed a special stress on the development of Soviet biotechnology. Academician Ovchinnikov stressed especially the achievements of biotechnology. Soviet scientists, he said, were now leading the world in "a number of very important branches of biology".

Ovchinnikov's summing-up covers a major confrontation during the past year among scientists involved in biotechnology. There appears to have been a power struggle between Ovchinnikov and his supporters from the physical chemical wing and Academician Dubinin representing the biologists. After some manoeuvring, Ovchinnikov emerged victorious and Dubinin retired from active scientific life. At the same time, there was considerable criticism in the Soviet press of the management of molecular biology research which, since May 1974, has had "top priority" status.

Another and more interesting confrontation has apparently been going on between the academy's biologists and the military scientific sector. This began two years ago when Professor David Goldfarb, a Jewish biologist, applied to emigrate to Israel. Professor Goldfarb had previously been involved in work on bacterial plasmids, and therefore, according to the emigration authorities, his work could be classified as secret. Several Western scientists wrote to Academician Ovchinnikov on Professor Goldfarb's behalf, but received only noncommittal answers. According to the latest information, however, certain academicians have spoken out clearly to say that in their opinion Professor Goldfarb's work was

not secret. This accords with the fact that Professor Goldfarb was never cleared by the security authorities for access to secret information. The whole matter appears to reflect not merely the usual blocking of a Jewish scientist wishing to emigrate but a genuine conflict between the academy and the security establishment over what is and is not secret information in the field of biotechnology.

Vera Rich

Pasteur institute

Rien ne change pas

Paris

Francois Gros, science adviser to the prime minister of France, has thrown in his lot with politics. He has resigned as director of the Institut Pasteur in Paris, one of the most famous of laboratories. The laboratory was founded in 1888 by Louis Pasteur, and since then it has been directed by a series of well-known biologists: Gros, a Nobel laureate himself, took over from Jacques Monod. The call of the new politics in France must be great!

The new incumbent — who took up his job this month — is Raymond Dedonder, 60, previously director of the Institute of Molecular Biology of the University of Paris. Dedonder is a microbiologist with a strong inclination towards the application of his work to the economy and to medicine — something already well-established in the tradition of the Pasteur. He has worked with *Bacillus subtilis*, of interest to industrial genetic engineering; and with *Bacillus thuringiensis*, contributing to the development of a bacterial toxin against certain insects.

It is unlikely that Dedonder will much change directions at the Pasteur. He spent a large part of his early career there and so is a "Pasteur man" — and Gros himself is likely to continue to take a fatherly interest from the prime minister's office.

So plans made under Gros's directorship — and, in fact, under the previous government — will not change. A new laboratory of immunology has been established and a laboratory of biotechnology will be set up, to come into operation in 1984. The independent management of the Pasteur is likely to continue, despite the fact that half the institute's money comes from government. Dedonder believes that far from wanting to nationalize the Pasteur — as some have suggested — the government wishes to take it as a model of fruitful symbiosis between basic and applied research.

The one change that may come with the new directorship — and new government — is a greater emphasis on the overseas laboratories of the Pasteur, particularly those in Third World countries, such as the Institut Pasteur in Tunis, Algier, Casablanca, Dakar and so on, in line with the government's foreign policy. Dedonder will be encouraging that development.

Robert Walgate