

France creates new super-ministry

Chevènement adds industry to research

M. Jean-Pierre Chevènement, formerly French minister of state for research and technology, has risen to new heights in last week's cabinet reshuffle. Far from being affected by his gaffe over the Palestine Liberation Organization leader Yasser Arafat (see *Nature* 1 July, p.2), Chevènement has been promoted to a new super-ministry, the ministry of research and industry.

Because of the recent nationalizations, Chevènement will there control nearly half the productive power of France together with almost all government civil research and development through the staff of the old ministry of research and technology.

Thus Chevènement comes to be what must be the most powerful "minister of the future" in the Western world. Not only has he had a year to develop an energetic



Chevènement: ambition undimmed

politics of science and technology, enshrined in a law given final approval by the National Assembly last Wednesday, but now he has at his disposal the means to put it into action.

Strangely enough, Chevènement was once firmly against the idea of a joint research/industry ministry. When a previous government set up a ministry of industry and research in 1970, he took the line that research would be submerged and forgotten — which proved to be the case. Now he sees the joint ministry as a "lever" of social change.

All this grand politics has provoked disquiet in the universities, where some fear that even fundamental research will be drawn willy-nilly in Chevènement's politically determined directions. Others, however, hope that Chevènement will now be so concerned with the more immediate politics of industrial affairs that he will let research alone.

Nevertheless, the fact that the new

ministry will be called research first and industry second is significant: Chevènement will retain most of his old cabinet of immediate advisers, including his *directeur du cabinet*, M. Louis Gallois, and the man who was to be and will be responsible for seeing into effect the new law on science and technology, M. Roland Morin.

In industry, energy will be one of Chevènement's new portfolios, delegated through the junior minister for energy M. Edmond Hervé. In this field, Chevènement has shown himself catholic: he will consider any form of energy that will free France from dependence on oil. The fast breeder reactor and nuclear power in general are secure with the new minister; and so are biomass and other forms of alternative energy, supported through the recently created Agence Nationale pour la Maitrise de l'Energie.

In the rest of industry, Chevènement's actions are likely to centre on improving

industrial research and development, which has been a weak point in his plan to raise total national spending on research and development to 2.5 per cent of gross national product by 1985. (It stands at 2.0 per cent at present.)

French government spending is already on a par with that of other industrialized countries, critics of the plan have pointed out, and it is industry's effort that has to be raised, not government's. The point was well taken at the ministry of research and technology, and now Chevènement is in a position to do something about it.

The minister is considering fiscal policy (tax incentives) as a means of encouraging private industrial research (despite his early reluctance to use such a "blunt" instrument); and he can take direct action with nationalized industry. Through the nationalized banks, he may also set up sources of venture capital.

Robert Walgate

Hopes for Bell in AT&T case

Washington

The argument over Bell Laboratories' proper role in the soon-to-be unregulated American Telephone and Telegraph Corporation (AT&T) continued last week, as Federal Judge Howard H. Greene held hearings on the government's proposed anti-trust settlement with the company.

AT&T made clear that in agreeing to give up its local telephone companies (the Bell Operating Companies) it felt it was paying a high enough price for the right to enter the unregulated market in computers and data processing. AT&T has so far been barred from this area on the theory that revenues from its regulated telephone monopoly could end up subsidizing computer research and development, giving it an unfair edge in the open market.

Bell's would-be competitors argued that such cross-subsidies could still occur under the settlement, since AT&T would keep its *de facto* monopoly on interstate telephone traffic. Bell Long Lines currently handles more than 96 per cent of this traffic.

The crux of the matter is what role Bell Laboratories will play. At present, 80 per cent of Bell Labs' basic research is supported by the "licence contract fee" that the Bell Operating Companies pay to AT&T. This source will be lost after the settlement.

William Keefauver, vice-president and general counsel of AT&T, says that although this will cause problems, they will be "manageable". He says AT&T intends to maintain Bell Labs as a "first class research outfit" by making up for the lost support with increased contributions from Long Lines (which now supplies the remaining 20 per cent of basic research costs) and with contributions from

American Bell, the new AT&T subsidiary created to go into the computer market. Estimates of the Bell Operating Companies' current contribution to basic research at Bell Labs vary from about \$200 million to \$400 million, depending on how basic research is defined.

Judge Greene is expected to rule quickly. He has a limited range of choices: he can approve, disapprove or suggest changes. Disapproval would mean reopening the case, which has been going on for eight years already. Action in Congress, however, may make the ruling irrelevant. Representative Timothy Wirth (Democrat, Colorado) has introduced legislation that would make the proposed settlement into a law — but go a few steps further. The bill (HR 5158) stipulates that any transfer of funds from Long Lines to Bell Labs must be in the form of a contract for specific research. Any patents arising from such work could be made available to the unregulated portions of the company — American Bell, Western Electric (which manufactures telephone equipment), and AT&T's international division — but only if they pay for it, just as any outside firm would have to do.

AT&T has fought an intensive lobbying campaign against the bill and has spent \$3 million on it. Keefauver argues, however, that the bill would do serious damage to Bell Labs' traditional strength in basic research. He says the requirement that regulated and unregulated research support be separated is unrealistic when basic science is involved: "How do you know where your research is going to go? Electrons and protons don't know whether they're regulated or unregulated."

The subcommittee staff counters that AT&T last autumn said it could live with a provision in the Senate's version of this bill that required not only separate accounting, but an actual split of Bell Labs into regulated and unregulated divisions. Keefauver says that was only because the Senate bill would also have allowed AT&T to hold onto its operating companies.

The Office of Technology Assessment (OTA), which was asked to testify at the House hearings on the bill, has suggested, however, that AT&T's major objections to HR 5158 may not be directly related to Bell Labs. OTA staff point out that the anti-trust settlement itself will have an enormous effect on Bell Labs' basic research mission, if for no other reason than by putting a premium on applied research as AT&T enters the unregulated computer field. By comparison, OTA says, HR 5158 does relatively little.

The bill does, however, make some substantial changes in the anti-trust settlement's treatment of the Bell Operating Companies. It would in particular prevent AT&T from taking over the very lucrative Yellow Pages, the operation of pay phones and the sale of terminal equipment from the operating companies. AT&T would get all of these, along with a large share of the intrastate lines, under the settlement — leaving the newly-independent operating companies with nothing but the right to "market a dial tone" as one critic put it.

The House Energy and Commerce Committee is expected to deal with HR 5158 quickly but the chances of its being passed are only fair.

Stephen Budiansky

Spain for CERN

Spain has rejoined the European Centre for Nuclear Research (CERN) in Geneva, but at a reduced price — less than a third of what it should pay on the CERN formula linking subscription to gross national product.

Starting next January, Spain will pay 2.1 per cent of the £170 million CERN budget (about £3.5 million), rising to its full 7.1 per cent only in 1989. The reduced subscription has been agreed because Spain as yet has too few high-energy physicists to make full use of membership. CERN will allocate the extra cash two ways: 40 per cent to reduce the contributions of other member states and 60 per cent to experiments.

Spain's benefits will be various. The move will help to prove Spain's interest in Europe when it is applying for membership of the European Economic Community. The few Spanish people already at work at CERN will now be able to apply for time on accelerators in their own right, and there may also be contracts to be won for the components of LEP, the large electron-positron collider that will be CERN's next accelerator.

Robert Walgate

French research law

La loi at last

La Loi is the law. Last week the French law for research and technology was finally adopted by the National Assembly in a form much like that originally proposed by the government, despite vehement Senate opposition which put it many weeks behind schedule. Now the race is on to promulgate the various consequent decrees which, for example, will redefine the role of organizations such as the Centre National de la Recherche Scientifique (CNRS).

While the research and industry ministry claims that the law adopted is "90-95 per cent" the same as the original, others point to "substantial" improvements in the protection afforded by the law to basic science. One amendment, for example, mentions the importance of fundamental research to the whole programme.

There is, however, no escaping the fact that the law is basically to do with technology, and with two objectives: to stimulate French effort in the new technologies and to "open up" French science to industry. The key provisions of the law are as follows:

- To raise the government budget for civil research and development by a real 17.8 per cent per year (on the average) to 1985.

- To set up seven "programmes mobilisateurs" — tactical programmes (such as in biotechnology) on which the rest of the law (and funds) will be focused. The list of programmes may be modified each year, but for now will be: the rational use of energy and new energy sources; biotechnology; electronics; research and the Third World; improvement of working conditions; promotion of French as a scientific language; and a programme covering various industrial technologies.

- The creation of regional committees for research and development, consultative to the regional councils, which will have their own budgets and a degree of autonomy to develop a regional science policy.

- The creation of a new legal category of organization, "établissements publics à caractère scientifique et technologique", which will be applied to organizations such as CNRS. The formula will give these bodies an explicit duty to attempt to apply their work, to publicize their research and to train and educate researchers.

- A second category of organization — "groupements d'intérêt public" — is created to allow bodies such as CNRS for a limited period to form profitable liaisons with industry.

- In a kind of inclusive job description, the "mission" of a researcher is defined as the development of knowledge, its transfer to industry and society, its popularization, the education and training of young and old and administration.

- All government researchers will become "fonctionnaires", giving them the envied security of civil servants which, hitherto,

only university staffs have enjoyed.

Many in France consider these last two provisions as the most important. One outcome may be to increase the mobility of scientists between research and other jobs. Thus, say the hopeful, university careers may be unblocked while industry may be able to recruit more researchers.

Robert Walgate

European research ministers

Going where?

Brussels

An unexpectedly lively debate between the EEC's research ministers took place last week when they met in Luxembourg to examine the flood of proposals from the European Commission. A distinctly positive response greeted the plans to change the structures of EEC research programmes and to launch the ambitious "Esprit" programme on information technology (see *Nature* 3 June, p.352). More detailed plans are to be prepared on both for the next research council in November this year.

The next stage will be to prepare detailed proposals by 1 January 1982 on the bulk of the Esprit programme, by which time the planned pilot projects should have established the credibility of the concept.

Discussion at the council meeting was also devoted to the Super Sara project at the EEC's Joint Research Centre at Ispra in Italy which will carry out research on nuclear safety. There was some grumbling that it is likely to cost more than at first estimated, but no definite decision was made on this or the ideas put forward for all the joint research centres.

A squabble did develop over the 1982-86 research programme on medicine and public health, for which the Commission had proposed a budget of 20 million units of account (£36 million). Most countries preferred 16.9 million units of account, while the British and West Germans argued in favour of even less, 10 million units. Before there is official agreement, however, the European Parliament will have to be consulted.

Commission officials will be heartened by the seriousness with which the member states are now taking the urgency of starting large-scale cooperation not only on information technologies but in other sectors too. A fully-fledged framework programme on the stimulation of the Community's scientific and technological potential in the 1980s will be ready in November. "A new leaf has been turned in the history of the Community's research strategy. The fragmentary approach which characterized joint Community research and development in the past has been left behind and we are now moving towards objectives which reflect the EEC's real priorities", Vicomte Etienne Davignon was reported to have told the ten ministers in Luxembourg.

Jasper Becker