Congress Questions NBS Budget Cuts

Bid to eliminate fire research and building technology programs, cut computer science work triggers barrage of testimonials

Although it has not attracted nearly as much attention as the Administration's plan to sell the weather service, a proposal in the President's budget to shut down fire research and building technology programs run by the National Bureau of Standards (NBS) has drawn a sharp response in Congress.

Sentiment in favor of the programs appears to be strong enough in both House and Senate to secure them a place in the congressional budget, but this will not solve all of NBS's problems. The bureau was, in effect, the first national laboratory when it was established in 1901 to provide a reliable physical measurement system and offer a variety of scientific and technological services to industry and government. NBS has a record of worthy service, but in recent years seems to have slipped to a place below the salt in federal science.

Attention in recent House and Senate hearings on NBS centered on major program cuts proposed in the President's budget. Overall, the new Reagan budget calls for $98.7 million for NBS next year compared with $117.9 million this year, a net decrease of $19.2 million. (This is in direct appropriations. NBS also receives funds amounting to more than $50 million a year for work it does for other organizations.)

Both the Center for Fire Research and the Center for Building Technology would be eliminated with savings of $5.89 million and $3.7 million, respectively. The largest single cut would be some $7 million from the current $10 million budget of the bureau's Institute for Computer Sciences and Technology, effectively ending the institute's work in developing automatic data processing standards.

The threat to the fire and building technology programs rallied a panoply of industry and professional organizations to their defense. The U.S. Chamber of Commerce even weighed in with support for the two centers.

In both House and Senate hearings, witnesses repeatedly invoked NBS experts' investigations of disasters such as the collapse of the Hyatt Regency Hotel skywalk in Kansas City in which 114 people were killed in 1981 and the collapse of an overpass in East Chicago that killed 13 workers last year. The centers were portrayed as indispensable to such investigations because of general confidence in their technical expertise and lack of bias. Another common theme was that the U.S. building industry is so fragmented that only NBS has the resources and concentration of scientific talent to do the "nonproprietary" research and the development of standards for materials and equipment necessary to prevent such disasters and foster future progress.

National Bureau of Standards

The Tower in Gaithersburg, Maryland.

On 22 March the Senate Committee on Commerce, Science and Transportation followed the lead of its science subcommittee headed by Senator Slade Gorton (R–Wash.) and approved an NBS authorization measure containing funds for fire research, building technology and computer science programs restored to current levels. Indications at the House hearings before the Science and Technology Committee's science subcommittee headed by Representative Doug Walgren (D–Pa.) were that similar action would be taken in the House.

Because discussion at the hearings was concentrated on the Administration's proposed program cuts, there was little consideration of the general state of NBS. At the Senate hearing in February, however, remarks by the chairman of the National Academy of Sciences' evaluation panels for NBS indicated all is not well.

MIT professor Mildred S. Dresselhaus heads the corps of 180 experts from industry, government, and academe who annually evaluate NBS programs. Like other witnesses, she opposed cuts in the fire, building technology, and computer science programs, but also expressed misgivings about broader trends at the bureau in recent years.

"Staffing reductions during 1979–1982 have seriously reduced the effectiveness of NBS programs, severely restricted the ability of NBS to move into important new areas, and contributed to serious morale problems, she said. After years of stability at about 3100 full-time permanent (FTP) staff members, NBS has been reduced to about 2700 FTP's in fiscal year 1983. Such a large reduction in force in so short a time has devastating effects on a scientific organization."

NBS estimates that the agency budget in fiscal year 1979 was about $89 million in constant dollars in direct funding and a total $156.3 million compared to a projected $86.4 million and $142.9 million next year if the Reagan budget prevails. During the period from 1979 to this year, total permanent positions at the bureau declined from 3120 to 2666. In the same period, the number of professional staff decreased from 1531 to 1354.

What has been the effect of this plateau in funding and perturbation in employment? The impression of a Bell Laboratories scientist who has had contact with programs in NBS's mainline National Measurement Laboratory over two decades is that NBS is "holding up."

William P. Slichter, a member of the NAS evaluation committee, says he thinks "the quality of research there is well sustained. The big problem now and for the past several years is an aging population. They're not bringing in enough young staff and postdocs to provide the revitalization that any institution needs. If they don't do something about getting new people in they may be in trouble."

During the House hearings, Democratic members of the authorization panel made particular efforts to elicit the Administration rationale for making the cuts. The general aim, they were told, was to reduce the budget deficit. Also, the Administration was following a broad policy of requiring users to defray costs of services that they require from government and of shifting the responsibility for applied research from the public to the private sector.

The burden of responding to this questioning of motives fell on NBS director Ernest Ambler.

Representative George E. Brown, Jr. (D–Calif.), was the most persistent in pursuit of the identities and motives of the policy-makers. With the Office of Management and Budget obviously in mind, he told Ambler, "I get the distinct impression that budgetary decisions and most of the planning decisions are being made elsewhere." Ambler, who like other agency witnesses, made it clear that he was there to defend the Administration budget, did concede that, "Mr. Brown, any director of a bureau will tell that he gets a lot of help."

A point Brown seemed to be getting at was expressed this way in earlier testimony by Dresselhaus. "It is difficult to understand the devastating budget cuts in basic research of the NBS funding for 1984 in view of the general policy of the 1984 budget, which shows a large increase of 18 percent in basic research across the various agencies."

A witness at the House hearings, Robert H. Pry put it another way. Pry, vice chairman for technology of Gould, Inc., said "I find it puzzling that the one department marked for the largest percentage decrease in R & D is the Department of Commerce, whose record for providing technical results useful to industry, per dollar spent, is unsurpassed by any other government department or agency."

Congress is not above reproach in its dealings with NBS. For example, it recently began imposing "floors" on spending for activities it deemed important. In a period of static or shrinking funding, such rigidity can be damaging to a scientific agency. And the congressional process is a rough and ready one in which it is easier to deplore and restore budget cuts than to look carefully at an agency like NBS and inquire if it is doing what it should be doing and doing it well or poorly. But now in the case of NBS the legislators seem to have caught the Administration in a contradiction between the policies it professes and actually practices. At any rate, if the Administration has a persuasive counterargument, it was not made at the hearings.

—JOHN WALSH

Research Chief Quits French Cabinet

Paris. France's flamboyant minister of research and technology, Jean-Pierre Chevènement, has resigned following a major political disagreement with President François Mitterrand and the majority of the French Cabinet over the steps that should be taken to boost France's technological industries and solve its economic and social problems.

Chevènement's resignation was announced last week as part of the broader reshuffle of cabinet positions that followed the devaluation of the French franc and the revaluation of the German mark. He will be succeeded by Laurent Sabius, a 36-year-old protégé of Mitterrand who was previously minister of the budget and is expected to follow a more conventional path than his predecessor. Significantly, the order of Sabius' responsibilities have been reversed in this title, so that he will now be minister for industry and research.

The timing of Chevènement's departure, the most notable change in the Cabinet lineup, was partly coincidental. Chevènement had, in fact, handed his resignation to President Mitterrand on 2 February, after a meeting of the Council of Ministers at which he had been reprimanded by the President for wanting to play an excessively large role in determining the strategies of France's newly nationalized industries.

Chevènement had argued that strong intervention was the only way of making the government's economic and technology policies consistent with its socialist principles. Mitterrand, however, preferred to listen to other Cabinet members who argued that the industries should be left more free to pursue their own strategies.

The clash had been brewing for some time. Chevènement, a charismatic politician who generates strong emotions in both his supporters and detractors, is the leader of a powerful left-wing group within the French Socialist party which had long expressed its opposition to the increasingly monetarist policies that the government is adopting under the guidance of its finance minister (and new deputy prime minister) Jacques Delors.

As research minister, Chevènement achieved some notable successes. He persuaded the government to endorse in principle an expansion of the research and development budget from 1.8 to 2.5 percent of the gross national product by 1985. He also organized a vast national colloquium on research policy at the beginning of last year which helped reduce the skepticism of the scientific community toward his plans. The previously low morale of scientists was raised further when the promised increases in research spending began to materialize last year with a research budget almost 10 percent higher in real terms than in 1981.

In July 1982, Chevènement was promoted by Mitterrand, who added responsibility for industry to his portfolio. It was a challenge to which Chevènement responded eagerly, arguing that France could become the world's third technological power behind the United States and Japan.

In the end, however, he was unable to reach his goals. He faced combined resistance to his proposals for strong government intervention both from the industries for which he was now responsible—ranging from chemicals to telecommunications—and from Cabinet colleagues who argued that it was necessary to place economic pragmatism before ideology.

There was also growing disenchantment with Chevènement's strategy within the scientific community. Many French scientists are concerned that general budgetary constraints will mean that support for research this year will fall well behind the promised targets and that Chevènement's expanded responsibilities would have left him little time to attend to their more parochial concerns, such as the revision of career structures within research institutions.

Chevènement's successor, Sabius, lacks Chevènement's political commitments and charisma but has built a reputation as an effective and intelligent administrator, as well as a successful political tactician. He is expected to proceed more cautiously, giving greater responsibilities and freedom to the private sector but endorsing his predecessor's support for increased funds for basic science.

—DAVID DICKSON