## Europeans Wary of U.S. Offer on Military R&D

A \$200-million item in the U.S. defense authorization bill seeks to rationalize military RCD within NATO

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HE United States is dangling a \$200-million carrot under the noses of its European allies to encourage them to develop a joint approach to research and development on a range of new conventional weapons and communications technologies.

The carrot takes the form of an amendment to the 1986 Defense Department authorization bill, proposed last year by Senator Sam Nunn (D–GA), which earmarks this money to be spent only on collaborative R&D projects between U.S. companies and those from other members of the North Atlantic Treaty Organization (NATO).

So far, the reaction in Europe has been mixed. Some countries have been quick to sign up for the six projects that have already been put forward—ranging from an airborne radar system to a new precision-guided missile—and more signatures are expected when the national armaments directors of the individual NATO countries meet in Brussels on 15–16 April.

At the same time, some fears have been raised that a U.S.-led program could undermine Europe's own attempts to start rationalizing its defense industries through joint research efforts, a goal currently being pursued by NATO's European members (including France) through the Independent European Program Group (*Science*, 26 April 1985, p. 475).

Nevertheless, U.S. officials are optimistic that their offer, which some see as complementary to the much larger Strategic Defense Initiative (SDI) research effort, will prove an important step toward closer collaboration in weapons-related research. "We feel that this is the most important R&D initiative that has ever been taken by the allies," says Dennis E. Kloske, a member of the U.S. Mission to NATO and a special adviser to Deputy Secretary of Defense, William H. Taft.

Several lines of thinking lie behind the new move. First there is the purely economic argument, long familiar in defense debates on both sides of the Atlantic, that better value for the defense dollar and a more effective defense system would both result from a greater harmonization of the military hardware produced by the 16 different members of the NATO alliance.

"It's ridiculous to have seven different countries each working on their own antitank weapons, or six different projects for remotely piloted vehicles," says Robin Beard, assistant secretary general of NATO for defense support. Research and development, he adds, is the most effective place to start getting people to work together.

The second argument comes from those, like Senator Nunn, who have been saying for several years that European countries should be doing more toward the overall support for NATO. Two years ago, Nunn

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caused considerable consternation in Europe when he proposed an amendment to the DOD authorization bill—narrowly defeated, but still being kept visibly on the shelf—threatening to reduce the commitment of U.S. troops to NATO unless European countries increased their conventional weapons spending.

The new amendment, which was co-sponsored by Senators William Roth (R–DE) and John Warner (R–VA), is said to have been put forward by Nunn as a different strategy for achieving the same end. In this context, some argue, the European response will be seen as a test of good faith, with the unspoken postscript that, if it is turned down, this could again become a pretext for the United States to reduce its NATO involvement.

Less explicit is said to be a growing fear in Washington that a technologically strong but independently oriented Europe would not necessarily be in the best interests of the United States, and could indeed weaken the political coherence of the NATO alliance.

In order to avoid a misalignment with Europe's own objectives, the first six projects have been identified after close discussion both with the European program group and with individual European capitals.

The projects on this list are: a stand-off airborne radar demonstrator system for a surveillance and target acquisition program; autonomous 155-millimeter precision-guided munitions; components of a "friend or foe" identification system; a multifunction information distribution system; modular stand-off weapons; and support environments for the high-level computer language Ada.

NATO officials point out none of these is aimed at meeting immediate hardware needs, but more at projected needs in 10 to 15 years' time. However, in each case, they relate directly to mission requirements that have already been identified by NATO commanders and endorsed at a political level, such as "follow-on forces attack," maritime defense, and Command, Control, and Communications.

Furthermore, although the program is not explicitly related to SDI, NATO officials point out that several of the technologies involved—such as those concerning surveillance and target acquisition—could be integrated into a defense against short-range missiles that is seen as an essential element of the "European architecture" of SDI.

The links between the two could be strengthened still further if, as some are already suggesting, a joint U.S.—European research project for the development of a new medium surface-to-air missile (M-SAM) is added to the list. M-SAM is already seen as an integral element in the so-called European Defense Initiative supported by West German Minister of Defense Manfred Wörner

So far, six separate working groups have been set up on each of what are provisionally called the "Nunn Co-operative Projects," after "letters of intent" were signed at a top-level meeting in Brussels of NATO deputy foreign ministers attended by Donald Hicks, under secretary of defense for research and engineering.

Some countries have openly expressed enthusiasm for the initiative. A spokesman for the West German mission to NATO, for example, said that his government's response had been "very positive." But the response has not been wholly uncritical. Keith Hartley, director of the Institute for Research in the Social Sciences at the University of York and an expert on the economics of arms cooperation, points out that there is still considerable distrust in Europe of U.S.

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offers of collaboration, which can mean little more than working as a subcontractor.

"The advantage of starting at the research end is that it is relatively inexpensive, but it is also likely to raise the question: Is this another SDI-type program, where the United States is trying to buy all our ideas on the cheap," says Hartley. "I am not saying that is necessarily the case; but some people will certainly use that argument."

David Greenwood, director of the Center for Defense Studies at the University of Aberdeen in Scotland, warns that the Nunn initiative "is a potential distraction from intra-European cooperation" which, he argues, remains essential if Europe is to strengthen its own technological capabilities. "One way around this would be to add a clause to the amendment saying that the United States would not try to take a slice of any cooperative deal unless two or more European countries are already involved—even if the United States offer has acted as a catalyst," suggests Greenwood.

Nevertheless, Beard of NATO says "the mood is there." He suggests that, with broad political endorsement of the first six projects, "we have run the first 10 yards of a 100-yard race." With a firm deadline of September 1987 by which formal contracts must be negotiated in order to qualify for the Nunn amendment funding, and progress being closely monitored from Brussels, "there is going to be some banging of heads together" to get things to work, says Beard. 

DAVID DICKSON

## Briefing:

## David Packard Tackles OMB on Indirect Costs

"The [Office of Management and Budget] did precisely what we recommended they not do," when it proposed a uniform cap of 26% on the administrative costs that universities recover on research grants, says David Packard, chairman of a panel of the White House Science Council. The Hewlett-Packard board chairman, whose panel is about to release its study of "The Health of U.S. Universities and Colleges," is one of the most influential persons to step into the very heated debate that is taking place between universities and OMB officials.

The forthcoming Science Council report will recommend a cap on administrative costs, which constitute about half of total indirect costs. But, by singling out this one recommendation, the OMB has distorted the intent of the report, in Packard's view.

"The OMB lacks any understanding of what the problem is all about," according to Packard.

Placing emphasis on the report's recommendations as an "integrated package," Packard said, "In suggesting a fixed administrative overhead allowance, we also recommended important measures to inject reality into the way research costs are identified and paid for." For instance, the report, which was circulated in draft form in January (Science, 31 January, p. 447), recommends a shift to longer term grants (5 years), an end to the administratively burdensome reporting by faculty of how they spend their time, and a new formula for more rapid depreciation of buildings and scientific equipment.

Packard's comments were made during an interview with Spyros Andreopoulos, director of communications at Stanford Medical Center and were released by the university. D. Allan Bromley of Yale is vice chairman of the Science Council panel.

The rates charged for administrative costs vary from institution to institution, with most exceeding the 26% cap that OMB proposed earlier this year in a move that took university administrators by surprise. Robert Rosenzweig, president of the Association of American Universities, has called the OMB proposal "arbitrary and capricious" (Science, 7 March, p. 1059). Various estimates have been made of the total impact on academic research, were the cap to stick. Most recently, Stanford president Donald Kennedy put the figure at \$300 million, with 40% concentrated in fewer than a dozen institutions.

OMB's original plan was to cap administrative charges at 26% as of 1 April, fewer than 6 weeks after the proposal was made public. However, strong opposition from universities, backed by pressure from members of Congress, forced OMB to grant a stay of execution until 1 July (*Science*, 4 April, p. 17). Now the budget office is considering comment from all quarters, including "scientific professionals who would have less opportunity to pursue research if overhead continues to climb."

At present, there is reason to speculate that implementation of the OMB cap may be delayed even further while the issue is more fully debated. In the House of Representatives, Sidney R. Yates (D–IL) has introduced an amendment to an important supplemental money bill that would mandate a delay. The congressman objected to the "arbitrariness" of OMB's action, which was taken without consulting the affected universities.

And Packard is talking to OMB to "see if we can get this thing turned around."

BARBARA J. CULLITON

## NAS Signs New Pact with Soviet Academy

After a year of negotiation, the National Academy of Sciences (NAS) has reached agreement with the Academy of Sciences of the U.S.S.R. on a new program of scientific cooperation. The 2-year pact, signed on 1 April, will be the first formal arrangement between the academies since 1980, when the previous program was partially suspended by the NAS as a protest against the treatment of Andrei Sakharov.

In a telephone interview, NAS president Frank Press listed the principal features of the new program. "Both sides will have access to the scientists who are at the forefront of key fields," Press said. This will be accomplished, the agreement says, through exchanges of up to 20 scientists per year for visits of 2 weeks to 12 months, all of whom are "known by their scientific publications and by their participation in scientific meetings." Reflecting an NAS concern that past Soviet nominees for the exchange have not always been at the forefront, the agreement notes that "an important and significant portion" of the exchanges will occur by invitation of the other side.

In addition, the pact calls for up to two joint workshops per year in each country, involving roughly ten scientists, and an annual exchange of six members, specially designated as "Academy Scholars," who will consult and conduct public lectures for 2–4 weeks on problems of mutual interest. The entire arrangement will be reviewed at least once a year by the officers of the Academy, who are free to raise matters such as the "human rights environment," Press said.

A year ago, when the negotiations began, the NAS was sharply criticized by some of its members because Sakharov remained in exile (*Science*, 3 May 1985, p. 530). Richard Perle, an assistant secretary of defense for international security policy, also attacked the decision on the grounds that it could facilitate the transfer of sensitive U.S. technology.

The agreement addresses the latter criticism by specifying that the exchanges will be conducted only in "nonsensitive" or "open" fields. The NAS attempted to defuse the former argument by sending a telegram about Sakharov to members of the Soviet Academy several days after the new pact was announced. The telegram asks that Sakharov be allowed to resume his scientific work, and it was paired with an NAS press release listing similar appeals in the past.

A new approach is warranted, Press said, "because we had no channel of communication in the absence of an agreement. Our