France Seeks Joint European Research

Paris. Can Archimedes meet the challenge of Darth Vader? Such is the proposition that France has put to its fellow European countries, suggesting that they collaborate on an extensive series of advanced technology research projects, grouped under the title "Eureka," as a counterweight to cooperation with the United States in the research phase of the Strategic Defense "Stars Wars" Initiative.

Eureka is the slightly awkward acronym for the proposed European Research Cooperation Agency. At present, the proposal remains somewhat ill defined; French officials, for example, sensing the reluctance of some of their European partners to endorse the creation of a new organization, admit that it might not turn out to be an "agency" in the conventional sense of the word.

Nevertheless this relative lack of definition has not prevented France's minister for external relations, Roland Dumas, from writing to his European counterparts suggesting that some major step in the direction of increased collaboration is necessary if Europe is to catch up with the United States and Japan in a number of critical areas of high technology.

Project Eureka would foster cooperation in six high-tech areas.

Drawing on the political success of the European Community's ESPRIT program in microelectronics, as well as President François Mitterrand's frequently stated vision of a technologically united Europe, Dumas has suggested six particular fields in which joint research could be increased: optronics (the merger of optics and electronics); new materials; supercomputers; high-powered lasers and particle beams; artificial intelligence; and high-speed microelectronics.

Technical steering committees would be set up in each of these areas to compile an inventory of current activities in different European states and suggest specific topics for research. Different countries participating in Eureka would be able to choose which of the research topics they want to take part in and how much money and effort they want to commit. This formula has already worked successfully for a number of programs run by the European Space Agency, including the Ariane launchers and Spacelab.

"It is important that we adopt the greatest flexibility possible, organizing joint projects according to a 'variable geometry' " says Hubert Curien, the French minister of research and technology who, as a former chairman of ESA's council (and president of the French National Center for Space Studies), has had long experience in putting together such packages.

Officially, Eureka has little to do with the American invitation to European governments (and industries) to participate in the SDI research program. Rather, says Curien, SDI has merely acted as a "catalyst" that has accelerated ideas already being discussed. Furthermore, suggests Curien, the importance of the research fields that have been selected lie as much in their civilian applications as in any military spin-offs they might have.

Yet little effort has been made to hide the fact that the six research areas being suggested by France for increased European collaboration—which will not necessarily be confined to the ten current members of the European Economic Community (EEC)—are precisely those areas in which the United States is currently seeking research partners and is likely to concentrate its initial SDI research efforts.

The timing is far from coincidental, for the French proposal has been put forward at a time when virtually every European capital is locked in a fierce debate over whether to accept the American invitation, and what the consequences are likely to be.

The main fear in Europe is that, even where political leaders have strong reservations about the strategic viability of SDI and concerns about its impact on their current defense policies, individual companies and private research organizations (more than 70 of which are said to have been approached by the Defense Department so far) will feel considerably less reluctant to collaborate if given the opportunity. This is feared, in turn, to lead to a further fragmentation of Europe's research efforts in a number of important fields of advanced technology and possibly a renewed scientific brain drain. Both would weaken Europe's ability to compete in economic terms with the United States and Japan.

Speaking at a meeting of the Western European Union in Bonn last week, for example, Dumas warned that "if we do not quickly harmonize our policies, nothing can prevent our research workers, our capital, and our industrialists from giving in to the temptation of ad-hoc cooperation, with the role of Europe [in the SDI program] becoming reduced to that of a subcontractor."

So far, reaction in European capitals to the French proposal has been mixed. Enthusiastic support has already come from the Belgian government, and there has been encouragement from West Germany, as well as Italy and Luxembourg. Britain has so far been more lukewarm, expressing less concern than the French about the dangers of a fragmented response to the U.S. request for collaboration on SDI research, and reserving judgment on Eureka until officials in London have seen more details of what Dumas has in mind.

The reception has been even cooler in Brussels, where the French initiative is seen as a potential competitor to the EEC Commission's own plans for strengthening European technology through expanding the joint research programs for which it has direct responsibility, and which EEC president Jacques Delors recently suggested be increased from 3 to 6 percent of the commission's budget.

Nevertheless, according to Curien, there was a "very encouraging and very positive" response to the French proposals when he put them before his fellow European research ministers at a recent meeting in Rome, and top priority is now being given to sketch out the proposals in more detail and generate a broad base of support.

—DAVID DICKSON