

EEC Research Program in Jeopardy

Efforts to develop collaborative research programs among 12 European nations are running into trouble because some countries say the costs are too high

PARIS — EUROPEAN nations' spending on collaborative research projects in high technology has become the center of a major political battle between affluent and less affluent countries. At stake is the question of whether the collaboration needed to compete with Japan and the United States should be based primarily on market forces, or on a broader vision of European unity.

Three days before Christmas, a meeting of the twelve research ministers of the European Economic Community, was canceled when it became clear that no agreement was likely to be reached on ambitious proposals to increase joint research spending through the EEC Commission by an average of 20 percent a year over the next 5 years.

The Commission, which is the executive body for the EEC, had already scaled down its proposals for a 5-year "framework program" from \$10 billion proposed in April to \$7.5 billion. The framework covers research areas ranging from advanced computers through biotechnology to fusion energy (*Science*, 25 April 1986, p. 447). The framework program sets out broad research priorities and an overall financial package that must be agreed to unanimously by all member states.

The proposal to limit funds to \$7.5 billion has received the full support of the European Parliament, as well as eight out of the 12 EEC countries. However, these are primarily the smaller and less economically powerful nations, who see European research projects, such as the information technology scheme ESPRIT, as a way of overcoming their own weaknesses in science and technology.

In contrast, the Commission's proposals remain firmly opposed by its three major budget contributors—France, West Germany, and Great Britain—each of which has said that it is not prepared to commit itself even to the reduced figure. The Netherlands has also argued that the proposed figure is too high.

The most vocal opposition has come from Britain. Even though he was concluding a 6-month chairmanship of the council of EEC research ministers, Geoffrey Pattie, the minister of state for industry and information technology, is said to have been given firm instructions by the British Cabinet (acting on the advice of the Treasury) not to agree to a joint 5-year research budget costing more than \$3.5 billion. This, in line with Britain's domestic policies on research, which would keep spending roughly at its current level for the next 5 years.

But there also has been firm opposition to the Commission's demands from both West Germany and France which, together with Britain, currently fund 80 percent of Europe's research and development efforts. Germany has voiced reservations about a key element of the proposals, a 10-year \$855-million program of research in advanced communications known as RACE; its reservations reflect the reluctance of Germany's largest telecommunications company, Siemens, to endorse substantial public support for a research field in which it considers itself to be well ahead of most European rivals.

France has been less open about its objections to the European Commission's proposals. But at a time when, like both Germany and Britain, it is trying to keep a tight cap on all research spending, the French government appears keener to support the technology cooperation scheme Eureka, launched two years ago by French President François Mitterrand, and since kept carefully outside the EEC framework.

Despite much initial skepticism, Eureka continues to gain momentum. Early in December at a meeting in Stockholm, research ministers from 18 European countries endorsed 37 new projects for international collaboration between high-technology companies and university-based research teams, ranging from the development of artificial seeds to advanced microchips. This brings to 109 the number of projects approved so far, each jointly funded by gov-

ernment and industry, with a total value estimated at \$3.3 billion.

In a speech to the Stockholm conference, Britain's Pattie claimed that two factors helped explain the growing enthusiasm for Eureka. One was that the projects were primarily selected by the companies themselves; the second was the emphasis on "market-opening measures," such as promoting the acceptance of common standards.

Supporters of the EEC's Framework Program argue that they are trying to spread technological opportunities equitably across Europe, whereas Eureka tends to favor those countries which are already technologically strong. "It is the old conflict between those nations which are more developed than others," says Rolf Linkohr, a member of the research and technology committee of the European Parliament. "The EEC program will have an integrating effect for the whole of the European Community, since the community has an in-built ideal of solidarity between rich and poor. That is why it is so important for us."

Critics such as Pattie argue that more work needs to be done on improving the efficiency with which the Commission spends its research funds, including the way in which it chooses between rival projects on the ground of industrial relevance, and evaluates their final results. A funding increase for the Joint Research Center in Ispra, Italy, has been rejected following a highly critical report of its internal organization and lack of critical evaluation.

Commission officials in Brussels are therefore having to tread a delicate path. On the one hand, they have reacted strongly to the research minister's rejection of their proposed spending plans, issuing a statement which described the cancellation of the pre-Christmas meeting as a major set-back to Europe's efforts to meet the dominance of Japan and the United States in all fields of high technology.

But these officials are also aware that, faced with the opposition of their three largest contributors, an impending financial crisis due primarily to the costs of the EEC's agricultural subsidies, and the rival attractions of Eureka, they are in a weak position to exert any substantial leverage.

Thus, although Commission president Jacques Delors has threatened (with the support of the European Parliament) to withdraw the whole of the Framework Program if the full \$7.5 billion is not approved a compromise appears inevitable. Also inevitable is the fact that it will fall far short of the Commission's initial ambitions, and that some hard decisions will have to be faced in the months ahead over which projects suffer the biggest cuts. ■ DAVID DICKSON