

SURVEY OF SCIENCE IN EUROPE

Prospects for European Collaboration

THE pages which follow show that in the past year there has been still further progress towards sensible machinery for international collaboration among European scientists and technical people and that, for better or worse, the European Commission in Brussels is beginning to play a constructive part in that process. The past year, and those preceding it, have also produced some notable successes. CERN at Geneva is a model for everyone, and soon there will be EMBO to follow. Laboratories all over Europe have become foci for collaboration, especially when research depends on the accessibility of large and expensive instruments in high energy physics and astronomy, for example. There have also been some successes in technological development.

Against all the odds and in spite of the way in which Euratom became moribund half way through, the project for developing a high temperature reactor has turned out well, and may yet make a useful contribution to nuclear technology. The ambitions of the European Commission to sponsor technical collaboration in the development of computers and telecommunications have fared less well, in spite of the energy of M. Pierre Aigrain. European space research continues to flounder, possibly because Europe is not ready or has no need of a gigantic organization like NASA in the United States, while there remains a danger that European governments will be seduced into spending money on rockets for launching satellites before it is apparent that the money would be usefully spent.

So far, most of the institutions for scientific and technical development in Europe have been created in response to particular needs and have come into being only when the case for their existence has been strong enough to overwhelm the objections to them, logistical and chauvinistic. In the circumstances, the attempts so far at creating forms of international collaboration on a European basis have been patchy, to say the best of them. And it remains a scandal that in several important technical matters, the development of fast nuclear reactors for example, nothing of substance has been done to prevent four governments—the British, French, German and Italian—from spending money on the separate development of reactors which are, in their essentials, the same. Worse still, European governments and private companies are still hard and separately at work on the development of the engineering equipment on which modern telecommunications are based (which is not of course to say that consumer products such as television sets cannot be transplanted from one country to another).

It is true that the British and French governments have collaborated on the development of a supersonic aircraft, but that is almost the exception that proves the rule—commercial organizations, however large, would not have sunk good money into such an uneconomic enterprise, and the chances are that each government would have been saved from its folly at an early stage if it had not been bolstered up by its partner. In short, in spite

of all the tangible benefits which the European Communities have already brought in economic fields, European industry and the scientific research on which it depends are still far from tightly coordinated.

What is to be done? The most immediate need in Europe is that the dependence of advanced industries on the national markets should be lessened. In Britain, for example, the Post Office Corporation is still largely dependent on British made equipment; and it will be many years before it switches over, of its own accord, to manufacturers from the mainland. Defence equipment is again largely a domestic purchase for European governments, even though there have been some sensible arrangements for the collaborative development of new aircraft and tanks. In the long run, however, it is clear that this chauvinism in the purchasing of advanced equipment will restrict enormously the efficiency of European industry in a properly European context.

In the circumstances, what is needed is an understanding among European governments that public purchasing of advanced equipment will in future be determined not by the geographic origin of the products but by considerations of price, pure and simple. The European Commission could do an important public service if it spent less energy huffing and puffing about particular schemes for collaboration and more on urging member governments to adopt such policies. In the same breath, it could usefully take steps to urge that European governments should begin to think how best to pool their collective resources in the conduct of basic research through universities and other institutions. For several years Europeans have been talking in a desultory fashion of institutions that would distribute funds for basic research to all comers. In present circumstances that is an unattainable goal. But is it not high time that existing grant-giving bodies gave money to university research groups outside the national frontiers within which they are at present confined? And should not the research councils take foreign nationals onto their committees? In the long run, one of the biggest objections to Lord Rothschild's recipe for the organization of basic research in Britain is that it says nothing of the rest of Europe.

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