European Synchrotron Choice Draws Protests

Selection of Grenoble by the French government is viewed as a political decision; some nations complain they have been excluded

Strasbourg. The French government has been hit by a fierce storm of protest over its decision to propose the city of Grenoble in the French Alps as the site for the construction of the European Synchrotron Radiation Facility (*Science*, 2 November, p. 524).

A recent visit by President François Mitterrand to the region of Alsace was boycotted amid nationwide publicity by virtually all local politicians, who claimed that the government has broken a promise to back the rival candidacy of Strasbourg, situated on the border between France and West Germany, as the site of the new machine.

Two days previously, representatives from Scandinavian countries attending the annual assembly of the European Science Foundation in Strasbourg had registered their own protest at the way the French and West German governments appear to have preempted formal consideration of site proposals from smaller European countries. By agreeing jointly to support the Grenoble proposal and to provide 60 percent of the funding, France and West Germany have virtually guaranteed that the proposal will be accepted. It will be a $200-million facility that will use the hard x-rays given off by accelerating electrons to study the structure of both organic and inorganic matter.

The announcement that the French government had chosen Grenoble rather than Strasbourg to host the facility was made in mid-October by Louis Mermaz, the leader of the majority socialist party in the National Assembly. Both science and politics seem to have played a part in the decision. Indeed, uncertainty about the relative weight given to these two factors largely explains the controversy that continues to surround the outcome of several years' intense discussion.

French research minister Hubert Curien said at the meeting of the European Science Foundation (of which he has been the president for the past 4 years) that one reason for choosing Grenoble was that the synchrotron would be placed adjacent to the high-flux neutron reactor run by the Institut Lauë-Langevin (ILL), and would thus be in a good position to make use of the institute's existing technical and administrative infrastructure.

This reasoning was endorsed by Harry Atkinson, director of the science division of Britain's Science and Engineering Research Council, even though he added that Britain (which finances the ILL jointly with France and Germany) was not currently in the position of being able to put any money into the new project.

Few observers have failed to comment, however, on the fact that Grenoble lies in the center of the region represented by Mermaz in the National Assembly, and that the socialists are keen to reverse the loss of the city to the conservatives in last year's municipal elections after almost 30 years of socialist rule.

It is also being pointed out that although the choice of Strasbourg was strongly lobbied for by the National Center for Scientific Research (CNRS), which had hoped to see the facility become the center of an entirely new international research institute, Grenoble's case had the backing of the powerful Atomic Energy Commission, the current landlord of the ILL.

> Denmark and Italy may decide not to provide any money for the project.

Whether or not political factors such as these played a major role in the final decision, their very existence is being skillfully exploited for maximum effect by those who would still like to see the machine go to Strasbourg (as well as those with other reasons for wishing to embarrass the socialist government).

Local politicians, for example, backed by many local university and CNRS scientists, had long been hoping that the construction of the synchrotron in Strasbourg would become a symbol for the economic and technological renaissance of a region that currently has a 15 percent unemployment rate. They claim that the government supported this strategy in a "planning contract" signed with the regional council in April, in whose annexe it says that the French government will propose Strasbourg to its European partners as the site of various joint projects, including the synchrotron facility.

Although the government now says that this was merely a statement of intent rather than a binding legal agreement, this interpretation is being contested by local political groups—particularly those aligned at a national level with the conservative opposition—who are using the affair of "our synchrotron" to symbolize their broader opposition to the government's policies.

In scientific circles, those who remain critical of the decision and the way it was made are focusing their objections around two points. The first is the suitability of the Grenoble site, which is located near the center of the city on land squeezed between two main roads and adjacent to the river Vrac (Strasbourg had made the more scientifically attractive offer of a virgin site on the city outskirts).

Some are questioning the likely impact of heavy vehicles moving past, suggesting they could affect the quality of observations. Others point out that although the site being offered is just able to accommodate the synchrotron in its current form—a ring 770 meters in circumference—there would be no room for the addition of major new facilities if these were felt to be needed in 10 or 15 years time.

In reply to the first criticism, Brian Fender, the current director of ILL who was largely responsible for Grenoble's bid for the facility, says that a survey carried out over the summer by the Atomic Energy Commission suggested that outside disturbances were not significantly greater than the tolerances suggested by the synchrotron's design team. Fender also points out that nearby sites could be used for later expansion, and that the suitability of these is now being studied both by the Atomic Energy Commission and the CNRS.

The second focus of criticism concerns the way that the decision to back the Grenoble site was taken by France and West Germany after little consultation with other European nations. Anger has been expressed particularly strongly by Denmark and Italy, both of whom had promised substantial government support for their own site proposals for the facility, in Risø and Trieste, respectively (*Science*, 27 July, p. 391).

The decision by the West German government to support the construction of the facility in France was taken as part of an agreement under which the French government will, in return, provide funding for a European supersonic wind tunnel near Cologne, a formal announcement on which is expected in the near future.

However, a strong protest about the way this agreement was reached bilaterally was made to the annual assembly of the European Science Foundation by H. H. Anderssen, the chairman of the Danish Natural Research Council. He pointed out that the foundation had originally been responsible for putting forward proposals for a truly European synchrotron facility in the late 1970's, and the technical details were subsequently drawn up under its auspices. Anderssen said it was regrettable that "the only countries that appear to have a chance of receiving the synchrotron are those which are able to make the largest financial contribution." Speaking on behalf of all Scandinavian research councils, he said that they might reconsider their participation in the European Science Foundation if the smaller countries were not given a larger role in future decisions.

Answering these complaints, French research minister Curien said that in principle the siting decision was still open, since all proposals would be considered by a new intergovernmental committee being set up next month to oversee the whole synchrotron development program. As the immediate past president of the foundation, Curien is said to have personally favored the Strasbourg proposal, and he has also spoken frequently of the need to broaden decision-making in European science.

In practice, the most significant point open for negotiation is where this committee will be able to raise the 40 percent of the initial capital costs not covered by France and West Germany. Britain has made it clear that, having recently opened its own synchrotron radiation source in Daresbury, it has no money left over for a European facility, and both Denmark and Italy—two other potential contributors—have suggested that their displeasure over the siting decision may convince their governments not to provide any money for the project.

However, a compromise may still be found by raising support through the research budget of the Commission of the European Economic Community, whose future distribution is to be decided by European research ministers when they meet in Brussels in mid-December.—**DAVID DICKSON**

Mixed Signals on Export Controls

The federal government and some professional societies seem to be moving in opposite directions on the application of export controls to the communication of scientific information. While government agencies are now adopting policies that academic groups generally find acceptable, some professional societies are closing meetings to non-U.S. citizens because they fear that papers would otherwise be withdrawn.

The clearest sign that the federal government was easing up on the control of scientific information came in October, when the Defense Department abandoned a proposal that would have given the Pentagon authority over the publication of unclassified results of research it supports in some potentially sensitive areas (*Science*, 26 October, p. 418). Instead, the department now says it will impose no controls on unclassified fundamental research, which is defined to include virtually all work performed on university campuses.

A similar trend is evident in the Commerce Department's attempts to rewrite its export control regulations. The regulations establish the conditions under which licenses will be granted for the export of technology that has potential military applications. Since technology is defined to include know-how, there has been concern that the regulations would be used to restrict scientific communication. Indeed, early drafts of the revisions drew howls of protest because they would have required researchers in some fields to obtain export licenses before publishing papers, giving lectures, or teaching foreign graduate students. Since July, however, a working group under the chairmanship of Andrew Pettifor of the Office of Science and Technology Policy (OSTP), has been drafting more palatable regulations in this area (*Science*, 14 September, p. 1131).

The working group's recommendations, which were presented to an OSTP advisory committee on 30 November, are described by one university official who has seen them as "an ingenious piece of bureaucratic writing that will almost certainly solve the problem." In a brief open session of the OSTP committee meeting, Pettifor said that the regulations would exempt from the license requirements information that is publicly available in books, scientific journals, and conference proceedings; fundamental research, which is defined to include virtually all university research; educational materials; and patent applications. One area of uncertainty is research performed at national laboratories and federally funded research and development centers, which will be dealt with on an institution-by-institution basis, said Pettifor.

A third area, the State Department's International Traffic in Arms Regulations (ITAR), is still causing concern. The ITAR rules, which have been under revision for several years, could also potentially be used to restrict publication of scientific data, and academic groups have complained that recent drafts would be unduly restrictive. OSTP Deputy Director John McTague told the advisory committee, however, that the ITAR rules should later be brought into conformity with Commerce's regulations in this area.

In spite of this trend, there has been an increase in the number of scientific meetings that have been closed to non-U.S. citizens. Last October, for example, the American Astronautical Society held a secret session on space warfare at its national conference. In the same month, the Society for the Advancement of Material and Process Engineering held a meeting at which sessions were restricted to U.S. citizens only. And in January 1985 the Society of Manufacturing Engineers is sponsoring a 3-day meeting that will be entirely closed to non-U.S. citizens.

These two trends indicate that, although the argument over scientific communication is being resolved largely in favor of maintaining as much openness as possible in basic research, threats and actions taken by the government over the past few years have had a chilling effect. Rather than risk a confrontation on export controls, some societies are taking a cautious approach by acting on their own volition to restrict attendance at their meetings.—**COLIN NORMAN**