INTERNATIONAL COLLABORATION

ESF Hopes to Be Voice of European Science

For the past 24 years, the European Science Foundation (ESF) has been quietly bringing together disparate groups of researchers across the continent by hosting conferences, establishing networks of labs, and seeding new fields with modest amounts of money. But by the early 1990s, the organization—which is now supported by 62 research funding agencies in 21 countries—seemed to have lost its way: Its budget of tens of millions of dollars was dwarfed by the billions devoted to the European Union's Framework program, and its purely science-led, bottom-up approach began to clash with the more directed programs of some of its research agency members.

So, faced with the prospect of becoming irrelevant, ESF has started to reinvent itself. Next week, it will put forward, for the first time, a 4-year plan to the annual general assembly of its member organizations. ESF is hoping to carve out a niche for itself in supporting scientific cooperation in areas of basic research that complement the Framework program, and it also hopes to increase its visibility—and its clout—in European science policy. All this will, however, require an increase in funding.

ESF has always prided itself on its political independence—it is funded by research councils rather than directly by governments and formulates its programs from proposals from the scientific community. ESF's strength is that it "catalyzes new areas of research," says physicist Pierre Papon, president of the Observatoire des Sciences et Techniques in Paris and a member of ESF's executive council. The research funding agencies of each country contribute on the basis of national income to ESF's general budget ($6 million this year), out of which the ESF convenes workshops and organizes research networks—short-term connections between labs to investigate potential for collaboration and possible future funding programs. Outside the general budget, ESF also sets up longer term "a la carte" research programs that member organizations can choose to take part in. Some a la carte programs attract considerable extra funds from outside ESF members (for example, the Europrobe program to study Earth's crust and mantle from the Atlantic to the Urals), while others act to coordinate European efforts in larger international projects (such as the U.S.–led Ocean Drilling Program).

But the trend toward more directed research programs in the early 1990s led some member organizations to reduce their contributions to ESF. The foundation responded in 1993 by carrying out a thorough reappraisal of its mission. The result was new and strengthened scientific committees with closer representation from member bodies, and a new science policy program.

The first fruit of its new emphasis on policy was advice on the content of the next Framework program, due to begin next year. "As far as I know, the advice has been taken seriously. You can trace some proposals [in the Framework 5 plans] to the ESF document," says Papon. ESF has also expanded its role as evaluator of the scientific case for planned new large facilities. For example, an ESF panel has just completed assessing Austria's plans for a spallation neutron source and a crystal-growth center, so that Austrian authorities can decide which one to fund. Most recently, the U.K. Medical Research Council asked ESF to determine how the future needs of medical and biological research can be met with existing and planned synchrotron sources.

The 4-year plan, which is due to be debated next week, builds on these activities. It divides ESF's research into eight key themes—from the solid earth, through genomes, to culture and the European identity—including many topics of basic research not appropriate to the mission-oriented Framework program. The plan also calls for a new breed of exploratory workshops to debate hot scientific topics. These workshops would allow researchers to explore their own ideas within an area defined from above and thus help reconcile the tension between top-down and bottom-up approaches. "You can advertise a broad-brush topic and invite proposals for specific subjects," says ESF President Dai Rees. "We would like the best proposals [for new networks and programs] to come out of exploratory workshops."

To carry out its new plan, ESF will request a 2% to 3% annual increase in its budget for 4 years. Responses from member organizations are expected to be mixed: Small countries tend to be more sympathetic toward ESF, because they gain more from international collaboration. "We'd say it's not an unreasonable request. But any more would meet resistance," says Reinder van Duinen, president of the Netherlands research council, NWO. However, Richard Brook, chair of Britain's Engineering and Physical Sciences Research Council, says "3% is hard to justify. ESF must give up some things if it wants to do others." Hubert Markl, president of Germany's Max Planck Society, says he can afford no more money for ESF's general budget: "It would be better to expand a la carte activities so that those who want them can contribute more."

Encouraged by the response to its Framework 5 advice, ESF also wants to devote a quarter to a third of its future activity to science policy. If next week's general assembly approves and grants its budget increase, ESF's voice will increasingly be heard guiding Europe's science.

–Judy Redfearn

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New Chief to Go After Industrial Funding

The European Science Foundation's (ESF's) next secretary-general, geophysicist and former Spanish research minister Enric Banda, says one of his priorities will be to look for joint ventures with industry. "Worldwide, science budgets tend to be diverted to industrial subsidies. If some science money is getting into industry, there should be some industry money getting into science," he said in an interview with *Science*.

ESF

Enric Banda

Given ESF's mission to spearhead fundamental research, this is controversial. "If we are convinced that joining efforts with the private sector is beneficial, let's do it," says Banda, who is due to be officially appointed at next week's general assembly and will begin his 5-year term next June, succeeding Swiss geophysicist Peter Fricker. He also plans to increase the number of joint ventures with non-ESF organizations, including private research foundations and funding bodies outside Europe.

Banda says he also wants to make the foundation more responsive to rapid scientific developments: "ESF has to be in permanent tension so that it can jump on scientific issues that are important at the European level."

–J.R.