

under consideration, however, sources in Congress say legislators have no plans to bump up NOAA's \$23-million FRAM request. These sources also say Congress will seek tighter control on how the agency can spend that money and will call for an outside review of the Corps' role within the agency. "Being cautious now will pay off," says one congressional staff member reviewing the budget bill.

There are some indications that NOAA itself is finally getting the message. "We need to experiment more with contracting and chartering," acknowledges Stubblefield, not-

ing that NOAA has requested proposals from the private sector for mapping around Long Island. NOAA has also created a task force, headed by John Carey, associate deputy undersecretary at the agency, to review and respond to the Marine Board report.

Publicly, however, the agency isn't backing away from its overall FRAM blueprint yet. "There's a lot of work the agency has put into developing this plan. I don't think you can take all that and throw it out the window," says Carey.

Still, many observers outside NOAA, and a few sources inside the agency as well,

have told *Science* they believe Baker, who took the helm after the FRAM program had been designed and who does not have his reputation invested in the plan, may be willing to scuttle it and develop a more modest plan. The Marine Board report, which Baker had requested, would offer a convenient justification for that move, they say. "The situation has gotten sufficiently critical that the status quo is untenable," asserts one high-ranking NOAA official. If so, then NOAA's plans to buy a large new fleet may sink before its aging ships do.

—John Travis

SOROS FOUNDATION

Russian Network Generates Sparks

Last week, the board of billionaire financier George Soros' International Science Foundation (ISF) approved an ambitious plan to create an array of computer networks for scientists and others in the former Soviet Union. But ISF's efforts to put former Soviet scientists on the cyberspace frontier has stirred opposition from commercial enterprises, which have charged that Soros may be trying to corner the emerging telecommunications market in the newly independent states. Those fears, combined with nationalistic opposition to other Soros-backed initiatives in the region and some fallout from recent turmoil within ISF, could delay construction of the first leg of the network and its expansion later this year.

The network has become a major activity for ISF, an organization Soros set up in 1992 to aid the research community in the former Soviet Union. The foundation has already started construction of a fiber-optic "backbone" network connecting science institutions across Moscow, and it plans to extend networks to other major science cities in the region (see map). But in recent months Soros has begun sketching out far more ambitious plans, expanding on the research networks to create a \$50-million civic network, starting in Yaroslavl, some 150 kilometers northeast of Moscow.

Ultimately, says ISF networking project director Alex Goldfarb, the Yaroslavl project will connect more than 100 schools, three institutes of the Russian Academy of Sciences, monasteries, newspapers, a radio and television station, and even a mosque. After that, Soros plans to launch similar networks in other towns. "The aim," says Goldfarb, "is to coordinate the telecommunication infrastructure in the former Soviet Union with a sub-

stantial amount of seed money from Soros." Last week in Moscow, the ISF board of directors approved a total of \$4 million to begin the Yaroslavl project, complete the next step of the Moscow backbone, and start work on research networks in Kiev, Novosibirsk, and Vilnius.

But the expansion plan has caused quite a stir within the telecommunications industry. Last week Gordon Cook, editor of the Trenton, New Jersey-based *COOK Report on the Internet-NREN*, devoted a special issue to Russian networking that described the battle between other Russian network providers and ISF. The *COOK Report* quotes officials from Relcom, a commercial consortium that is Russia's largest network provider, and from other network companies accusing ISF of breaking deals and alleging that the ISF plan may actually be a front for Soros' commercial networking ambitions in the region. Alexi Platonov, director of The Institute for the Development of Public Networks in Russia, which is part of the Relcom consortium, complained to *Science* that ISF is "trying to create some parallel infrastructure, and without any doubt they will try to 'buy' the Relcom teams in regions."

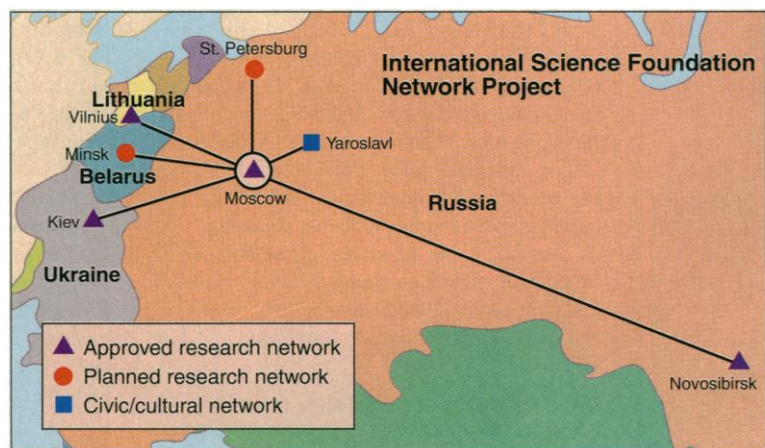
ISF officials deny that they—or Soros—have any commercial intentions. "Soros has stated quite unequivocally that he doesn't want to make a profit," says Goldfarb. "When the time comes that the [ISF network] becomes profitable, his aim is to transfer it to the users, who will be able to sell the services on the market."

Goldfarb says he understands why Russian communications companies may feel threatened by the ISF network. But he contends Relcom "has a record of squeezing tremendous fees from the academic community" and that ISF wants to provide a cheaper alternative. Platonov denies that Relcom acts like a monopoly; indeed, he says, its members are often in competition with each other.

While ISF and Relcom trade blows over the next step, disarray within ISF has already delayed elements of the network project. The Moscow backbone was originally planned to be finished last autumn. But in October, Harley Balzer, a Georgetown University Russian studies expert who during his tenure as executive director of ISF ran the telecommunications project, was forced out in what Balzer describes as a "philosophical dispute" over ISF strategy. In the ensuing management vacuum, ISF withheld money for key elements of the backbone project, halting the effort and alienating some of its Russian partners. The disarray also caused the National Science Foundation, which had provided a staff consultant, to withdraw support for the project.

Now, with Goldfarb at the helm, the board has released the money, and ISF can attempt to mend fences. "If the controversy is resolved," says Goldfarb, "we hope to have the [Moscow] backbone completed by the end of 1994."

—Christopher Anderson



Busy signal? ISF's board approved this computer network last week.