

Impasse reached in supercomputer access talks

Galen Gruman, Contributing Editor

Negotiations between several federal government agencies—including the Defense Department, State Department, and National Science Foundation—on rules restricting access to US supercomputers by Soviet and Soviet-bloc researchers have stalled. “The major players just don’t seem to be able to reach any agreement,” said Arthur Kusinski, the NSF’s assistant general counsel.

The federal government issued proposals restricting access by Soviet-bloc researchers late last summer, but withdrew them after an outcry from the academic community, especially from researchers involved in five NSF-sponsored supercomputer centers. (Although the academic community has

been particularly vocal, any restrictions would cover all supercomputers: private, government, and academic.)

In retracting the original proposals, the government established the Senior Interagency Group on Technology Transfer last September to formulate rules that the academic community might more willingly accept.

Representatives from the five supercomputer centers (at Carnegie-Mellon University, Cornell University, Princeton University, the University of California at San Diego, and the University of Illinois at Urbana-Champaign) expressed their concerns directly to the group in several meetings, while the NSF has represented them in the ongoing interagency talks. (Other participants in the group are the Com-

merce Department, Energy Department, Central Intelligence Agency, National Security Agency, and National Aeronautics and Space Administration.)

By January, the group had agreed that some sort of security measures were needed to keep supercomputer technology away from the Soviets and their allies. However, despite initial optimism from some officials in the talks, there has been no overall agreement.

The stumbling block is whether the restrictions apply to all foreigners on the Commerce Department’s sensitive-technology embargo list in all situations or whether the restrictions would have an “exception to the general policy,” Kusinski said. “We would allow an exception for what we considered legitimate scientific research—not a KGB agent.” (The embargo list applies to most communist nations and includes any technology the Soviets might not have. When organizations in allied or neutral nations receive such embargoed technology, they must promise not to pass it on to an embargoed nation.)

The NSF and the universities have proposed that Soviet-bloc researchers with legitimate research interests in areas not threatening US national security be given exemptions on a case-by-case basis and that undergraduate-level supercomputer courses be exempt from the restrictions because of their generally low-level access to the machines.

However, the Defense Department has balked at the proposals. “State is trying to act neutral, as a middleman. Defense just doesn’t buy it,” Kusinski said. George Menas, a Defense Department representative in the interagency talks, would not discuss the specifics of the negotiations, but did confirm they had stalled over the two issues. Michael Marks, a State Department technology-transfer policy analyst involved with the talks, also confirmed there were two unresolved issues.

Kusinski said the impasse might force the National Security Agency to take a direct role in the access proposals, something that it has so far left to the interagency group. When asked if this were a

possibility, David Wilson, deputy director for East-West trade at the State Department, responded, “I just can’t say at this point.”

The universities and the NSF are in no hurry to have limits placed on them. “This policy is going to be looked on by the university community [as something] that they’re not going to like,” Kusinski said. When told late last fall that no policy proposal was expected until late this summer, Sidney Carin of the San Diego Supercomputer Center responded, “Good. I won’t have to worry about it until then.” That attitude was reflected by various members of the supercomputer centers contacted by *IEEE Software*. Kusinski concurs with this attitude. “No policy certainly doesn’t hurt our operations,” Kusinski said.

Many in the academic community are skeptical about some of the Defense Department’s motives and concerns (see *Soft News*, September and November 1985, *IEEE Software*). Kusinski said a major intent of the access proposals is to pressure the Europeans and Japanese to enforce the technology embargoes and restrict access to their own supercomputers. The US defense and security agencies apparently believe that it will be easier to pressure the allies if the US

has its own restrictions.

Furthermore, “I think they were to some extent exaggerating the case,” Kusinski said. Those original concerns included fear that Soviet agents might use US supercomputers to run Soviet military programs because the Soviets have no supercomputers of their own. “You don’t run your sensitive, high-security programs in a hostile country,” Kusinski added.

Still, Kusinski said he expects some acceptable policy to be proposed eventually, whether by the interagency group or by the National Security Agency itself. The universities and the NSF do agree that some security measures—such as visa controls—should be taken. However, they feel the federal government should assume the burden of enforcing any measures. Classroom content and academic freedom should not be affected, they argue.

As the number of supercomputers increases and the realization grows that the universities will be the homes for many of the machines, the federal agencies will become more amenable to the NSF and university proposals, Kusinski said. “You need the cooperation of the academic and research communities. Defense knows this,” he explained pointedly.