

End isolationism in research

Technological cooperation with East and West Europe is a must for U.S.

BY WILLIAM C. NORRIS



On a recent visit to the Soviet Union and Western Europe, I was struck by the enormous benefits to both East and West that could result from expanded technological cooperation.

This is a thought that has occurred to me on previous visits over the past 25 years, but the economic and political turmoil of the post-Cold War period have made such cooperation even more attractive and essential.

One major difference is that the U.S. is no longer the world's undisputed industrial leader. Sadly, there is growing evidence that Japan is overtaking us, with a newly integrated Europe not far behind.

Since it is clear that the only way to reverse this ominous trend is through a massive expansion of innovation to get new and improved products on the market, our first priority must be to obtain the technology to fuel the necessary innovation. The most important single ac-

tion we could take to accomplish this would be to expand cooperation in research with other countries. This would give us better access to foreign technology, achieve reciprocity for U.S. technology and increase the efficiency of our own research efforts.

A second difference from past years is the historic and painful transition under way in the Soviet Union from socialism to a market economy.

The Soviets have a large research establishment that in many areas is comparable in scope and quality to our own. In the past, a high percentage of Soviet research and development was devoted to military applications, but the Soviets are now opening their defense R&D facilities to commercial research. Consequently, a large number of highly competent Soviet scientists are available and willing to work with their U.S. counterparts. And since pay scales for Soviet scientists are only about one-fourth those of U.S. scientists, substantial savings can be achieved in research costs.

The potential benefits from

cooperation in research with Soviet scientists haven't gone unnoticed by other countries, especially Germany, which is aggressively seeking such relationships.

A third noteworthy change from the past is the growth in cooperative research among organizations in Western Europe, which the European Community is encouraging by underwriting a substantial amount of the cost of such programs. While the main objective of these programs is to strengthen European high-technology companies, the programs also serve to create an environment conducive to cooperation, one that will be receptive to the initiatives of U.S. organizations.

The merits of domestic cooperation among U.S. companies, universities and government laboratories are widely recognized, as evidenced by the rapidly growing number of research consortia. Since the passage of the National Cooperative Research Act in 1984, more than 170 research consortia have been formed. More are being planned.

To this point, most U.S. research consortia have shunned

foreign participation. This is understandable in view of the formidable management problems confronting most U.S. companies in recent years, which first had to be addressed in order to achieve successful operation. However, with most of those problems solved and given the urgent need for the U.S. to obtain technology to fuel industrial innovation, it would now be ad-

OUR FIRST PRIORITY must be to obtain the technology to fuel the necessary innovation.

vantageous for most U.S. consortia to invite foreign participation.

Not only is the U.S. not benefiting as much as it should from foreign research, we are allowing other countries, especially Japan, virtually unlimited access to our university research and advanced small company technology. Meanwhile, the U.S. is not afforded equivalent opportunities in Japan because most of the research in Japan is under the control of private companies and because Japan lacks the kind of extensive small business sector that serves as a wellspring of

innovation here.

Technology flow between Europe and the U.S. is not skewed so unfavorably against us because, although European countries also lack strong, innovative small business sectors, there is roughly equivalent access to university research.

There are straws in the wind moving in the direction of more international cooperation in research. For example, talks are being held between the European community and Washington, D.C., to expand cooperation in microelectronics, computers and other areas of electronics.

It is time for the nation to call upon its research consortia not only to help expand international technological cooperation but also to lead the way in demonstrating to the rest of the world how to perform research more efficiently and equitably through cooperation.

The U.S. is in a globalized economic contest. To win that contest and regain industrial leadership, we must think and act globally. Anything less will undermine our economic and social well-being and, ultimately, our national security.

Norris is founder and chairman emeritus of the board of directors of Control Data Corp. In 1983, he conceived and initiated the Microelectronics and Computer Technology Corp.

