## East European Scientific Cooperation Seen Lagging

An ambitious program launched in 1985 has failed to live up to expectations and is being "renewed"

Paris

EASTERN EUROPE'S political leaders have expressed disappointment at the slow rate of progress of an ambitious program of collaborative research and development projects launched 3 years ago by the Council for Mutual Economic Assistance (CMEA). Created primarily at the urging of the Soviet Union, the program represents a major attempt to boost the socialist bloc's capabilities in high technology.

The initiative, which focuses on electronics, automation, nuclear energy, new materials, and biotechnology, carries the unexciting title of "Comprehensive Program to Promote the Scientific and Technological Progress of CMEA Member Countries to the Year 2000." The projects span the complete spectrum from fundamental research to production, and the goals are in many respects comparable to those of the EURE-KA program, launched also in 1985 by 18 Western European nations.

At the 44th CMEA session held in Prague earlier this month, several delegations—including that from the Soviet Union—were openly critical of the lack of progress achieved so far. Hungarian Deputy Premier Jozsef Marjai, for example, said the results had "failed to meet expectations," and reported that "last year no progress was achieved in concentrating resources on the most important tasks."

Reflecting such views, a communiqué issued at the end of the meeting acknowledged that the program is "so far failing to exert adequate influence in terms of enabling the CMEA countries to scale the heights of scientific and technological progress." It said efforts would be made to ensure the program's "renewal."

The Comprehensive Program, as it is usually called, is supposed to work at two levels. One is through the harmonization of the research programs of the individual CMEA countries; the second is through a series of bilateral and multilateral agreements between countries on specific projects in each of the five main areas, over 1000 of which have already been signed. All together, ten separate countries have pledged to bring together their scientific talents in the

identified fields for collaboration.

The principles behind the program have received widespread official support in the CMEA member states. For example, Pál Tétényi, director of Hungary's National Committee for Technological Development said in an interview with *Science* last year that the Comprehensive Program was "very important for Hungary."

The difficulties appear to have arisen in putting the principles into practice. The topdown planning techniques traditionally used by almost all socialist bloc countries are said to have provided little scope for the bottomup collaboration that characterizes EURE-KA-type cooperation in the West. In addition, each participating country still encoun-

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ters major difficulties in linking the activities of its basic research institutions to the needs of its industries.

Western observers such as Marie Lavigne of the University of Paris-1, author of a recent report on the Comprehensive Program to the French government, claim that it has run into three specific obstacles: the lack of the convertible currencies needed to provide a framework for research collaboration; the fact that bilateral collaboration between universities and academies is not organized through the CMEA; and the way that the Comprehensive Program is widely perceived as a device by which the Soviet Union can cream off the most advanced technologies that its Eastern European satellites have to offer.

Recent shifts in Moscow's attitudes some stemming from Secretary General Mikhail Gorbachev's desire to make technological collaboration the new backbone of economic cooperation between the CMEA states—may improve the situation. Soviet

Premier Nikolay Ryzhkov, head of the Soviet delegation to the CMEA meeting and, in the past, a relatively uncritical supporter of the Comprehensive Program, this time acknowledged that it has so far exercised only a "weak influence" on the productive base of the CMEA countries' economies, and particularly on one of the program's chief goals, the computerization of these economies.

"We must change this quickly," said Ryzhkov, adding that "the dynamism of mutual exchange has fallen to an inadmissible degree," and, more concretely, emphasizing the need to increase both the intensity and efficiency of technological cooperation through greater use of "commodity-money relations"—prices in Western parlance.

Some Western observers claim that Gorbachev has himself shifted over the past 2 years to a more flexible approach to cooperation with other socialist bloc countries. "It does appear that the Soviet Union has given ground on the question of increasing the emphasis given to 'marketization'" says Alan Smith of the University of London's Schools of Slavonic Studies.

Several Eastern bloc countries, such as Hungary, Poland, and Bulgaria, are seizing eagerly on the opening they are being offered by the Soviet Union to reduce central government control over the activities of industrial research institutes, arguing that greater autonomy is necessary for the success of the Comprehensive Program.

Czechoslovak Premier Lubomir Strougal said in a final speech to the CMEA meeting that it was in the "key sphere" of science and technology that socialist countries were lagging behind the West. "This situation requires a radical turn and quicker progress in the restructuring of the mechanism of cooperation, because we will not get any further merely by improving the existing mechanism," Strougal said.

Others, in particular Romania, are sticking firmly to the line that the solution remains in more integrated planning. The head of the Romanian delegation, Constantin Dascalescu, said that what was needed was "more systematic and sustained collaboration between the CMEA countries' cooperation bodies and organizations," a reference primarily to government agencies.

Yet whatever their feelings about Moscow's call for each to "restructure" its research base to take account of new technological priorities, the CMEA members reached a consensus in their final communiqué that the Comprehensive Program—described as an initiative that will "substantially strengthen the position of socialism in its peaceful competition with capitalism"—should remain a top priority for the near future. **DAVID DICKSON**