Shake-up Announced For Soviet Academy

Retirement at age 65 is planned for laboratory directors; more autonomy will be given to the academy's departments

THE Soviet Academy of Sciences has agreed to new regulations requiring that, "as a rule," directors of scientific laboratories, research institutes, and academy departments retire on reaching the age of 65. The academy says it will create the posts of "honorary directors" for those it refers to as "elderly scientists," and will also introduce an age limit for scientists appointed to new administrative positions.

In addition, a number of steps are being taken to increase the autonomy of the academy's various scientific departments from the central organization, and to strengthen links between fundamental research groups and industrial enterprises. Eleven new institutes have been created, including an Institute of Automation and Design in Moscow and an Institute of Information Science in Orel. A new scientific council has been established under the direct auspices of the Presidium of the academy to address "the fundamental problems of technology."

These changes are part of a package of reforms agreed to at the annual meeting of the academy at the beginning of March. They have been designed in response to calls from Soviet General Secretary Mikhail Gorbachev for a general shake-up in the way that Soviet science is organized in order to increase its contribution to the modernization of the Soviet economy.

Each of the areas targeted for "restructuring," such as the top-heavy age structure of the Soviet scientific community, excessive central control, a lack of flexibility in the choice of research programs, and insufficient linkages between basic research laboratories and the industrial sector, have long been acknowledged—even by many individuals within the Soviet Union—as contributing to the nation's relatively low level of scientific productivity.

Whether the present reforms turn out to be any more successful than previous attempts remains to be seen. But, according to some Western observers, the current signs are promising. "Now at least they are confronting the issues," says Murray Feshbach, Sovietologist-in-residence with the North Atlantic Treaty Organization in Brussels. "Before there were many people aware of what the issues were, but they were not really addressing or dealing with them."

Since coming to power 2 years ago, Gorbachev has referred frequently in speeches to the need to boost Soviet efforts in science and technology. His criticism of the way science has been conducted in the recent past was reinforced by the 27th Communist Party Congress in Moscow last year, which passed a resolution underlining the need for more efficient ways of linking fundamental science to national needs.

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Shortly afterward, then academy president Anatolii Alexandrov agreed to step down, even though he still had 4 years left to run of his 5-year term of office. In a move widely seen as evidence of a new determination to link science and industry, his place was taken by Gurii Marchuk, formerly chairman of the State Committee for Science and Technology, which is formally responsible for coordinating the nation's research policy with its economic and industrial needs.

One trend that can already be seen, according to some Western observers, is a shift in official thinking about the causes of insufficient technological innovation in the Soviet economy. The previous line of argument was that Soviet science worked effectively, but that industrial managers failed to exploit the results; there is now increasing recognition that many problems lie in the operating structures of the scientific community as well.

"The change in tone is quite striking," says Stephen Fortescue, of the Center for Russian Studies at Birmingham University in England, pointing for example to increasing press reports emphasizing the need to involve user organizations in R&D policymaking. "It could signal an important shift in official attitudes toward science and scientists."

The need to change the age structure of the scientific community in the Soviet Union—over half of the academy's 250 full members and a significant proportion of its top officials are currently over 70—has also been receiving growing attention. One of the new responsibilities of those being retired from administrative positions will be to train "the young people who will take their places," according to vice president Konstantin Frolov, and it is pointed out that the new academic secretary of the economics department, Abel Aganbegyan, is only 55.

The internal restructuring of the academy is designed, according to its architects such as Marchuk, to increase the responsibility of each research group and institute for the effectiveness with which it operates. Vice president Frolov told the meeting that the purpose of the rule changes was to achieve "the transfer of the center of gravity" of the academy's research activities to its individual scientific departments.

One step aimed specifically at improving the effectiveness of regional scientific activities in the Soviet Union was the decision, approved by the academy meeting, to transform the Far Eastern Scientific Center, formed in 1970 to stimulate research on the Pacific coast, and the Urals Scientific Center, into regional departments of the academy.

In both cases, scientists had responded to criticism of the poor performance of the two centers by arguing that this resulted, in part, from excessive attempts at centralized control from Moscow. The change will mean that each will have its own scientific council and operate similarly to the department that already exists for Siberia, based at Novosibirsk.

Within the academy itself, 135 "promising avenues" of research have been identified whose development, according to vice president Vladimir Kotelnikov, is considered "of tremendous national economic significance." These include the mathematical sciences, general physics and astronomy, nuclear physics, elementary particle physics, biochemistry, and "the entire range of technical sciences."

He added that special attention was needed for research that helped the progress of science itself, for example in computer science, new materials, and scientific instruments. "These are precisely those spheres in which difficulties are arising over obtaining information from capitalist countries," said Kotelnikov, author of an earlier study that stressed the problems caused by increasing constraints on the importation of Western high technology. ■ **DAVID DICKSON**