

WILLIAM C. NORRIS INSTITUTE

FAX TRANSMITTAL SHEET

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COMPANY: Office of Senator Levin FAX #: 202/224-1388

FAX SENT FROM: William C. Norris FAX #: 612/853-4202

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COMMENTS:

Attached are the following:

- (a) Summary of Proposed U.S./Russia Program
- (b) Russian Responses to Proposed Program

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PROPOSED U.S./RUSSIA PROGRAM: TRANSFER OF TECHNOLOGY
VIA SMALL ENTERPRISE JOINT VENTURES

There is a desire by the U.S. government to help the Soviet Union make the transition to a market-oriented economy. A number of leaders in the U.S. Congress are advocating assistance with food, medicine and technical aid in converting military facilities to commercial use. President Bush has stated his support for an aid program, including assistance with technology.

A program, which would be highly effective in commercializing Soviet technology, is the transfer of technology, through small enterprise joint ventures. It would provide a means for Soviet republics to most effectively expand innovation to create new products and services that can compete in global markets.

While the joint ventures would be based on both Russian and U.S. technologies, the major emphasis would be on utilization of Soviet research results, in order to more effectively commercialize the output of the large number of Russian research and technology centers.

This approach is in consonance with a major trend in the Soviet Union, where the research institutes and universities are spinning off technologies into small companies. By coupling these companies with counterparts in the U.S., through joint ventures, each side would benefit. The Soviet companies would gain management and marketing assistance; whereas, the U.S. companies would gain access to leading edge technology for new products in the U.S. Often, j-v's would be established in both countries based on the same technology.

The advantages of a j-v approach include:

- (1) Sharing permanently in a foreign market; whereas, with a marketing or licensing agreement, a small company invariably loses market participation.
- (2) The cost and risk of entering a foreign market is shared and the chances for success enhanced.
- (3) Improvements made in the product are available to the company furnishing the product; whereas, this is not the case with most license agreements.

A number of small enterprises j-v's have been established in recent years between Soviet organizations and U.S. companies. E.g., WCNI, the William C. Norris Institute, has successfully set up two joint ventures with Soviet organizations.

One joint venture is SAMAN (Soviet American Management between WCNI and the State Academy for Management, Moscow). Its mission is to develop computer-based technology courseware, primarily for management training and to deliver computer-based technology instruction in the Soviet Union. SAMAN has made excellent progress, reaching breakeven after two years in a tough, tough business and social environment.

The second joint venture is New Technologies in Education, Inc., between WCNI and the Institute for New Technologies, Moscow, to develop computer-based technology courseware for academic instruction. The first courseware product is now being tested in U.S. schools.

It is clear that the number of U.S./Soviet small enterprise j-v's which have been established, is miniscule, compared to the potential. To realize it requires a support infrastructure, because most small companies lack the resources to seek out and set up j-v's in foreign countries, especially in Soviet republics.

Equally important, Soviet technology will often be in an early stage, requiring investment for further development and determination of market potential. This situation is not unique to the Soviet Union but applies to spinning off most early stage technology in U.S. universities and government laboratories.

Experience indicates that the support required consists of a properly structured and managed process. Basic elements consist of seed capital and continuous evaluation and mentoring by experts.

The process begins with a proposal for the further development of early stage technology into a commercial product or service. The proposal is evaluated by a group of experts. If the planned outcome is deemed viable, seed funding is provided to underwrite the cost of further development. Evaluation is continuous. as long as progress is viewed as satisfactory by the experts, seed funding is continued until a commercial design is completed. At that time, other investors are brought in.

Experts for evaluation and mentoring are readily identified through the experts data base services available from Teltech, Inc. The incentive for experts to provide their services is a small percentage of the equity of the joint venture company.

Term of Program: Six years. At the end of this period, the program will be self-financing at the same level. Review after two years to determine if the level of activity should be significantly increased.

Financing: Appropriation by Congress necessary to finance start up. There are two major components consisting of:

- (a) Administrative cost of the support infrastructure, estimated at \$3.3 million.
- (b) Seed capital fund, estimated at \$50 million plus, depending on desired level of initial activity.

He is intensely interested in the proposed SE program and will discuss it with Senator Levin and send me a report on the outcome.

INSTITUTE FOR SYSTEMS STUDIES, MOSCOW

Dr. Gvishiani, General Director, elaborated on the enormous problem of financing research in the current adverse economic and political environment. He noted that most R&D laboratories are trying to make money by setting up small enterprises. His institute has established four thus far.

He alluded to a joint venture established between the Soviet Academy of Science and E-West managers S.A. It was established as an investment syndicate for the development and commercialization of Soviet basic and applied research results in a selected number (25) of Soviet research institutes. The initial capital goal of \$50 million to be supplied by member large corporations has not been reached -- only able to raise \$2-3 million.

The basic reason for the failure to raise the capital is lack of interest by most large companies in assuming the risk and making the investment in technologies requiring further development. Dr. Gvishiani stated that the proposed SE program is of great interest.

SCIENTIFIC INDUSTRIAL CORPORATION (SIC), MOSCOW

This organization is one of the largest military research, development and manufacturing complexes in the Soviet Union. Major items of production are electronic equipments for antimissile systems -- 55,000 employees.

Poliashev's observations included:

- o 60% of SIC current workforce is not needed.
- o Progress on conversion from military to commercial production is progressing slowly because of lack of funding and capability to manufacture commercial products.
- o Have organized 20 small companies, however, unable to provide adequate support.
- o Proposed SE program could be of great help by providing support for 20 existing small companies, and on a much larger scale, to divide SIC into divisions which could form joint ventures with U.S. companies.

MOSCOW INSTITUTE OF ELECTRONIC ENGINEERING, ZELENOGRAD

MIEE is conducting research and development in many areas of electronics, including microcircuits. Rector Verner noted that the City of Zelenograd is a free trade zone, which has facilitated the formation of new companies. There are now more than 4000 small companies in Zelenograd. Over half have presidents from MIEE. Twenty of these companies were organized with participation by MIEE. The proposed SE program is of great interest.

INSTITUTE FOR NEW TECHNOLOGIES (INT), MOSCOW

INT was established by a spinoff from the Soviet Academy of Science. It has 300 employees and is presently engaged in the development of computer-based models, simulations, computer-based courseware and computer software. There are 20 small companies under the aegis of INT.

Alexi Semenov, Director, is strongly supportive of the proposed SE program and will be contacting other Russian organizations to identify more interested organizations.

P.S. INTERNATIONAL, INC., MOSCOW BRANCH

P.S. International is a consulting company located in Washington, D.C. Its primary activity is helping to transfer Russian technology to U.S. companies.

For many years, Vladimir Svirski has helped individuals in the Soviet Union start private businesses by advising them regarding necessary special permits and other legal aspects. He has assisted more than 6,000 businesses to start up. He doesn't know how many have survived.

He noted that there is little or no technology in the Soviet Union which doesn't require further development. For that and other reasons, the proposed SE j-v program is needed.

SAMAN, MOSCOW

SAMAN is a joint venture between the William C. Norris Institute and the State Academy of Management, Moscow. Its purpose is twofold:

- (1) Develop computer-based technology (CBT) courseware and deliver CBT instruction in the Soviet Union.

- (2) Assist with the startup of small companies in Russia. Currently, four companies have been established.

Alexander Molostnov, Executive Director, is a strong supporter of the proposed SE program and is prepared to help implement it in Russia.

KURCHATOV RESEARCH INSTITUTE, TROITSK

In addition to having a high level position at the Kurchatov Institute, Prof Dykhne is a participant in Vista Scientific, which is a joint venture between U.S. investors and the Kurchatov Research Institute, Russian Division of the World Laboratory and a partnership of 12 individuals, consisting mainly of Russian leading scientists and engineers. Kurchatov Institute is the leading Russian research center in nuclear energy.

The initial purpose of Vista is to import Russian technology for use by American industry for commercial purposes and later to help startup business activities in the Soviet Union.

Reaction to the proposed SE j-v program was positive and in consonance with Vista's plans.