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REPORT ON THE WORKSHOP ON INTERNATIONAL CO-OPERATION IN SCIENCE AND TECHNOLOGY WITH THE RUSSIAN FEDERATION

PRACTICAL RESPONSES FOR OVERCOMING OBSTACLES TO CO-OPERATION

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

This document is a report on the results of a workshop on overcoming obstacles to international co-operation in science and technology with the Russian Federation. The workshop was jointly organised by INTAS (International Association for the Promotion of Co-operation with Scientists from the New Independent States of the former Soviet Union), the Russian Ministry of Science and Technological Policy and the OECD.

The objective of the workshop was to develop and advance practical responses to obstacles to co-operation in this area. Although it is recognised that Russian science and technology can make significant contributions both to economic transition and to global progress in that field, co-operation efforts have been hampered by numerous obstacles to implementation. By bringing all the key international players together for the first time, the meeting constituted a step in co-ordinating activities in this field. Following the meeting, participating organisations have initiated co-operative efforts to act on some of the responses discussed at the workshop. For example, three agencies (including the OECD) are co-operating to provide advice to the Russian authorities on the legislative framework for science and technology activities in Russia.

The report presents documentation from the workshop that is selected for its usefulness to policy-makers and practitioners active in this area. A joint statement of the workshop's conclusions on possible responses to obstacles is followed by Annexes containing workshop papers on practical issues, such as the transfer of funds to Russia for international co-operation in science and technology.

The report was prepared by Marshall Mills of the OECD's Directorate for Science, Technology and Industry (DSTI) as part of the CCET's activities.

The views expressed in this document do not necessarily represent the opinions of the OECD or the Russian Ministry of Science and Technological Policy. It is published on the responsibility of the Secretary-General of the OECD.

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OECD Assistant Secretary-General
Director of the CCET

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REPORT ON THE WORKSHOP ON INTERNATIONAL CO-OPERATION IN SCIENCE AND TECHNOLOGY WITH THE RUSSIAN FEDERATION

"PRACTICAL RESPONSES FOR OVERCOMING OBSTACLES TO CO-OPERATION"

BACKGROUND

The transition in Russia has led to significant increases in the level and varieties of international co-operation with Russia in the field of science and technology (S&T). This report documents selected results from a workshop in September 1994 that aimed to develop practical responses for overcoming obstacles to this co-operation. In 1993, the OECD conducted two studies to examine this and other trends in Russian S&T -- first, a Science, Technology and Innovation Policy Review of the Russian Federation[1], with the Russian Ministry of Science and Technological Policy (RMSTP), and second a study on "Co-operation in Science and Technology with the Federation of Russia: Experience and Programmes of Selected OECD Countries".[2] The Review and the Study found that international co-operation was increasingly important and beneficial for all participating parties but that significant obstacles were impeding its development.

During the transition, the S&T sector in Russia has suffered a sharp decrease in resources provided domestically, placing severe strains on the sector. Its share of Russia's GDP has dropped an estimated 60 per cent from 1990 to 1993, during which time GDP itself has dropped by one-third to one-half (depending on estimates). Meanwhile external funding has now reached a level equal to 8-9 per cent of internal funding from all sources, according to RMSTP estimates. The dramatic opening of Russian science and technology combined with the funding crisis of the sector has made its internationalisation a key element of its transition.

As part of the follow-up to the activities in 1993, the First Deputy Minister of Science and Technological Policy of the Russian Federation, Mr A. G. Fonotov, suggested a workshop with the objective of developing concrete policy responses to address some of the obstacles that are impeding the development of international co-operation. Furthermore, Mr Fonotov suggested that INTAS (the International Association for the Promotion of Co-operation with Scientists from the Independent States of the former Soviet Union) co-sponsor such a workshop, partly in order to benefit from its operational experience. This report, prepared by the OECD Secretariat, presents the leading conclusions of the meeting, as well as a selection of the documentation in the annexes that is considered useful to those active in the field, consisting of Annex 1 -- Financial Interaction and Annex 2 -- Problems of Communication and Perception.

In addition to the participants from Russia and OECD country multilateral and non-governmental organisations mentioned in the Conclusions, the more than 100 participants included representatives of the following OECD Member countries -- Belgium, Denmark, Finland, France, Germany, Italy, Japan,

Netherlands, Norway, Portugal, the United Kingdom and the United States. A full List of Participants is provided in Annex 3.

The statement of Conclusions of the workshop was drafted by the organising institutions. The document was then circulated to representatives of all participating countries and organisations for comment, as requested during the workshop, and the resulting comments were incorporated in the final version presented in this report. The participants intend for this statement to inform the authorities responsible for the co-operation efforts and encourage these authorities to consider these conclusions in the development of their activities and decisions. The statement is an inclusive record of the responses to obstacles that were offered by participants, without any prioritisation or evaluation.

The documentation from the workshop that is included in the annexes is intended to be useful for those active or interested in international co-operation in S&T with the Russian Federation. The views expressed in these documents are those of the authors and not of the OECD. It should also be recognised that the situation changes rapidly in Russia, and, while these documents may represent the most up-to-date information available, there is no guarantee that they remain completely valid.

The four documents in Annex 1 concern financial interaction, which remains the leading practical concern in international S&T co-operation. This documentation presents various experiences and points of view on responses to the difficult obstacles to financial interaction. Annex 2 consists of a paper on "S&T Co-operation with Russia: Problems of Communication and Perception".

In addition, several countries and organisations contributed reports on their activities in science and technology in Russia (as well as, in some cases, their experiences related to the topics of the workshop) for the information of the workshop participants. The countries that contributed reports were Finland, Germany, Italy, Japan, the Netherlands, Norway and the United Kingdom. The organisations that submitted reports were ICSU (International Council of Scientific Unions), INTAS, ISTC (International Science and Technology Centre) and ISF.

Participants expressed the hope that the workshop would serve as an important step towards improved co-operation and information-sharing in international S&T co-operation with Russia. The benefits from and the need for this co-operation have not diminished as Russia's difficult transition has continued. Yet, at the same time, the obstacles to this co-operation have probably hampered its development significantly, particularly as it must compete for resources with other activities in international science co-operation or in economic co-operation with Russia. The workshop indicated that there were further opportunities for involved institutions and countries to work together on overcoming obstacles; it is now for these institutions and the responsible authorities in Russia and the OECD Member countries to pursue the responses put forward in the workshop as they see appropriate.

CONCLUSIONS

An important workshop on international co-operation in Science and Technology with the Russian Federation was held in Brussels on 8-9 September 1994. Entitled "Overcoming Obstacles to Co-operation", the workshop was organised jointly by INTAS (the International Association for the Promotion of Co-operation with Scientists from the Independent States of the former Soviet Union), the Russian Ministry of Science and Technological Policy (RMSTP) and the Organisation for Economic Co-operation and Development (OECD).

The objective of the workshop was to identify means of overcoming obstacles to co-operation in Science and Technology between the Russian Federation and OECD Member countries, especially by developing concrete policy responses.

More than 100 officials participated in the workshop, including representatives of the Russian Federation, OECD Member countries, the European Parliament, the European Commission, and leading international agencies, as well as prominent policy experts. Leading Russian participants included: Mr A. FONOTOV, First Deputy Minister of Science and Technological Policy of the Russian Federation, Mrs L. ROZHKOVA, member of the State Duma and Chairman of its Committee on Education, Culture and Science; Mr G. MESIATZ, Vice-President of the Russian Academy of Sciences; and Mr V. FORTOV, academician and President of the Russian Foundation for Fundamental Research. Some of the major international agencies represented were the International Science and Technology Centre (ISTC), the International Science Foundation (ISF -- founded by Mr G. SOROS) and the International Council of Scientific Unions (ICSU).

The workshop was unprecedented in that it was the first time that representatives of all the major institutions involved in co-operation in Science and Technology between the Russian Federation and OECD Member countries gathered around the same table. The workshop was conceived and planned in the framework of the follow-up to the Science, Technology and Innovation Policy Review of the Russian Federation, which was conducted by the OECD and the RMSTP in 1993. This review and the workshop were part of the assistance programme of the OECD's Centre for Co-operation with the Economies in Transition (CCET).

The discussion emphasised the vital importance to all involved parties of international co-operation in science and technology between OECD countries and the Russian Federation. Although confronting a critical reduction in resources, Russian science remains world-class and still surpasses scientific knowledge in OECD countries in some areas. Co-operation between previously separated national science establishments can yield significant mutual benefits in terms of scientific results.

International co-operation can also provide significant external resources for Russian science. These external resources are particularly useful in managing the effects of the sharp reduction of domestic resources that is associated with the transition in Russia. The bulk of resources for Russian science continues to come from domestic financing, yet its reduction means that the contribution of international co-operation nevertheless plays an important role (the best available information indicates that international co-operation is providing 8-9 per cent of the financial resources for Russian science -- a figure that falls within the range for the comparable figures in OECD countries). Furthermore, while there is a need for immediate action to support Russian science, co-operation should also gradually move towards a longer-term basis in the future.

In these ways, co-operation with Russia contributes to preserving the foundations of Russian science as well as providing for application of its achievements to non-military purposes. Viewed in this context, **scientific co-operation with the Russian Federation can yield broad benefits to world science and the welfare of all countries**.

The discussion in the workshop followed a problem-solving approach, first precisely identifying obstacles and then offering possible responses. Some participants noted the value of this approach in an area where overcoming obstacles to implementation of existing programmes is a high priority. In order to examine specific obstacles, participants discussed the following selected topics in a very open and frank manner:

-- financial interaction;

-- legal and institutional framework for science and technology activities in the Russian Federation;

-- exchange of information among participants in co-operation;

-- submission of proposals for financial support of science activities from institutions from OECD Member countries.

For each topic, participants elaborated and discussed numerous possible responses to obstacles, to be considered by the responsible authorities, including the administration of the Russian Federation, OECD Member countries and international funding agencies. This statement of the conclusions of discussion is intended in part to transmit its content to the responsible authorities. (Occasionally, discussion of one topic would refer to related issues from another topic, and in these cases, the statement includes these references under the most directly related topic.)

Financial Interaction

In the discussion on financial interaction, participants noted the central role that this interaction plays in co-operation efforts.

The **obstacles** arise from the cost, difficulty and uncertainty involved in: transferring money to Russia; tracking it; and fulfilling customs requirements for the importation of goods for co-operation. International agencies compared their experiences and discussed methods for minimising these obstacles. Some agencies found certain Russian regulations governing co-operation in Science and Technology to be unclear or cumbersome. Furthermore, some agencies shared the observation that the application of some tax, customs and currency regulations was not always uniform, varying according to the time, location and parties involved. Some participants argued that certain practical difficulties arose from an underdevelopment of the financial sector in Russia and the rapid changes it is undergoing, while others argued that efficient financial services have recently developed in Russia.

The **possible responses** that were mentioned in the discussions were intended for consideration by the full range of parties involved. Many of these responses involved co-operation among all major parties, such as suggestions for a systematic exchange of information on financial interaction between funding agencies and the Russian authorities, at varying levels of details. On several occasions, a number of participants expressed a general preference for solutions that would not increase centralised management, with respect not only to financial interaction but also other topics. The establishment of a

working group of all the involved parties on the Russian and OECD country sides to review tax and customs treatment was one suggestion that received much attention. For instance, an examination of practices in this area in OECD countries was offered as one guide for this group's work.

During the discussion of the legal and institutional framework, international funding agencies stated a desire for the Russian authorities to maintain a tax and customs treatment for non-commercial co-operation activities that was uniform and equal in all cases. In particular, one agency suggested a clear confirmation and broad dissemination of recent declarations by the Russian authorities that (1) all gifts to Russian scientists and institutions for co-operation were exempt from VAT as well as import customs duties, and that (2) the definition of non-profit co-operation included intergovernmental organisations for the purposes of tax treatment.

Co-operation among funding agencies in financial interaction was the subject of several responses, including sharing detailed information on experiences and distributing publicly the information presented at the workshop. The International Science Foundation made the first broad public announcement at the meeting of its new Grant Assistance Program (GAP), which offers ISF's established services in transferring funds and importing goods for non-commercial co-operation in Science and Technology with the Russian Federation. Some participants felt that this service would prove especially attractive to numerous smaller agencies and co-operation programmes that do not have the scale or knowledge to develop interaction efficiently on their own. INTAS announced that practical procedures for the transfer of funds and the import of equipment are being finalised and that guidelines on these procedures for INTAS project co-ordinators will be issued very soon.

Legal and Institutional Framework

The discussion of the legal and institutional framework for international co-operation in Science and Technology dealt with broad implications of this topic for the conditions under which co-operation takes place.

In the context of the transition of Russian society, uncertainty over the framework has created **obstacles** for co-operation. Responsible parties from all sides are unsure of their potential authority, obligations or privileges with respect to co-operation, including international agencies, research institutes and Russian agencies responsible for implementing regulatory policy. As a result, co-operation activities suffer from the following problems, among others: a complex, unclear and changing legal environment; the negotiation of agreements without clear guidance or precedents; complications in the management of co-operation; and tax and customs treatment by regulatory bodies that is not uniform (as addressed above).

The **possible responses** mentioned in the discussion were addressed to a broad range of responsible authorities. Several ideas concerning the legal environment were put forward in the discussion. Many participants felt that it would be very useful for all parties involved if the RMSTP were to publish a compilation, on a regular basis, of the relevant legal provisions, regulations, established regulatory practices and perhaps public tariffs (e.g. electricity) that govern co-operation.

Several ideas were put forward for consideration in the legislative process in Russia. One suggestion was that international co-operation in science and technology have the same legal status as humanitarian assistance. Concern was also expressed about the possible implications of emphasising in draft legislation that international co-operation in the field would expressly be subject to the provisions of general legislation on state secrets, Foreign Direct Investment and pension arrangements. Other ideas addressed the process of drafting legislation on science and technology by executive and legislative

authorities of the Russian authorities; these included the possibility of an international meeting on how this legislation is developed in OECD countries, mechanisms for the communication of concerns from international co-operation agencies into legislative proceedings and a review of Intellectual Property Rights legislation in Russia using experience from OECD countries.

Two approaches were mentioned for dealing with the issue of guidance for agreements. The RMSTP proposed discussion of specific guidelines in their Background paper, while other participants suggested the compilation of a Handbook with a range of standard agreements commonly used in international co-operation.

Discussion also referred to arranging co-operation on a commercial basis, involving the private sector. Possible responses included publicising past successes of collaboration with OECD country enterprises and examining the possibility of more "matching funds" from non-commercial sources for private foreign co-operation. As an example, workshop participants were favourably impressed by the commercial co-operation activities in science and technology undertaken by the Boeing Technical Research Centre in Moscow. While admittedly different from the non-commercial co-operation that was the focus of the workshop, this type of commercial operation resolves many organisational issues and can play an important role in the transition of the science sector in Russia.

Possibilities for consideration to improve the management of co-operation included more training by the RMSTP and OECD country funding agencies for Russian managers on financial aspects of project planning and management, an international conference on the adaptation of scientific and technical standards and a system of involving the RMSTP in all co-operation efforts.

Exchange of Information on Co-operation Opportunities

With the dramatic increase in co-operation opportunities, participants conducted a lively discussion on the exchange of information on these opportunities.

The **obstacles** in this area are evident in a shortfall in information observed by participants in certain cases. On the mechanics of communication, there were varying points of view as to the optimum means and key bottlenecks that need to be addressed. Printed media (e.g. newspapers and periodicals), conventional telecommunications (phone and fax) and electronic networks (especially on INTERNET) all had strong advocates based on arguments of cost effectiveness and convenience. On the state of information exchange, participants noted that the demand for funding of worthy joint projects already greatly exceeds the supply of funding, but there was a consensus that the access to and quality of information could be vastly improved. In particular, concerns were expressed that the exchange of information did not adequately include remoter regions or less well-known institutions. Furthermore, the information available is not easy to evaluate.

The **possible responses** mentioned in discussion addressed issues of the means of communication, databases, evaluation and institutional arrangements. Given varying opinions on the ideal mix of the means of communication, some participants suggested that a working group of interested parties (from Russia and OECD countries) conduct a comparative examination of communication means, identify priority needs and propose co-ordination of investment in the field to meet these needs (for instance, among assistance programmes, ISF is funding a high-speed fibre optic data network in the Moscow region, while the OECD has an ongoing programme in telecommunications). Electronic mail

also received support as a means of submitting funding proposals and maintaining communication during funded projects.

The use of databases accessible through electronic networks constituted a point of particular interest, with proposals for training in the software to make good use of existing databases, for a databank of useful databases and a database of co-operation efforts involving governments, non-commercial institutions and private enterprises. The development of an accounting system to gather data on international co-operation from funding agencies would be a necessary first step for this latter database. The Centre for Science Research and Statistics in Moscow could play a useful role in this area.

Some participants felt that the usefulness of information on Russian scientific capabilities could be improved by fostering the implementation of methods of evaluation and review developed in the OECD countries. For example, formal outside appraisals and peer review of research proposals and projects are standard practices in OECD countries that are being adopted in Russia. ICSU representatives offered to pursue the possibility of OECD country scientists and managers conducting workshops and missions in Russia to demonstrate these techniques further.

In the evolving context of co-operation with the Russian Federation, participants discussed possible new institutional arrangements to facilitate the exchange of information. For example, participants discussed the possibility of the RMSTP establishing basic information offices on international co-operation that would cover all regions, as well as the possibility of INTAS establishing an office in Moscow. Several participants noted the usefulness of "match-making" activities for less well-known institutions in Russia and mentioned the potential value of OECD country institutions co-ordinating their efforts in this area. In subsequent discussion, the issue of all involved parties establishing a comprehensive information clearinghouse on international co-operation in science and technology was explored. According to some participants, such an undertaking would require substantial ongoing funding and merits serious yet careful consideration.

Process of Submission of Proposals

The discussion of the process of submission of proposals addressed approaches for facilitating this process.

The **obstacles** involve the complexity and duration of the processes of submitting proposals for funding of international co-operation with Russia, particularly taking into account the experience, information and expectations of participating scientists. The lack of information and experience in this area might risk creating frustration, disillusionment or even resentment on the part of scientists, including OECD country scientists not accustomed to the difficulties of communications with economies in transition as well as Russians not accustomed to this type of funding system. Furthermore, agencies reviewing proposals face constraints in terms of resources and obligations to the donors of funds.

The **possible responses** discussed included efforts at more co-ordination of proposal submission and review, mechanisms for feedback from scientists, more flexibility in types of projects funded and better information for scientists submitting proposals. Some suggestions were aimed at co-operative solutions to sorting through proposals in a more systematic manner that would be co-ordinated among funding agencies. For example, some participants advocated a more comprehensive approach that took into account how all international funding agencies were allocating their resources, while others proposed

more or less formal mechanisms among funding agencies to establish clear parameters for projects eligible for funding or simply to discuss common problems in the area.

Various suggestions were aimed at improving communication on submission of proposals. Some participants cited the usefulness of clear, concise and simple guidelines on proposal submissions, while others mentioned the convenience of electronic messaging. They further noted that these procedures could be used for other practical matters after receiving funding, such as transfer of funds, taxation, customs clearance, social fund contributions, etc. In particular, training by the RMSTP and funding agencies for Russian scientists on how to develop and submit research proposals seemed important to participants.

Discussion also addressed the issue of providing for feedback from Russian and OECD country scientists on the proposal processes. For example, a survey of Russian scientists on the submission of proposals was proposed, as was the participation of Russian scientists in joint discussions with Western European scientists on organisational matters.

Some feedback from scientists that was offered during the workshop involved the flexibility of the types of projects funded by certain international agencies -- for instance, projects of different sizes should be considered and long-term institutional co-operation (such as "twinning") should be considered for long-term support. Finally, given the enormous excess demand for funding from joint research proposals considered "excellent", some participants strongly felt that OECD countries and their institutions should be encouraged to increase the resources devoted to international co-operation with the Russian Federation.

* * *

The general consensus was that the workshop had proven to be an excellent starting point for examining concrete responses to obstacles to co-operation. All participants agreed that ideas emerging from the workshop should be built upon in future actions. In particular, **OECD country institutions expressed a desire to establish a mechanism for periodic consultations, such as a task force**, to consider together the issues arising in scientific co-operation with the Russian Federation. The participants issue this statement of conclusions so that the responsible authorities will be informed of the results of the workshop for consideration in their decision-making process.

ANNEX 1: FINANCIAL INTERACTIONS

RUSSIAN BACKGROUND REPORT

Introduction

For the workshop, the Ministry of Science and Technological Policy provided a Background Report on "International scientific and technological co-operation of the Russian Federation (current state and problems, strategy and prospects)". The excerpt below, "Financial Interaction and Financing International Co-operation in Science and Technology", is the section that related directly to the issue of financial interaction. Further statements on financial interaction at the workshop by Ministry officials and other Russian participants are reflected in the Conclusions. The aspects receiving particular attention in the discussion included the following: the possibility and usefulness of increasing the exchange of financial information on international co-operation; the compilation and publication of all Russian laws and regulations governing international co-operation; the establishment of an agency (perhaps under the aegis of the RMSTP) to offer useful information and assistance to all participants in co-operation efforts; and the value of international comparisons for developing compatibility between different national systems.

Financial Interaction and Financing International Co-operation in Science and Technology

In order to promote the participation in international co-operation of foreign financial sources, the Russian Federation has implemented a number of important decisions. In particular, the following items are no longer subject to Value Added Tax upon importation to Russia -- goods and technological equipment brought into the Russian Federation within the framework of non-profit technical assistance or needed to conduct joint scientific projects, as well as books, periodicals, and text books for educational institutions and scientific use.

Some problems in international co-operation do arise due to the absence of a legally-determined definition for non-profit Russian and foreign organisations on Russian territory. As a result, foreign funds tend to create their own safeguards and guarantees for activities carried out on Russian territory. First, there is a tendency to limit the amount that can be granted to physical persons, in order to prevent these funds being used in profit-making activities. Second, financial support tends to be provided to those scientific activities which, in the opinion of funding agencies, are unlikely to be diverted to commercial purposes. Lastly, there is a tendency (which has an important psychological effect) for financial resources for co-operation efforts to be transferred directly only to the foreign partners, with the Russian participants receiving resources only indirectly.

It is quite natural, therefore, that this situation causes some complications both for the foreign funding agencies and for the Russian users. It is well known that there is strict financial and social control

on the activities of funds and non-profit organisations in the OECD countries. In Russia, such a system of control is virtually non-existent, which can lead to abuses from both donors and users. For these reasons, an international seminar on this problem would be a useful activity, with participation from OECD, INTAS, the Russian Ministry of Science and Technology Policy, the Russian Academy of Science, as well as funding agencies and non-profit organisations on Russian territory. Such a seminar could assist in the development of organisational arrangements in this field, before comprehensive Russian legislation is implemented.

Joint financing of projects in international co-operation.

The RMSTP partially finances approximately 500 international projects carried out by both Russian and foreign scientists. The Russian Federation is prepared to broaden its financial participation in international projects. At the same time, it would be useful to ensure more co-ordination of bilateral and multilateral co-operation activities. In particular, the contents of co-operation projects, their financial aspects, reporting information to estimate the efficiency of joint expenditures, etc. should be co-ordinated by all partners.

For these reasons, the RMSTP suggests that all interested parties carry out a joint international project devoted to comparative research and analysis of the experiences of OECD Member countries and the Russian Federation in the fields of financing R&D and international co-operation. This project could culminate in the organisation of an international seminar involving, among others, the OECD, the European Commission, and the Russian Federation.

PROBLEMS OF FUND TRANSFER

by Ilkka Linnakko[3]

All donors and co-operation partners, private funds and governments are faced with some fundamental questions to be solved in all aid programmes. These questions are:

-- how to guarantee that the funds find the target;

-- how to keep overhead costs low;

-- how to control the use of the funds;

-- how to avoid unnecessary fees, taxes, custom duties, etc.

When dealing with countries like Russia, these problems are more complicated than between OECD countries or between countries which are more familiar with foreign aid and co-operation.

The purpose of this paper is to clarify, classify and systematise some of the above-mentioned questions. The material for this paper was collected during Spring 1994 for INTAS' purposes and the paper has been written with the permission of INTAS.

1. Legal system

The Russian legal system is under-developed for international co-operation and for science financing. The Russian legal system is also changing very rapidly, which makes planning difficult for all parties. Turbulence also exists in taxation and customs rules and practices. To obtain comprehensive, up-to-date information requires "detective work", numerous meetings with bureaucrats and competition between administrations and organisations.

Also the Russian banking system is still embryonic, sometimes chaotic, but developing fast. This makes the donors' or partners' life very exciting and frustrating.

2. Types of aid

The grants and other payments can be classified into four main groups, which can all have different types of transfer systems:

Individual grants. Individual grants are funds given to individual physical persons in Russia to cover their normal living expenses while working.

Travel grants and subsistence. Travel grants and subsistence stipends cover participation in conferences abroad, scientific meetings and co-operation (travel) in general.

Institute grants. Institute grants are given to Russian organisations to cover project costs, equipment, salaries, overheads, etc.

Equipment and consumables. Equipment covers devices which are given or leased for a project in Russia.

3. Methods of transfer of funds

There are five technical methods for the transfer of funds (money) into Russia: 1) cash; 2) cheque; 3) bank account; 4) bank card; and, 5) transfer by name and address.

3.1 Cash

The use of cash means direct payments in cash to the Russian party in Russia or in OECD countries.

If the OECD country representative personally carried cash into Russia, it can create personal risks, as these funds can be lost or robbed. There can also be difficulties with large sums at Customs offices, as all foreign currency has to be declared upon arrival in Russia as well as upon departure from the country. This can cause personal problems for the OECD country partner.

If funds are kept in an OECD country in bank accounts, it is a potential catalyst for the brain drain: Russian scientists can work more easily in OECD countries, as well as outside the project, when they have funds of their own available outside the country.

Institute grants paid in the form of cash can create corruption or taxation problems.

Travel grants can be paid in cash, but they are later difficult to control.

Cash payment for **equipment** can also create corruption problems and is difficult to control.

In general, cash is practical, but also risky, difficult to control and not useful for governmental programmes.

3.2 Cheque

Bank cheques and travellers' cheques are technically possible methods for fund transfer. This method has been used by ISF, which is distributing cheques to Russian scientists through ISF's own offices in Russia.

The cheque volume has to be big enough to make this type of service cost-effective.

Cheques are very safe, because Russian banks change them into US dollars only upon presentation of a passport and the cheque, which is in the name of the person. If the cheque is lost, no-one else can use it.

There are no taxation problems with cheques, as a cheque is already money and the receiver does not pay taxes on grants. There is a letter of guidance from the Russian Ministry of Finance (MINFIN) for state taxation officials, which guarantees the tax-free position for ISF cheques.

3.3 Bank account

In this method, the Russian party (individual, institute) opens a foreign currency account in a Russian bank, and the funds are transferred through to this account.

It is, in general, easy to open a foreign currency account for individual persons in any bank in Russia. The person has to show his/her passport, complete an application form and sign a card. Some banks require a tax inspection registration form. Mostbank and Inkombank do not require tax registration. The fee to open an account is from US $ 0 (Mostbank) to US $ 50 (in most banks).

Transfers through these accounts means that the scientist is charged for cash withdrawals (from 0.5 per cent in Mostbank to 2-3 per cent in most banks) and for transfers in favour of anybody anywhere (from 0 per cent in Inkombank to 3 per cent in Dialogue Bank).

The difficulty is to get the tax free status for the funds, if the accounts are in a Russian bank.

A bank account is rather cheap and safe -- all transactions are well-documented, the scientists can withdraw money from an account freely in US dollars or in roubles, all at once or in parts, and there are no taxes if registration of the funds has been done according to the rules.

3.4 Bank card

Bank card (not a credit card but a debit card) is a possible alternative for a normal bank account.

A Russian bank can issue a card (VISA, AMEX) for all recipients and with the card (which is not a credit card) they can withdraw cash from the "account" or pay directly with the card in Russia and abroad. The funds are not in an individual account, but in a special account in US dollars in an OECD country.

This method is controllable and modern banking technology can be used. Scientists can also withdraw money within the limits of the account abroad, which makes travelling easier. A card is safe, because it is personal and can be closed.

The tax-free status can be obtained as in the bank account method.

The banking risk is low, because only reliable Russian banks can issue international debit cards.

3.5 Transfer by name

Transfer by name and address is a subclass of transfer through an account.

Among Russian banks, Dialogue Bank accepts transfers in the name of an individual, but they are limited in that Russian citizens cannot withdraw foreign currency, only roubles and that the bank pays them in roubles equal to the hard currency exchange rate used by the bank, which is about 10 per cent

lower than the market rate. The bank also charges 3 per cent for cash withdrawals. So, the cash received is about 13 per cent lower than the funds transferred and if the scientists wish to change the roubles into US dollars there will be another small loss.

The Russian Independent Bank said that they charge only 1.9 per cent for name transfers, and only a passport number is needed for identification. The Russian Independent Bank is active only in Moscow and cannot cover other Russian centres.

This method is not practical and is expensive.

4. Taxation

4.1 Individual grants

All individual grants are tax-free according to existing practice in Russia. This practice is based on the rules of State Tax Inspection authorities. There are (as at June 1994) no special regulations (law or act accepted by the government or parliament) for charity actions of foreign foundations for science in Russia. Drafts for such laws have been made by MINNAUKI.

If the grant is paid as a salary, it has to be taxed. It is important to use in all letters the right vocabulary to avoid such interpretation.

To guarantee the tax-free position for individual grants, the donor has, with the help and support of MINNAUKI, to ask for a special letter from MINFIN (Ministry of Finance) for this purpose. It is necessary to describe in the letter all the possible transfer methods that have to be tax-free.

MINFIN cannot do this letter without MINNAUKI. The law concerning grants and support for science is under preparation in MINNAUKI and might be in Parliament during the summer.

The Russian State Committee for Humanitarian Questions has the right to give an exemption from tax and customs duties for charity operations and charity goods imported to the country. This Committee can only be used through MINNAUKI. There is, in Russia, also a tendency to use charity organisations as an umbrella for normal business. The donor has to follow this closely, in order that its name or procedures are not mixed up in such activities.

4.2 Institute grants

The grants for institutes are in principle tax-free when the institute receives the funds into its own account. But on all goods, services and salaries Russian institutes have to pay taxes according to the law. So, salary-related taxes and VAT (included in prices and customs duties and included in prices of imported goods bought on domestic markets) have to be covered. Only Russian hospitals can buy duty-free and VAT-free goods. Some medical institutions connected with a hospital also have the same right.

4.3 Travel grants

In principle, these grants are tax-free. Russia has published a list of tax-free per diems for different countries for those cases where the funds are taken from foreign currency accounts for business travelling purposes.

4.4 Equipment

All equipment purchased from Russian markets includes VAT, other taxes and customs duties, if they are imported from abroad.

A letter from MINNAUKI (Vice Minister Yakobashvili) to the State Custom Office is needed, in principle, to get a tax-free status for **each** piece of imported scientific equipment. To streamline this procedure (which is not only time consuming but also uncertain) some kind of centralised "channelling" is recommended. For this purpose the donor, MINNAUKI, the Russian Customs Administration and a customs office, have to agree on a system which will guarantee routine tax-free importation of labelled scientific equipment.

5. Misuse of Funds in Russia

In the case of misuse of funds, the donor can, in principle, start legal proceedings in Russia. In practice, legal proceedings can be more expensive than the loss incurred and the legal system for this type of issue is rather weak in Russia. So, the recommended method is just to stop financing the said project or part of it and to publish the case in Russia. To avoid such situations, control systems, account auditing and, particularly, follow-up among grant recipients in Russia is very important. Donors must have the resources to check all difficulties, misuse or crime quickly and locally.

6. Remarks

1. MINNAUKI should develop a comprehensive system for all donors concerning taxation, customs duties, VAT and other legal issues and publish guidelines.

2. All foreign aid and co-operation financing should be treated equally (bi-, multi-, private, governmental programmes).

3. Also there should be clear rules for commercial (OECD country industry -- Russian science) scientific co-operation.

TRANSFER OF FUNDS AND THE IMPORT OF EQUIPMENT TO THE RUSSIAN FEDERATION

by INTAS

1. Introduction

INTAS -- International Association for the promotion of co-operation with scientists from the independent States of the former Soviet Union -- is a non-profit international association under Belgian Law set up in June 1993 in order to promote co-operation in research and technological development among scientists from Western Europe and scientists from the new independent States (NIS) of the former Soviet Union, namely Armenia, Azerbaidjan, Belarus, Georgia, Kazakhstan, Kyrgystan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

The Members of INTAS are presently the European Community, its fifteen Member States as well as Norway and Switzerland. INTAS is open for participation from any country, national or international organisation, provided that they are ready to contribute significantly to the budget of INTAS and that they are accepted by all Members.

At present, INTAS focuses its support on two types of activities. First, it provides funding to research projects performed jointly between research teams from the NIS and from the INTAS Members. The funding for these projects is devoted primarily to the research teams from the NIS enabling them to continue their activities in their own countries. Secondly, it supports scientific networks between scientists and institutions from the NIS and the INTAS Members. In accordance with its statutes, INTAS may also financially support the organisation of scientific workshops and seminars and award mobility fellowships.

INTAS covers all exact and natural sciences, as well as economic sciences, social and human sciences. It abstains from military research and from any political and commercial activities. So far, INTAS has selected approximately 1 000 projects with a funding of about 60 million US Dollars for these co-operative activities with the NIS.

Each INTAS project associates a minimum of two participants from Western Europe and one from the NIS. Among the participants from Western Europe, one acts as project co-ordinator, responsible to INTAS for the scientific, administrative and financial management of the project towards.

2. The transfer of funds and the import of equipment

Upon its establishment and until recently, it has been INTAS policy, in accordance with the practice of the Commission of the European Community for science and technology projects, to entrust the Western project co-ordinators of the selected scientific projects with the disbursement of funds to the participants involved in the projects.

While this policy did not raise problems for disbursements made to Western participants, very often questions were raised when considering such transfers to participants located in the NIS. Likewise, other concerns were raised when a participant contemplated the purchase of equipment in the West for its later import into the NIS. These questions and concerns were related to experienced or reported tax impediments or other feared obstacles linked for example to the control of such monetary or in-kind transfers.

This has led INTAS to investigate the legal and practical frameworks of the transfer of funds and the import of equipment into the NIS and, because more than 80 per cent of the project participants from the NIS are from this country, to the Russian Federation.

A summary outline of these frameworks is set out hereunder. Its understanding is based on the application of the current Russian tax legislation governing the problems concerned.

3. Transfer of funds to Russia

3.1 Legal framework

The issue of the transfer of funds to Russia must be divided into the transfer to individuals (for the Russian scientists' individual financial support and possibly the purchase, in Russia, of equipment and consumables) and to institutions (in order to cover the overheads and possibly the purchase, in Russia, of equipment and consumables).

The transfer of the INTAS financial support (grants) to the Russian scientists must be made directly to each of them (not to their institution) individually. This system of direct transfer to each scientist avoids, in principle, the withholding of social security charges by the scientists' institutions (who would otherwise distribute a salary to their scientists) and prevents the payment of individual income taxes since the grantor (INTAS) is a non-profit, charitable organisation.

The transfer of the INTAS financial support (grants) to the Russian institutions must be made directly to each institution. The funds are, in principle, exempted from corporate (organisational) income taxes provided that the institution is state financed or non-commercial and that the funds are used for the implementation of a special purpose programme bearing on the statutory activity of the institution.

3.2. Practical procedures

Although the disbursement of the INTAS grants to individual scientists and to institutions must, in order to fall under the tax exemptions, be made directly to the scientists or to the institutions, a transparent method must be organised in order to allow control by the Russian Tax Authorities. At the same time, the method should give control to the project co-ordinators and to INTAS.

In this respect, it is quite obvious that the “backpack” method (where the funds are taken into Russia as cash in one's pocket), notwithstanding its dangerous character, does not meet such requirements. Moreover, if ever contemplated by a Russian scientist or institution, the latter must be advised that it is illegal under Russian laws, except under some circumstances or conditions, for a natural or legal person to hold a bank account in a foreign country.

The disbursement by cheque written by a Western bank, made out to the Russian scientists and cashed by the latter in a Russian correspondent bank has unconditional merits. It requires however some

important centralised logistics outside as well as inside Russia, for example, when the cheques must be distributed to the scientists.

An alternative procedure lies in the direct use of banks whereby the scientists and the institutions are able to collect the INTAS grants over the counter at a bank located in the Russian Federation.

In order to implement this procedure, INTAS has recently prepared guidelines for the attention of the project co-ordinators, setting out the legal framework and banking procedures which could be followed by them when required to transfer funds to Russia. These guidelines combine a centralised method of transfer through an INTAS account held in a Western bank with a decentralised method of decision making by the project co-ordinator which in accordance with INTAS contractual specifications remains the manager of the project. Upon instructions given by the latter to the Western bank, the funds are transferred to one of the banks located in Russia and made available to the recipients concerned.

Simultaneously, INTAS has entered into agreements with these banks. The agreements provide, *inter alia*, that an individual scientist or the responsible person for an institution is able to collect the funds in US Dollars at the Russian banks by presenting his/her passport. Upon collection, the banks must remit a certificate, stating the amount withdrawn as well as the origin and the tax exempt character of the grant awarded.

This certificate should enable the institutions to prove the tax exempt character of the funds received towards the Tax Authorities when they are filing their annual income tax return. The same is applicable for the individual scientists having to file such tax return and who should bear in mind that the grants received from INTAS, although not taxable, are part of their declarable income.

4. Import of equipment and consumables

4.1. Legal framework

Equipment and consumables imported into Russia are subject to VAT and to customs duties, except if they are imported in the framework of gratuitous technical assistance or for humanitarian, charitable purposes.

Such exemptions from import VAT and customs duties are only granted on a case by case basis by following a bureaucratic procedure involving, in principle, the Ministry of Science and Technological Policy of the Russian Federation, the Russian Commission for Humanitarian Aid and Technical Assistance and the State Customs Committee of the Russian Federation.

In order to implement this procedure and ensure the tax exemptions, a request for an individual exemption must be addressed by each individual scientist or institution receiving the equipment and/or the consumables to the Ministry and to the Commission. If the goods are qualified by the latter as technical assistance, the same request must then be addressed to the Customs Committee. Upon receipt of a written acknowledgement of the exemption, the scientist or the institution may proceed with the import by presenting the letter at the port of entry, where the goods cross the border.

4.2 Practical procedures

The above exemption procedure may be justified in order to prevent any potential abuse.

However, timely decision-making and efficiency are essential to international science and technology co-operation. In this environment, the scientific community should be regarded as one of its most important elements and therefore shielded from any type of avoidable additional and timely decision making processes. This does not mean that oversight, administration or control should be neglected, but they should be streamlined to these principles.

The following alternatives might therefore be useful:

1) equipment and consumables imported temporarily for less than one year for the purpose of carrying out scientific research work without commercial objectives and remaining the property of the Western participant is in principle exempt of any taxes such as import VAT and customs duties;

2) personal equipment such as personal computers, personal fax machines, etc. and personal consumables such as computer diskettes having a value of less than US$2 000 may, in principle, be imported duty-free with relevant documentation;

3) the equipment mentioned in point 2) is often less expensive in Russia than in Western Europe and should, therefore, as far as possible, be purchased in Russia.

ISF GRANT ASSISTANCE PROGRAM

by the International Science Foundation

Introduction

The International Science Foundation (ISF) is a charitable trust, registered in the State of New York, established in December 1992 by Mr George Soros for the purpose of assisting basic research scientists in the Former Soviet Union (FSU). Its geographic scope extends to all countries which had formerly been part of the Soviet Union, including the Baltic States. The ISF's programmes are conducted on the basis of a gift from Mr Soros of US $100 million, with the mission of spending or committing the entire sum within a period of two years. There is no endowment. Policy oversight of the ISF is carried out by its Trustees and an Executive Board appointed by them. The Chairman of the Executive Board, and one of the Trustees, is Dr James D. Watson.

The ISF has carried out its programme through a combination of competitive grant programmes and infrastructure support programmes, as described in the next section. In order to make it possible for these programmes to operate, the ISF has also gone to considerable effort to develop an internal infrastructure to handle transfers of money, scientific equipment, and research materials directly to FSU scientists. Until this time, the absence of safe, reliable, tax-free channels to send scientific assistance directly to the FSU and Baltic science communities has been a major stumbling block, and often a deterrent, to Western organisations. The mechanisms developed by the ISF are uniquely capable of ensuring that critically needed Western assistance will have the greatest possible and most timely impact during the current crises.

The ISF is therefore now announcing the establishment of a new Grant Assistance Program, in which it will make this grant- servicing infrastructure available to scientists and non-profit organisations outside the FSU. This programme will enable Western donors to transmit cash and material assistance to FSU scientists for non-profit purposes, free of tax and customs duties, through the same tested system utilised successfully by ISF for the past year.

Obstacles and response: Financial interactions

The existence of obstacles to normal financial interactions with the former Soviet Union has been no secret. It has affected, and been a deterrent to, all types of undertakings, including those in the commercial sector, multilateral projects to protect the "brain drain" of Soviet weapons scientists to hostile countries, and of course scientific co-operation and assistance programmes. It has been the Achilles' Heel of most assistance programmes. What has not been widely understood is that the window of opportunity for OECD country assistance funds, in particular, to have maximum impact is already closing. Economic pressures are persistently accumulating, between rouble inflation and a kind of stabilisation in the exchange rates, to draw down the real purchasing power of OECD country currency in Russia with each passing day. Thus efforts to overcome the financial obstacles to co-operation and assistance must be timely in order to be effective-- and, I will argue, should be based on proven mechanisms rather than risking more precious time in trying to reinvent the wheel.

There are many financial obstacles that need attention, but here I will discuss in particular two obstacles which are most salient from the standpoint of Western organisations: transferring money, and dealing with duties (including tax and customs). My comments will be drawn primarily from the experience of the International Science Foundation.

Just two or three years ago it was not considered wise to carry significant sums of money securely, and legally, across the Russian border to give to third parties. This did not, of course, deter many valiant members of the scientific community from doing just that. They did so because their Russian and other former Soviet colleagues were desperate because their traditional sources of support for science had totally evaporated. So they used the "backpack" approach and it worked, for a while, as long as the sums were fairly modest. With the passage of time, and with the increasing sums of money involved, these adventures became less advisable and in fact quite dangerous. The legal alternative to this approach -- wiring money to individual bank accounts -- was at least equally undesirable because of the encroachment of various middlemen -- banks, the state, the institute -- between the money and the intended recipient. It was reliably reported that through this route only some 10 per cent of the original funds actually reached the beneficiary.

When in late 1992 Mr Soros decided to create the ISF, he indicated unambiguously that he wanted 100 per cent of the ISF's funds to reach the Russian scientific community. He also indicated that the bulk of the ISF's administrative work was to be done in Moscow. It was this condition that made it possible for the ISF to devise a sound practical solution to the problem of financial transfers. We made a substantial investment in our Moscow office and staff who then spent the next nine months negotiating locally with banks and government agencies to set up a legal, secure, and workable system to handle the massive sums of money that we would soon move across the border. The New York Public Health Research Institute, which handles our finances, was also able to negotiate a key arrangement with the Bank of New York. But without the substantial advance time spent on this mechanism on-site in Moscow, it could not have worked and could not continue to work.

Therefore the first rule of thumb in transferring money or goods for science into Russia is: have a local staff in Russia that has a close and continuing relationship with local authorities. No matter what the established laws and regulations may be -- and with all respect to our colleagues from the Russian government, no matter what any particular ministry may promise -- it is not only prudent but necessary to have staff on location to ensure that laws and decrees on taxes and customs are observed. These matters simply cannot be left to chance and to the whim of the customs or tax inspector.

The broad outline of the ISF money-transfer system is as follows:

1. Trained ISF staff in the FSU (Moscow, Kiev, Vilnius) interact quarterly with Principal Investigators to obtain updated lists of current project participants to whom payment should be made. These lists are transferred to ISF/New York.

2. ISF/New York centrally prints checks to individual recipients in batches, entering each check as an obligation to the grant's account. Simultaneously, ISF/New York prints lists of the recipients with their dates of birth and passport numbers for later identification purposes.

3. ISF/New York authorises US bank to wire the necessary funds directly to the FSU banks which have agreed to participate in the programme, through which ISF checks drawn on a US bank can be cashed over-the-counter on demand. ISF pays a nominal bank fee in addition to the face value of the check.

4. The checks and recipient lists are delivered to the Moscow, Kiev, or Vilnius ISF offices.

5. The local ISF offices notify recipients that they should pick up their checks in person at these offices, which provide instructions about where the check is to be cashed. At the same time, the ISF offices provide the local banks with the lists of recipients and passport numbers.

6. Once the funds have been wired by the US bank to the participating FSU bank, the recipients take their checks to the bank, present their passport for identification, and receive the full value of the check over-the-counter in dollars. No withholding is taken from the check.

7. The FSU banks return the cancelled checks to the local ISF office, which then ships the checks to ISF/New York for account reconciliation.

A key presupposition of this process is that the payments being made through this system are tax-free. On May 25, 1994, as the result of many months of discussion by the ISF/Moscow staff with Minister of Science and Technology Policy Boris Saltykov and his staff, Prime Minister Viktor Chernomyrdin signed a decree exempting funds and goods coming into Russia through the ISF for charitable purposes from taxes and customs duties. While ISF cash grants had not been taxed prior to this time, the Chernomyrdin decree explicitly formalises the exemption and has been extremely helpful in securing the co-operation of government and financial officials.

The Chernomyrdin decree also includes customs, but it should not be supposed that it simply extends automatically to every shipment that arrives at Sheremetevo airport. To implement the decree, it is necessary to obtain specific customs clearance for each shipment. This requires getting official stamps from officials at the Ministry of Science, then at the State Customs Committee, and presenting them at the airport. Again, this process entails local staff support. It is, however, secure and reliable.

The ISF has made an enormous investment in setting up and maintaining the facilities described above. The financial value of that investment is probably in excess of one million dollars. These facilities will be used, first, to service the nearly $70 million in grants that have already been issued by the ISF. But having made this enormous investment, the ISF wishes to make this infrastructure available to other sources of external support for FSU science as well. Because it knows how much time and expense must go into developing such a system, and because so much precious time is being lost as individual organisations flounder in efforts to deal with these obstacles, the ISF believes that a unique, practical opportunity now exists to break through the morass and get on with the job of assisting the scientists of the former Soviet Union.

The International Science Foundation is therefore announcing a new programme, called the Grant Assistance Program or GAP, to address the problem of transferring money and materials to scientists in the FSU. The programme is open to non-profit donor organisations in all countries who wish to provide assistance to non-commercial scholarly research and education programmes in the countries of the former Soviet Union and the Baltic States. The programme will use the ISF's proven infrastructure to assist in the transfer of funds, the purchase and delivery of research materials, and the provision of travel support to eligible recipient organisations throughout the FSU and Baltic countries. These services are being offered to donor organisations for a fee of 10 per cent of the value of the donated resources **[the fee was subsequently waived for many projects -- please see the announcement in the addendum]**, after all direct costs have been met by the donor organisation. The fee's purpose is to cover the administrative expenses incurred by the ISF in managing the GAP programme, which will allow participants to save up to 40 per cent in taxes and duties on materials shipped through it.

For information about submitting a request to the GAP, please contact:

Grant Assistance Program (GAP)
International Science Foundation
1054 31st Street, NW, Suite 110
Washington, DC 20007
(202) 342-2760 (phone)
(202) 342-2765 (fax)
info@isf.org (internet)

Addendum

ISF waives GAP fee for qualified aid programmes

The International Science Foundation (ISF) Executive Committee at its 30 November 1994, meeting in Washington, DC, considered the current situation with Western aid programmes to the former Soviet Union (FSU) in the areas of science and education and decided to provide ISF's infrastructure free of charge to qualified aid programmes.

During 1995, the ISF will employ its infrastructure to transfer urgently needed funds and equipment to the FSU on behalf of other qualified aid programmes free of charge. The estimated cost to the ISF of operating this Grant Assistance Program is $ three million, assuming that the total volume of aid at risk is $30 million. Mr Soros has agreed to underwrite these costs.

To qualify for the Grant Assistance Program, projects should fall in the areas of fundamental research in the basic sciences and humanities, and related educational programmes. Applied science, defence related and commercially oriented projects are not eligible. Applications from individual project directors are subject to internal review by the ISF and a formal endorsement by FSU government agencies to verify their non-profit nature.

Project directors interested in applying to the Grant Assistance Program should contact the ISF's Washington, DC, Executive Office at the address listed above.

Excerpt from ISF Press Release, 8 December 1994

TRANSFER OF FUNDS, MACHINERY, EQUIPMENT AND CONSUMABLES

by the VDI Technology Centre

Introduction

The following procedures have been compiled by the VDI Technology Centre in Düsseldorf, project agent of the German Federal Ministry for Research and Technology for the laser technology, in co-ordination with the Ministry for Science and Technology Policy of the Russian Federation as the result of extensive studies and consultations in Russia for co-operation in laser sector. These procedures are currently undergoing field testing.

Although, among other things, the constantly changing legal environment means that there is at present no guarantee for the tax-exempt transfer of funds and goods to Russia, it could prove expedient to consider the procedures equally in other fields of scientific co-operation with Russia.

The following procedures are recommended :

1. Co-operation Agreement[4]

A "co-operation agreement" will be concluded between the German and the Russian partners. On the Russian side, both natural persons and juristic persons (enterprises, organisations, institutions) can act as partners. If a co-operation agreement is concluded with a natural person, the written consent of the head of the relevant entity should be obtained, if at all possible.

The co-operation agreement should specify: The timetable for execution of the work as well as well as the sums of money to be transferred at specific milestones and the purpose for which the money or equipment is needed.

Specifically the co-operation agreement must without fail state:

-- that the technical or humanitarian aid (termed "grant") falls within the framework of the scientific and technical co-operation;

-- that this aid is given free of charge and is not directed towards obtaining a profit and no commercial activity whatsoever is linked to it;

-- that the results of these grants are public property;[5]

-- that the funds for the grants come from public promotional programmes for the support of the socio-economic reforms in the Russian Federation;

-- what proportion of the funds are scheduled for investments, personnel costs and travel expenses (major items of cost).

Fundamental distinctions:

1.1 Co-operation agreement with natural persons:

Financial grants transferred within this framework will not be taxed and the sum will be paid in full to the recipient. No social security contributions or income tax will be charged on these sums. In our opinion, this form of procedure is expedient because it is quite simple and reasonable.

1.2 Co-operation agreement with legal personalities (enterprises, organisations, institutions):

Financial grants made within the framework of these agreements cover the following items of cost:

a) Equipment and materials, including cash funds for the purchase of equipment (even abroad) are duty-free and will not be taxed;

b) Personnel costs are subject to tax; this amounts to approximately 53 per cent at present (social security contributions and income tax);

c) Travel and accommodation expenses in Russia as well as abroad are not subject to tax.

2. Transfer of monies

An account shall be opened in Russia by the Russian partner in person with the Dresdner Bank in St. Petersburg, for example, or with the Russian bank CREDO which maintains correspondent accounts with the Dresdner Bank.

Note:

Great caution should be exercised in the case of many other Russian banks, in particular those which promise high interest rates on foreign currency accounts.

It is recommended that payments should be made in connection with important deadlines/milestones (cf. Schedule for Execution of the Work). Payment is made via the bank in Germany. The paying-in slip must bear the note: "Payment is made as a grant to the person/entity as technical and humanitarian aid".

The Russian partner takes the co-operation agreement to the Ministry for Science and Technology Policy of the Russian Federation (in the sector for Laser Technology in the Information and Further Education Centre) and obtains confirmation that the co-operation is recognised as technical and humanitarian aid.

The Russian partner can obtain the money in the bank on presentation of the confirmation and the co-operation agreement. The sums of money received are not covered by the standard rate for compulsory exchange of 50 per cent in roubles because these are not foreign exchange proceeds but funds arriving as technical or humanitarian aid.

3. Transfer of goods

The goods will be transported from Germany to Russia by a freight forwarding firm. The waybills shall bear the following note: "Technical aid as defined in Article 36, Item g), Section VI of the Law of the Russian Federation "On Customs Tariffs" dated 21 May 1993 (No. 5005-1) and of Order

No. 42 of the State Customs Committee of the Russian Federation dated 29 January 1994". The goods are provided by the Federal Republic of Germany under promotional programmes within the framework of support for the socio-economic reforms of the Russian Federation".

It shall also be stated whether the goods are a *gratis* gift or are being imported for a limited period. In either case the Russian partner can take possession of the goods free of customs duties in the local customs clearance office on presentation of the co-operation agreement and the confirmation from the Committee for Humanitarian and Technical Aid and the Ministry of Science and Technology Policy.

If the goods are imported only temporarily and remain the property of the German partner, but will not be used for the purpose of obtaining a profit, the following aspects must be considered:

a) The temporary import of goods for the purpose of carrying out research work without commercial objectives is in general exempt from customs duties, value added taxes, special taxes and excise duties (in accordance with Instruction No. 01-12/328 dated 26 April 1994 of the State Customs Committee of the Russian Federation, Item 1 and Appendix 1).

b) On expiry of 12 months a *pro rata* customs fee shall be paid for each full calendar month and fraction thereof, amounting to three per cent of the total customs duties and taxes due on importation of the goods for the free movement of goods. The payments made can amount to considerable sums.

c) If it is not possible to obtain confirmation of the co-operation agreement (to the effect that it in fact involves technical aid) from the Ministry of Science and Technology Policy in good time, the goods can be imported in the first instance for a period of one year free of customs duties. The documents required for execution of the relevant donation can be obtained within this year.

Note:

On declaration of the goods for customs clearance for temporary import (export) and on re-exporting (re-importing) the goods, fees for the customs clearance (caution -- these fees are not customs duties) must be paid in the amount of 0.1 per cent of the customs value in the currency of the Russian Federation and in the amount of 0.05 per cent of the customs value in the foreign currency at the exchange rate applied by the Central Bank of Russia.

At present the possibility of extending the period for temporary import from one to three years with full exemption from customs duties is under discussion. The target of the discussions is three years for goods included in grants under selected promotional programmes. All documentation must be prepared in at least English.

4. Preparation of documentation

The co-operation agreement and the waybills shall be prepared in German and Russian if possible but at least an English language version of the documents must be available.

ANNEX 2: S&T CO-OPERATION WITH RUSSIA: PROBLEMS OF COMMUNICATION AND PERCEPTION

by Harley Balzer[6]

In preparing my comments for this conference, I took the request to speak about "exchange of information" in the broad context of difficulties in communication. I want to address what I see as some of the most important problems of mutual understanding and cross-cultural communication in efforts to promote Russian-OECD co-operation in S&T.

Russian-OECD co-operation in S&T is now at the stage where we must do the truly difficult work. The era of toasting more frequent meetings, gaping at the visas people never believed they would receive, and assuming that once barriers came down everything would be "normal" is over. As Henry Aaron said, "Getting married is easy; it's staying married that is the hard part." Having made a decision to build a relationship, the Russian and OECD member nation science communities must recognise both the opportunities and the difficulties involved in the process.

My focus is, inevitably, on problems and difficulties rather than on achievements. I want to stress that the objective is not to say these obstacles are anyone's fault. I am not seeking to apportion blame. Rather, I want to speak frankly about some issues that must be confronted directly if genuine co-operation is to flourish. If I seem to spend more time on the Russian "side," it is attributable to two factors. First, I have spent more than 20 years studying Russia. Others here know far more about the "Western" situation. Second, the OECD nations have accumulated a great deal of experience with the inevitable tensions between co-operation and competition involved in any international relationship. Many things taken for granted among OECD member states are not so obvious to new partners.

My comments will begin with some general thoughts on basic historical problems underlying the new relationship. As usual, there is good news and bad news. The bad news is that Joseph Stalin succeeded in many ways in implementing his mania for autarky, and the result is that the elite in the Communist world was probably one of the most isolated and least Westernised leadership groups in the international community. (And this is true despite the belief among the intelligentsia that they were part of an international intellectual community.) Soviet participation in international science was massively influenced by the "kopeck for a rouble" approach of paranoid politicians and intelligence bureaucrats. In an era when Russia is seeking to establish a new identity, this legacy continues to have a heavy influence on all of the parties involved.

The good news is that a generational sea change has been gathering force for nearly a decade, and in some cases longer. A nation with tens of millions of highly educated specialists is certainly in a position to assume a major role in the international community. We see evidence daily that this is taking place. But it is not without difficulty.

It is in the spirit of sensitivity to both the opportunities and the difficulties that this commentary will delve into some of the more intricate, and perhaps controversial, aspects of the co-operative relationship.

We might start by noting a few of the legacies from the Stalinist/Soviet era. Russians have to acknowledge this heritage from the past if they are to change their system. Foreigners need to understand what underlies Russian approaches, and must be frank in assessing the effects of the cold war mentality in OECD nations.

Preoccupation with equity. One of the most important cultural divides stems from the fact that the Soviet system stressed equity, and none of the assistance programmes or co-operation initiatives has equity as a major concern.

Lack of trust. One of the most pernicious long-term social consequences of the totalitarian system was the destruction of social trust. Soviet society was a social milieu in which no one trusted anyone outside their family or *kruzhok*. Within the Party, family circles and regional groupings provided some security. But belief in fair standards of behaviour within a professional community was sadly lacking. Effects manifest themselves in myriad ways as specialists from the post-Soviet world begin to integrate with their international professional communities.

Chaotic legal system. With the dissolution of the USSR, all the new states face the need to revise their legal and taxation systems. In Russia the process has been complex and protracted, with competing national, regional and local jurisdictions sometimes adhering to contradictory laws. Political battles of tax policy have been frustrating and costly to almost all parties involved. Russians need to recognise the costs of delay and confusion. Foreigners must understand that some of the delay and confusion reflects the working out of important political processes rather than evil intent or incompetence.

Different styles of S&T. The Soviet Union developed a distinctive style of doing science and technology. The elite scientists and technical specialists worked primarily in two communities -- the Academy of Sciences and the Military-Industrial Complex. Both of these communities were largely insulated from many of the pressures that are well-known to scientists in the West: the needs of the market; cost-effective production; competition; and the demand for usable results. There is no value judgement implied here. I personally would probably prefer to be a senior scientific researcher at a USSR Academy of Sciences Institute. The problem is that no one can afford very many such structures in a real-world economy.

A mania for planning and administrative solutions. Many of the administrators under the Soviet system could not envision solutions to problems outside the framework of more or better planning. Gosplan is, mercifully, gone, but many in Moscow continue to see solutions to economic and other problems in new state programmes. Not only are these familiar approaches of dubious efficacy, but they can increase the difficulty of carrying out international collaborative projects.

The great power syndrome. Russians often speak of the need to maintain research in "all areas" of science. But it is not at all clear what it means to be a great power or a "superpower" in the post-cold war world. There is not enough attention in either of the former superpowers to the possibility that the definition may be changing. All nations have genuine security concerns, but the world needs a post-cold war definition of security. We now live in a world where for most nations terrorism, crime, ecological deterioration and nuclear remnants rank equal with if not ahead of foreign invasion as the serious threats.

In the case of America in particular, the cold war legacy means that money is more often available from the Defense Department than from other sources, imparting a special and not necessarily "scientific" character to assistance programmes.

Nationalism and nativism. Every nation in the former Soviet Bloc is in the process of redefining itself. (We might note that every national community in the world is continuously in the process of redefining itself, but in times of epochal change the process is vastly accelerated.) Russia's self-definition will have an important effect on science policy and the character of international co-operation. As with the era of "market romanticism," the era of "international romance" is over. On all sides there is a recognition that large nations have genuine interests, and that these interests are sometimes in conflict. The question is how the interests are defined and how the conflicts are resolved.

Russian politicians will for many years be grappling with the choice between a secure nationalism that permits them to play the role of a major power on the global stage, and a chauvinist nativism that will present serious difficulties for all nations, including Russia. Russia does not now, and will not for at least two decades possess the resources to maintain a global military or a global science policy. To try to do so will prolong the period of adjustment. But the temptation to try is enormous. It is a serious political choice, and Yugoslavia provides graphic evidence of what happens when leaders make the wrong choices.

The "end point" effect. The Soviet world is in the very early stages of a transition to something new, but not to something finite. Process and change are the very stuff of history, yet in both Russia and the OECD nations there is a rush to pronounce verdicts on the transition. It is critically important to maintain a sense of the open-endedness of the process. Having lived with a teleological ideology for so long, Russians in particular should be sensitive to this issue. But the very determinism of the previous ideology leads many to seek a new teleology as a comfortable replacement.

If these comments seem to have dwelt heavily on Russian problems, it is not meant to imply that the difficulties are all on one side. Far too often, outsiders have assumed that they have all the answers. We have watched a flood of consultants travel to Moscow and begin enunciating policy prescriptions with little understanding of Russian conditions -- or worse, with a superficial understanding based on a week in one city.

One of the most important failings is that many of the Western "experts" fail to comprehend that they could learn things from their Russian counterparts. Russian approaches may be different, but they are not necessarily inferior. Genuine co-operation requires not paternalism, but recognition of the possibilities for mutual enrichment. And it requires a long-term commitment to the relationship. My own sense is that the Europeans are doing better than the Americans on this score.

Let me now turn to some of the practical implications of these perhaps overly philosophical ruminations.

1. Equity

Private foundations, being independent and flexible, were relatively quick to initiate programmes of assistance in Russia. Their operations have been a source of frequent complaints from Russians. Many people think there is some cabal of foreigners who, under the cover of charitable activity, are seeking to dictate policy. Some government officials want to "rationalise" the seemingly erratic welter of sometimes overlapping programmes and initiatives. None of the foundations behaves precisely as Russians would, and those (like the Soros foundations) that have involved Russians in their grant making decisions have experienced internal conflicts.

The foundation world is always and everywhere an insider game, and this fuels Russian suspicions that things are rigged. (They are, but not in the way Russians believe.) Foundation programme officers were first viewed by Soviet ministry bureaucrats as chickens to be plucked. Most of them turned out to be savvy enough to avoid this, or to risk only minimal sums. More recently, the foundations have been regarded as some dark cabal, pursuing an unknown but unified policy. Very few Russians have learned what the "insiders" in the West know -- that the foundations are constantly in competition; that each seeks to do something new and to do it first; and that programme officers are probably motivated at least as much by their own career concerns as by any overarching policy pronouncements. For a foundation, giving a large grant is like loaning someone a lot of money -- you become dependent on them. That is why foundations prefer to begin with a small project to test a recipients' reliability and the quality of the work.

The foundations do not help matters when they (inevitably) begin any new initiative with a press conference announcing grand designs. The hype and unrealistic promises virtually never live up to their billing, even when these organisations are operating in their home countries. In Russia, things are inevitably much slower.

Foundations and government assistance programmes will never be able to achieve equitable regional distributions. (The Soviet system did not do this, though it may have come closer than most nations do.) At first, everyone opened an office in Moscow. Then the vogue became grant-making outside Moscow. But in any open grants competition, Muscovites seem to have advantages due to connections, proximity, availability of information, and easier international contacts. It is true that Moscow constantly drew in the top scientific talent of the entire USSR, but one must wonder if, as ISF results might suggest, more than 55 per cent of the best scientists were located there.

INTAS faces a particularly difficult situation in terms of equity. Under the Soviet system, only a limited segment of the scientific community was permitted to travel abroad or even to meet with foreigners inside Russia. And the quality of an individual's scientific work was not the sole criterion in selecting these people. In many cases, the "approved" individuals were able to establish relationships with foreigners, and are therefore the first ones to be invited to participate in joint projects. Some have even taken the initiative by calling foreign colleagues and proposing that they apply for joint grants. I do not want to overstate the case: Western scientists read the literature in their specialities and know quite well who the good specialists are. But they are still likely to work with people they already know, and this creates an impression that the same people are reaping the benefits of co-operation.

One solution to both the regional distribution difficulties and the problem of those with existing connections garnering the major share of collaborative grants is to improve access to information and communication. One of the major contributions the Ministry of Science can make is to help disseminate information about all types of grants and collaborative research programmes as broadly as possible. Programmes to assist new regional development offices could play a role here. And efforts to improve telecommunications will help to lower the cost and increase the efficiency of international contacts.

Another equity issue concerns differentials in the size of grant awards. Russians have complained that different foundations and different programmes offer different levels of support. In conditions of rampant inflation, no one has done a very good job of calibrating stipends/salaries to living costs. Building in increases for inflation means fewer recipients and the risk that the amounts will appear excessive in the initial phase. Failing to do so results in scorn. (I recently had a somewhat unpleasant

experience with a scholar who had visited my university under a grant I manage. This individual subsequently received another grant that pays about twice as much. This person spoke rather derisively about the stipend paid by the first grant until reminded that without that first opportunity the chances of receiving the subsequent grant would have been minimal.)

The number of grants that can be awarded by any foundation, or by all of them taken together, is finite. There have been inevitable pressures to increase the number of grants and thus the number of individuals receiving support, even if this dilutes the size of grants. My personal view is that the ISF made a serious mistake in choosing to award too large a number of grants, reducing the number of grants that will support serious research projects. I cannot quarrel with the logic behind the decision, but if the real goal is to sponsor scientific research and "save" practising scientists, I would have made a different choice. The issue will arise repeatedly in the process of allocating limited funds, and everyone involved should be aware of the nature of the choices and their implications.

There have been complaints that Russians hired to work for foreign firms, whether in Russia or abroad, are paid less than Western specialists doing the same work. Russians are finally learning why in the West revealing one's salary is a highly sensitive matter. (In the USSR most salaries were a matter of public record.) How much one is paid depends on a host of variables, and it is a source of endless difficulties. Law firms, university departments and sports teams often must offer new recruits more money than individuals who are already employed, causing serious friction. We rely on the response that everyone should be able to get what they can -- rather than complaining about someone else's deal, you should find a way to get a better deal for yourself. The more characteristic Russian response is to denounce unfairness.

Russians sharply criticise the "dumping level" salaries paid to émigrés. But a Russian moving to the West will rarely be offered a salary matching the top Western specialists -- though there are exceptions. (I can name several who earn far more than I earn.) More often, employers want to verify the "product." If an employer does not within a reasonable time adjust salaries to knowledge and performance, market forces usually intervene.

Complaints about the differential pay for scientists working in Russia and in the West most often come from people who also advocate wage equality and broad sharing of available resources. Yet if foreign firms were to pay New York wages in Moscow, the number of scientists they could support would be vastly smaller. (One physics group compensated for what it considered low salaries by reducing the number of scientists in the group. Those who remain are quite satisfied, but what about the others?)

It would also be helpful to remind Russian scientists that even George Soros did not make billions on his first investment. Mr Soros was living in his third country, working for perhaps his tenth employer, before he created the immensely successful Quantum fund. Most Russian S&T personnel need to learn more about the global market before they can command high prices. Boris Babaian initially signed a contract with Sun Microsystems that made his researchers comfortable by Russian standards but was almost laughable by international standards. On the other hand, the risks for Sun were enormous, as they are for any pioneer. When other companies began to express interest in Babaian's group, the price went up.

Evgenyi Dianov (who may be best known in the US for his unforgivably stupid comments about the motives of the International Science Foundation) considers that AT&T Bell Labs was miserly in the amount it paid his Physics Institute. But he freely admits that "co-operation with AT&T has been very good advertising for my team. So now I have contracts with other companies." Has he offered to pay Bell Labs for the advertising?

In a market economy, the price of something depends on what someone wants to charge for it and what someone is willing to pay for it. This basic rule of the bazaar and the market cuts against deep Soviet cultural values -- that things should be fair, that prices should be the same for everyone, that there should be rules and regulations governing what things cost, what people can charge, etc.

Clearly, we are not heading for the world of Milton Friedman, where there will be no government regulation. But we recognise that every step toward government control exacts a price in terms of efficiency of the market system. Every society works out its own compromise between the two principles, and in every society the mix changes over time, reflecting changing social priorities and also demonstrating that there is no perfect solution to the question.

2. Lack of trust

One reason that salary and stipend issues are so contentious is that the level of trust is so low. Russians need to learn more about the way the world works, and need to avoid facile analyses based on incomplete information and false analogies. Westerners need to understand the environment out of which Russian science is emerging.

When it comes to allocating grant funds and conducting peer review, Russian scholars refuse to believe that colleagues will behave responsibly, and doubt that foreigners will be able to perceive the tricks and machinations of duplicitous Russians. [In general, Russians believe they have invented virtually all types of scams, ways to cut corners, etc.] In my own experience with the ISF, I was amazed at the belief on the part of Russian scientists that their colleagues would not be able to make judgements based on professional standards. It was almost as if they believed the Russians were too clever for their naive and gullible Western counterparts. As if our own graduate students have not thought up every angle imaginable over the past few centuries.

On the level of specific research projects and collaborative efforts, there is still a long way to go to build trust and genuine co-operative activity. This is particularly the case in policy research. Many foreigners have treated grants to Russians as charitable contributions, assuming that we already know all the answers and paying little attention to the research products generated. Many Russians consider that they know all the answers, and that the OECD nations are merely a source of financing until the Russian economy is back on its feet. Neither of these approaches leads to the sort of genuine collaboration that can produce new proposals.

At the most basic level, we have to get beyond vague claims about being ripped off and deal with specific substantive issues. Only by resolving individual cases and setting precedents will new models of co-operation evolve.

3. Chaotic legal and financial conditions

Four more nations have joined the European Union. The negotiations for this step took seven years, and required working out 18 baskets of agreements, some with several dozen sets of detailed legal arrangements covering everything from patents to truck sizes and weights. Most of these agreements cover things Russians have not even thought about yet. I doubt if there is a single expert on liability law in the entire former USSR.

Russia lacks basic legal guarantees for all forms of property, including intellectual property. The tax laws are subject to constant revision, and are interpreted variously at different administrative levels. When legislation does exist, foreigners often do not know about it, and it is likely to change quickly. Basically, the Russian government needs to do a great deal of work to stabilise the legal environment and enforce the laws; foreigners need to understand that this is not likely to happen overnight.

The legal chaos is not just a function of the "Russian soul." There are good reasons why many people prefer the lack of clear rules with strict enforcement. And other people prefer no rules to rules that restrict their opportunities. In a fluid political environment, many players prefer to postpone crucial decisions, thinking they will be in a stronger position later on.

One important mental adjustment on all sides would be a more realistic appreciation of what is possible under existing conditions. After my own experience with ISF, I formulated a model that I call Quicksand (Russ. *zybuchii pesok*; Fr. *sable mouvant*) and Molasses (Russ. *melassa*; Fr. *melasse*). Most Western programmes in Russia have been of the quicksand variety: money vanishes without a trace, most often ending up in bank accounts in Switzerland or the Cayman Islands, and there are few visible results left in Russia itself. The more successful programmes are like molasses: They are very slow, they cannot possibly live up to the expectations they engender, and those involved usually find themselves covered with something that sticks to them for a long time.

In a country where people must pay for archive materials and for every cell in a data matrix, the issue of payments and even outright bribes must be confronted. Before the break-up of the USSR, businessmen who came to visit the science staff at the Russian Embassy in Washington were handed business cards with the staff members' consulting business phone number. There are now far fewer science attaches, but I suspect the modus operandi is not much different.

4. Different styles of S&T

In science and industry, there are special difficulties stemming from the nature of the Soviet system. There were few places in the Soviet system where cost-effectiveness was a major concern, and much research was divorced from such mundane considerations as marketing. Particularly in the Academy of Sciences, the prevailing culture held that genuine scientists were above such earthly concerns. The legacy is a profound cultural gap. One is reminded of the stories from Israel about Russian physicians who emigrated, set up a medical office, and then visited their Knesset representative to ask why they had not been sent any patients. Many Russian scientists and engineers begin with the interesting technical question, where their American counterparts are more likely to ask, "what can we do with it?"

It is important to remember that despite the grand claims about the quality of Russian S&T, the USSR was never a major player in international high technology markets. In machine tools, the Soviet Union exported far more units than it imported, but the value of the imports far exceeded the value of the exports. This was because the exports were mostly first- generation basic tools -- inexpensive, reliable, uncomplicated-- whereas the imports were sophisticated multi-axis and numerically controlled devices (e.g. the infamous Toshiba case).

The major exception to the low technological level of Russian exports was weapons systems. This is a highly sensitive and emotional issue. In some cases, it touches on geopolitics. But it is also important to remember that many of Russia's customers were regimes that can no longer afford the

weapons. And there is a vicious circle of reliability of future supply dictating current sources. We should also note that at least some of the American objections regarding weapons sales do not apply solely to Russian enterprises -- in August the US navy tried to block the sale of US submarines to Egypt for the same security reasons that underlay objections to Russian sales to Iran.

5. Planning and administration

The weight of the Soviet legacy also affects proposals for "co-ordination" by government bodies and Ministries. Given the past history, Russians and foreigners alike are wary when bureaucrats talk about co-ordinating, rationalising and otherwise becoming involved in their activities. (Given the potential for corruption, some of the advisors to Gaidar and Federov sought to minimise government involvement, especially where foreign trade was concerned.) It is important that the Ministry take cognisance of this history, and couch its proposals in a form that will not alarm the community it is seeking to help.

And the bureaucrats are certainly among the groups attempting to reap the benefits of co-operation. This is particularly true of the refugees from various "International Departments." It will take a long time before the impulse to put all international contact under bureaucratic control will be fully eradicated. Often nowadays such attempts are cast in the guise of improving efficiency: the economic crisis is so severe and the available resources are so limited that the government should step in and provide co-ordination, or at least an information clearing house.

Such plausible-sounding proposals have to be viewed in the context of years of bureaucratic manipulation and interference. Most foreign donors would take the stance that a certain amount of redundancy is a small price to pay for changes that will unleash individual initiative. The real goal is to have enough going on that on one could possibly keep track of it all, much less put it back into a straitjacket.

At the same time, there is an urgent need for better co-ordination among the various departments of the Russian government dealing with science and technology. In September 1993, at the OECD Conference in Moscow, the Minister of Science and the Deputy Chairman of the State Committee for Industrial Policy both stated frankly that there was a need for better co-ordination, that they were trying to achieve this goal, but that it was elusive. At IIASA Conference in Vienna in March 1994, the Deputy Minister for Science, Deputy Chairman of GKPP and President of Russian Fund for Basic Research said essentially the same thing: there is a desperate need for co-ordination, but inability to surmount departmental barriers. Except for 1992, the military R&D budget has remained outside the purview of civilian S&T agencies. It is absolutely impossible to implement a co-ordinated industrial policy or programme of conversion without bringing in the Ministry of Finance and the Ministry of Defence.

Departmental battles and irreconcilable political conflicts over policy have already had a major long-term negative impact on Russian science. The opportunity to implement reasoned reductions in personnel and institutions has been lost. Those of us who called for such reductions were not conducting a vendetta against Russian science, and we were not attempting to destroy the community or turn Russia into a raw materials supplier. Rather, we were making a plea to save as much as possible with the limited resources available. The reductions were inevitable. The sole question was whether they would come as part of a coherent programme or by chance.

The result of reductions taking place by chance is that some of the best people have left basic science, and those who remain are finding support outside the state-funded sector. Given that state support is severely limited, and that even the miserly amounts in the budget are rarely delivered in full and never

on time, other sources of financing appear more attractive. Institutes encourage their researchers to seek outside support, and the best of the scientists are usually the ones who receive it. With so many leading researchers working abroad, working for foreign firms, and receiving grants from ISF, RFBR, INTAS, etc., the government is losing (may have already lost) its ability to conduct a coherent science policy influencing the research programme of the top 10 per cent of its scientists. More often, it is conducting a welfare programme for second and third rate S&T personnel.

6. Great power syndrome

Russian insistence on maintaining a broad front of research covering all areas of science and technology has an effect similar to the refusal to reduce personnel and institutions: it forces cuts on a chance basis, without any rational decisions about what is needed for economic or military security. A government that eschews painful decisions because they are too difficult may survive in the short run, but its long-term prospects are dubious.

Most American government initiatives in S&T have been and continue to be driven by the source of the funds available: the Pentagon. As long as the largest share of financing for S&T co-operation continues to come from DOD, these programmes will be hampered by working in the most sensitive and dangerous fields. Some of the complaints about slowness, complexity and political agendas stem directly from this situation. (And it is something some of us warned about when the project was first proposed.) It is still not too late to match the ISTC programme with a civilian science initiative aiding all basic science disciplines.

Expanding the scope of USG programmes would help address a serious fairness issue. Many Russian scientists consciously refused to work for the military. Yet now it is precisely the weapons scientists who are the major recipients of Western government aid.

The OECD nations could also move more expeditiously to remove the remaining barriers to co-operation. There is still a residue from security arrangements in COCOM, and from travel restrictions and other limitations. Russian physicists are still subjected to demeaning visa delays and restrictions. Some of this is due to mere neglect -- no one has bothered to change the outdated rules. Addressing the issues would help prevent damaged feelings and improve the relationships.

7. Nationalism and nativism

As Russia gropes for a new identity, political leadership will be crucial. Responsible leadership that seeks to strengthen Russia's position in the world on the basis of a realistic assessment of the nation's resources and the intentions of other nations is desperately needed. Irresponsible actions based on false images of Russia's situation or misreading the international context could seriously threaten global stability.

There is an understandable tendency to view the late Soviet period through rose-colored glasses, and to think that everything was fine before the monstrous reforms of *perestroika* destroyed a wonderful system. It is true that for some scientists, the situation in the Academy and in the military-industrial complex (MIC) was indeed wonderful. But these islands of excellence and creativity were purchased at a frightful cost to the society as a whole, including the science system. And even in the privileged sectors, there were indications that the system was in trouble well before Gorbachev came on the scene.

The wails of pain by scientists who must work at more than one job to feed their families are real, but they ignore past conditions. I well remember a night in 1986 when I hailed a "gypsy" cab in Moscow and was treated to an earful from the driver. He was a geologist, and several of his books had been translated into English. He asked me if any of his colleagues in America were forced to moonlight as taxi drivers to make ends meet. If more people did not do this under the Soviet regime, it was because there was not much to buy and the laws against it were sometimes enforced.

Western participants in joint projects must be sensitive to the reaction that may develop within Russia, and to the political realities under which Russian officials are operating. There is no way to escape the misuse of issues by irresponsible politicians. But they should not be given scandals that make their demagoguery easier. On their part, Russian political leaders have the responsibility to lead -- to explain coherently and repeatedly just what foreign partners, and particularly charitable foundations, are about.

Among the many draft programmes for the reorganisation of science circulating within the Academy, one that was given to me includes some very disturbing material that is worth quoting at length:

> "Lack of deep knowledge and culture leads to a political line, the principles of which amount to the following: Russian science is behind world science, therefore it should utilise the achievements of world science and cease conducting its own R&D, which Russia does not need during the period of economic reforms. And it follows that Russian natural resources should be developed using the best results of foreign technology. This position is characteristic also for the political line of many foreign countries and international organisations, and is being inflicted on the Russian R&D sector. One of the confirmations of this was the report on scientific-technical and innovation politics of the Russian Federation prepared by OECD presented at a conference in Moscow in September 1993. It is evident from the report, that the basic goal of foreign advisors is the rapid destruction of the scientific potential Russia has acquired, and directing the priority development of that scientific - technical potential to development of natural resources."

As I learned when I worked for the US Congress, no good deed goes unpunished.

8. End point

As Russian and foreign scientists and administrators work to establish a more constructive, co-operative relationship, there should be a recognition on all sides that the definition of appropriate policies for co-operation is constantly in flux. Even the most successful national and international science and industrial policy programmes have been characterised by serious flaws as well as achievements. It will be necessary to constantly re-evaluate and recalibrate the relationship over time. I am not suggesting that all agreements must be temporary -- basic principles can be accepted that will govern changing conditions. But the inevitability of change should also be recognised.

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NOTES

1. *Science, Technology and Innovation Policies: Russian Federation,* Volume I, "Evaluation Report" and Volume II, "Background Report", OECD, Paris.

2. "Co-operation in Science and Technology with the Federation of Russia: Experience and Programmes of Selected OECD Countries", OECD, Paris.

3. Mr Linnakko was an examiner for 1993 review of science, technology and innovation policies conducted by OECD. He is currently with Oy Sitrans Ltd, Finland.

4. A co-operation agreement is not a contract. The correct choice of words is very important because of the possibility of transferring monies or equipment to Russia free of tax and free of customs duty depends on it.

5. This wording concurs with the binding documents in Russia.

6. Harley Balzer is Associate Professor of Government and Director of the Russian Area Studies Program at Georgetown University, Washington, DC, 20057, USA. During 1993, he served as Chairman of the Board and Executive Director of the International Science Foundation. Mr Balzer was an examiner for 1993 review of science, technology and innovation policies conducted by OECD.