

NFSAT “Networking Program for Scientific Infrastructure” (NPSI) Request for Proposals

The National Foundation of Science and Advanced Technologies (NFSAT) is currently accepting applications for the “*Networking Program for Scientific Infrastructure*” (NPSI). This program will enable competitively selected companies or organizations to provide Internet services within Armenia and install high-quality connections between institutions (research organizations) and the Armenian Research and Educational Networking Association’s (ARENA) Center.

ARENA is a consortium of Armenian non-profit organizations committed to develop networking technologies for other non-profit organizations in Armenia. Members include: NFSAT, the National Academy of Sciences of the Republic of Armenia, Yerevan State University, State Engineering University of Armenia, Yerevan Medical University, Yerevan Physics Institute, Internet Access and Training Program (IATP) at the International Research and Exchanges Board (IREX), United Nations Development Programme, Yerevan Institute of Automated Systems of Management, and the Open Society Institute Assistance Foundation-Armenia.

All the companies/organizations wishing to participate in this competition must submit a proposal(s) in accordance with the requirements stated in this announcement **no later than May 15, 2003**. The winner(s) of this competition will be awarded a maximum of US\$90,000 to install the links between selected Institutions and the ARENA Center.

The goals of this program are to improve the availability and quality of Internet service for the Armenian scientific community and increase the connection speeds at scientific institutions in Armenia.

Background:

In order to enhance the development of scientific potential of Armenia, NFSAT has identified increasing access to scientific information in Armenia and the integration of Armenian scientists with the international scientific community as major priorities for its charitable activities in Armenia. The most cost effective means for Armenian scientists to access scientific information and to remain in contact with the international scientific community is through reliable email and Internet service.

ARENA has agreed to work with the NATO “Science for Peace” Program to implement the “Virtual Silk Highway” project in Armenia. Through this program, NATO has granted a Satellite Dish with corresponding equipment including a Ground Station (GS) to ARENA, which connects ARENA to DESY (DEUTSCHES ELECTRONEN SYNCHROTRON, which is a governmental organization in Germany that is linked to international up-to-date scientific information through the World Wide Web).

NFSAT, an ARENA member, will enhance NATO’s investment by linking selected institutes and universities via fiber-optic technologies to the ARENA Center. A full list of these organizations is attached in Appendix 1.

NFSAT’s “Networking Program for Scientific Infrastructure” is carried out under the prime Award #NFSAT-03-2001, which is provided by the U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union (CRDF).

Eligibility:

- The organization or company must be an indigenous civilian organization legally registered to do business and located in Armenia.

Special Consideration: NFSAT will give preference to:

- Proposals where the external network connections would require minimal technical efforts.
- Proposals with the usage of independent communication channels/cables for the entire network or the component parts, as well as the use of fiber-optic cables as the basic means of connectivity.

Program Guidelines:

The NPSI is divided into the following two parts:

- Part A: Organizations located within the territory of Yerevan;
- Part B: Organizations located outside Yerevan.

Proposal Content:

Each proposal must include all the following materials, in the order prescribed below. Only applications that include this information will be considered.

- **Title Page.** Please include:
 - a) The official name of the applying organization;
 - b) Full address and telephone number(s) of the applying organization;
 - c) The Organization Director's and Project Director's names and signatures. The Organization Director's name must be sealed.
- **Proposal Narrative (5 pages maximum).** Please include:
 - d) A detailed explanation of how fast, high-quality connectivity between selected Scientific Institutions and ARENA's Center will be established.
 - e) A description of the relevant prior work previously carried out by the Project Director and the Organization.
 - f) Detailed diagrams and drawings of the proposed connections.
 - g) A detailed description of the proposed equipment, materials, and labor that are needed for installing and maintaining the network. All the equipment used in this project must be new.
 - h) Verification that any rented fiber-optic cables used in the project belong to an officially existing company that possesses a registered license for usage.
 - i) At least a one-year service agreement that guarantees a secure connection. The overall time of connection breaks must not exceed 10 hours per month and applicants must demonstrate 24-hour control of the connection availability.
- **Cost Proposal Summary Table.** Please list the costs of all requested equipment, installation, and hardware maintenance using the table provided in Attachment A.
- **Narrative Cost Proposal (1 page).** A separate sheet must be included to explain all costs. This sheet must be clearly marked "Narrative Cost Proposal."

All pages should be numbered consecutively in the upper right corner.

- **No proposal may exceed 15 pages in length. Any proposal exceeding 15 pages in length will be deemed ineligible.**

Maximum Costs:

- The total amount requested for all expenses under NPSI may not exceed US\$90,000. No proposal requesting more than US\$90,000 will be considered.
- Organizations that apply for both Parts A and B may request up to US\$90,000.
- Organizations that apply only for Part A may request up to US\$40,000.
- Organizations that apply only for Part B may request up to US\$60,000.

Proposal Submission:

- Applicants may submit two separate proposals and simultaneously participate in both parts (Internal – A, and External –B) of the NPSI.
- Applicants must submit four original hardcopies (two in Armenian and two in Russian) to NFSAT.

- Applicants must also submit two electronic copies of the proposal (one in Armenian and one in Russian) in PDF format to NFSAT.
- No modifications may be made to any item of the proposal once it has been received by NFSAT. If necessary, participants may request and receive additional information from NFSAT for completing their applications, but only before the final proposal is submitted.
- NFSAT reserves the right to request additional information from applicants if necessary. The final selection of which equipment will be used will be determined once all costs (i.e. equipment costs, ongoing communication costs, etc.) are evaluated.

Evaluation Criteria:

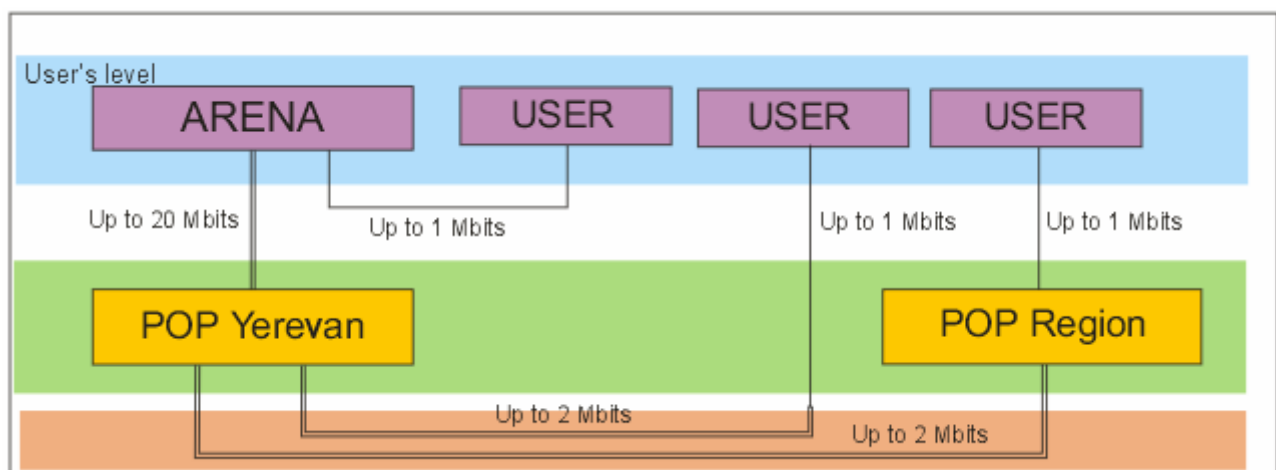
NFSAT will use the following criteria in the evaluation of proposals for this program:

- 1) Level of sophistication of the technical solutions and the equipment that will be used;
- 2) Connection speed and reliability;
- 3) Quality of the proposed maintenance;
- 4) Relevant experience of the applying organization in the field of networking communication.
- 5) The decision on the winner between organizations that apply only for Part A or Part B will be made through evaluation of the bids based on the prices they suggest, in relation to the amount requested by the successful bidder for the other Part. The main criterion in this case, along with the criteria stated above, would be the total amount of expenses for both Parts A and B which in sum may not exceed US\$90,000.
- 6) Total cost of the project.

Technical Requirements:

- All connections between selected Institutions and the ARENA Center must be accomplished from “point” to “point,” with ARENA’s Center as a start “point” and the local network installed at the place allotted by each of the selected institutions as a second/next “point.”
- The TCP/IP connection between the POP (access point) located in Yerevan and any other Regional POP (access point) must connect at a minimal speed of 128 Kbps, with the possibility of increasing it up to 1 Mbps without future replacement of the already existing equipment.
- A TCP/IP connection between the ARENA center (located in the 5th building of SEUA) and the Winner’s POP (access point) must connect at a speed of up to 20 Mbps.
- The equipment installed at the user’s point must demonstrate the possibility of increasing the transmission speed up to 1 Mbps without future replacement of the already existing equipment.
- In addition to the connectivity established by the fiber-optic cable, in order to increase the reliability of the network as a whole system, it is acceptable to establish a connection by radio modems between POP Yerevan and POP Region, as well as between POPs and users.

Connection Diagrams: Please include detailed connection diagrams based on the example below.



Internal Network Requirements:

- All the equipment (switch/hub, etc.) and computers within the same Institution are to be placed in a single separate room or laboratory.

Maintenance

- All equipment should be provided with the minimum of a one-year warranty.

Proposal Deadline: **May 15, 2003**

Maximum Cost: **US \$90,000.00**

Contract Type: **Fixed Price**

Timeline:

- NFSAT expects to award a contract to the selected vendor by no later than 20 June 2003.
- Installation of the equipment and software must be completed no later than within three months following the date of signature of the contract between the NFSAT and the selected vendor.

Applications should be submitted to:

Boris Polikhatko, NPSI Program Manager
NFSAT
Yerevan, #26 Azatutyun Ave.
Fax: 28-13-80
Phone: 28-81-92
E-Mail: pboris@nfsat.am

Checklist of Application Contents:

<input type="checkbox"/> Title Page	<input type="checkbox"/> Proposal Narrative
<input type="checkbox"/> Cost Proposal Summary Table	<input type="checkbox"/> Narrative Cost Proposal

Appendix 1:
List of Institutions that Will Be Linked to the ARENA Center

A. Institutions within Yerevan:

1. Institute of Fine Organic Chemistry, NAS RA
2. Molecular Structure Research Center, NAS RA
3. Institute for Informatics and Automation Problems, NAS RA
4. Institute of Molecular Biology, NAS RA
5. Institute of Chemical Physics, NAS RA
6. Institute of Mathematics, NAS RA
7. Institute of Geology, NAS RA
8. Institute of Applied Physical Problems, NAS RA
9. Yerevan State University
10. State Engineering University of Armenia
11. Yerevan Physics Institute
12. Ecological Noosphere Research Center. NAS RA

B. Institutions outside Yerevan:

B1. Gyumri:

1. Institute of Geophysics and Seismology, NAS RA
2. Gyumri Branch of SEUA
3. Northern Branch of National Service of Seismic Protection

B2. Ashtarak:

1. Institute of Electronics and Radiophysics, NAS RA
2. Institute for Physical Research, NAS RA

B3. Byurakan:

1. Astrophysical Observatory, NAS RA

**Attachment A:
 Cost Proposal Summary Table**

Item	Units	Number of Units	Per Unit Rate	Total Line Item Cost
Labor				
Equipment & Materials <i>(List all items)</i>				
1.				
2.				
3.				
4.				
...				
Transportation/Shipping Expenses				
Travel Expenses				
Other Expenses <i>(List all items)</i>				
1.				
2.				
3.				
...				
TOTAL:				

Notes:

- All costs must be quoted in USD/AMD.
- Each line item should be itemized and described in the budget narrative.
- The total requested amount may not exceed US\$90,000.