

- A lack of awareness among political decision makers;
- Inadequate support for network initiatives;
- A lack of co-ordination among different national actors;
- Some fragmentation of the efforts;
- Inadequate training facilities;
- A shortage of personnel, material and infrastructure resources;
- High tariffs for national and international circuits;
- A possible misunderstanding of the role of individual research, academic and educational networks by Public Network Operators (PNOs); and
- Continuing monopolies.

### The need for a concerted strategy

One of the challenges of the workshop was to go beyond the physical (the mountains) and the political (the large number of small states and territories) barriers in the region. Consequently, the prime objectives of the workshop were:

- To give the opportunity to network managers and policy makers to meet in person and exchange views on the present networking situation in their respective regions;
- To help them define the needs of the region and the possible areas of co-operation;
- To provide them with the proper information and expertise for planning projects in the near future.

A total of 66 participants from 25 countries attended the Workshop.

### The outcomes

The workshop and the follow up meeting that took place in April 2000, also in Tbilisi, provided the participants with a better understanding of the regional situation and of the possible synergies and led to a series of recommendations on several fronts such as infrastructure, training and regional organization.

We all can be pleased with the major outcome of the follow-up meeting that led, on April 28, 2000, to the signing of a Memorandum of Understanding between Networking Organizations from Armenia, Azerbaijan, and Georgia that stated:

*The undersigned representatives of the following networking organizations do hereby declare the will to work together to realize common networking goals in the Caucasus Region.*

*The main goal is to foster the stability, growth, and internal sustainability of the Internet infrastructure for the socio-economic development of the Caucasus Region. Desired outcomes of this international networking include increased political stability, free exchange of views, and rebuilding of links between the scientific and educational communities of these states of the former Soviet Union.*

*Increased communication between these three countries will enable scientists and educators to work in close collaboration, to exchange ideas and results, and to work together on projects of common interest (e.g. sharing of online catalogs between national*

*libraries and centralized retrieval in library science, seismic data collection and exchange Internet infrastructure redundancy in case of earthquakes, creation and maintenance of common usage databases such as flora and fauna and cultural heritage of the Caucasus Region). Additionally, large-scale collaboration with scientists in other countries sometimes requires regional mirrors of central databases (e.g. genetics, high-energy physics, etc.).*

*International traffic will be optimized by direct routing between Caucasus Region countries. In addition, improving the redundancy structure of the Internet regional collaboration on Internet infrastructure will allow back-up services and alternate routing in case of failure or overloading in one of the countries.*

*The development of a Caucasus regional network, based on existing national Internet infrastructures, will provide an easy access point for integration with other European and global networks, which will become increasingly important for growth and international communication.*

*The coordination of Caucasus countries' networks will encourage information technology standardization and increase compatibility and exchange of information. Lastly, the formation of a group of country networks will allow bulk purchases and to negotiate deep discounts with vendors.*

*To realize these goals, and to coordinate and leverage the use of resources and funds, we express the desire to create a single management organization (working name: Caucasus Academic, Research, and Educational Networking Association - CARENA).*

*The organization would comprise one representative organization from each country, to be determined. In the case of Georgia, the single representative would be GRENA (Georgian Research and Educational Networking Association).*

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