THE GEORGIAN HIGH ENERGY PHYSICS COMMUNITY AND INTERNET

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At the High Energy Physics Institute of Tbilisi State University (HEPI TSU) on the 27th of August in 1996 there was founded Satellite Communication and Computer Network center. This project has been financed by INTAS and realized by great support of the Doutshes Electronen Synchrotron. With the help of this center in Internet was joined High Energy Physics Institute and Computing Mathematics Institute of Georgian Academy of Sciences. The greatest role played the Radio-Msu net NPI of Moscow State University and Moscow Satellite Communications Engineering Center (SCEC).

Satellite terrestrial station is founded on KEDR-Ms terminal base with parabolic antenna of 4,8 m diameter, which power of transmission is 40 w and antenna direction is automatically controlled. The management of the station is accomplished by satellite modem SDI-100 and the exchange datas speed is 64 kbps. Discharge in Internet is made with the help of Hamburgs Central Station with which the connection is occurred by Russian geostationary satellite "Raduga" 35OE. Satellite station and computer nets equipment's are feeded with the powerful UPS (6000 kwa) and in exceptional cases are provided for feeding from the generator (2x Honda 6500). All this ensure continuous work of nets and satellite station during the twenty-four hours.

What is today the local net of the High Energy Physics Institute of TSU. The nets domains name is Hepi.edu.ge (194.67.95.1), server Sun 5 sparcstation, Sun 20, Netblaser, with 16 asynchronous ports, Cisco 2501 router and is constructed on a thin ethernets principle where in the meanwhile are united ten personal computers. With the Netblaser to the Institutes net with leased Lines communicate the Institute of applied Mathematics of TSU, the Institutes of Physics and Cybernetics of Georgian Academy of Sciences, while the Institute of Computing Mathematics Institute has its own independent discharge in Internet, three academic institutions-Georgian Academy of Sciences, Physics faculty of TSU and administrative building of TSU are joined by telephone lines. Georgia Scientific Academys Computing Mathematics Institutes computer net is independent (194.67.94.6) and some institutes of Scientific Academy are joined to it.

Five months work had shown, that the works stability of terrestrial satellite station is improved. Statistic date are given in the following table:

(From Radio-MSS lines' statistics)

Satellite link to HEPI, Tbilisi

Month	Station up	Station down
September 1996	89,0%	11,0%
October 1996	96,1%	3,9%
November 1996	96,0%	4,0%
December 1996	93,6%	6,4%
January 1997	99,9%	0,1%

It is clear that since the past years September till this years February the time of non-working state sharply reduced which shows the service staffs improvement of professional skill.

On the basis of NATOs grant it will be enlarged the academic and educational institutions joins to Internets net.

It is planned to acquire new technics for Georgia Scientific Academy Institute of Computing Mathematics and Physics Institute of High Energy of TSU, that will sharply improve Internets net introduction in Georgias academic institutions and will promote the exchange of Information with leading academic centers.

Our thanks to Dr. Hans Frese, DESY, Germany for that great attention he had shown for introduction and operating Internet in academic institutions of Georgia.