



Science - Educational Network of Turkmenistan

NATO science committee “VIRTUAL SILK HIGHWAY” Project Review

National Science – Educational
Network of Turkmenistan

**Legislative Basis
for the Creation of the Network :**

- Decree of the President of Turkmenistan
(March 3, 2003 y.)
- Order to Supreme Council for Science and
Technique under the President of Turkmenistan
(April 1, 2003 y.)



Project Review

VIRTUAL SILK HIGHWAY

National Science – Educational

Network of Turkmenistan

Purposes of the Project

- Creation of common informational network to unify educational and science and research institutions of Turkmenistan
- Providing an access to worldwide science knowledge and achievements
- Evolution of using of modern computer and network technologies in science and educational purposes

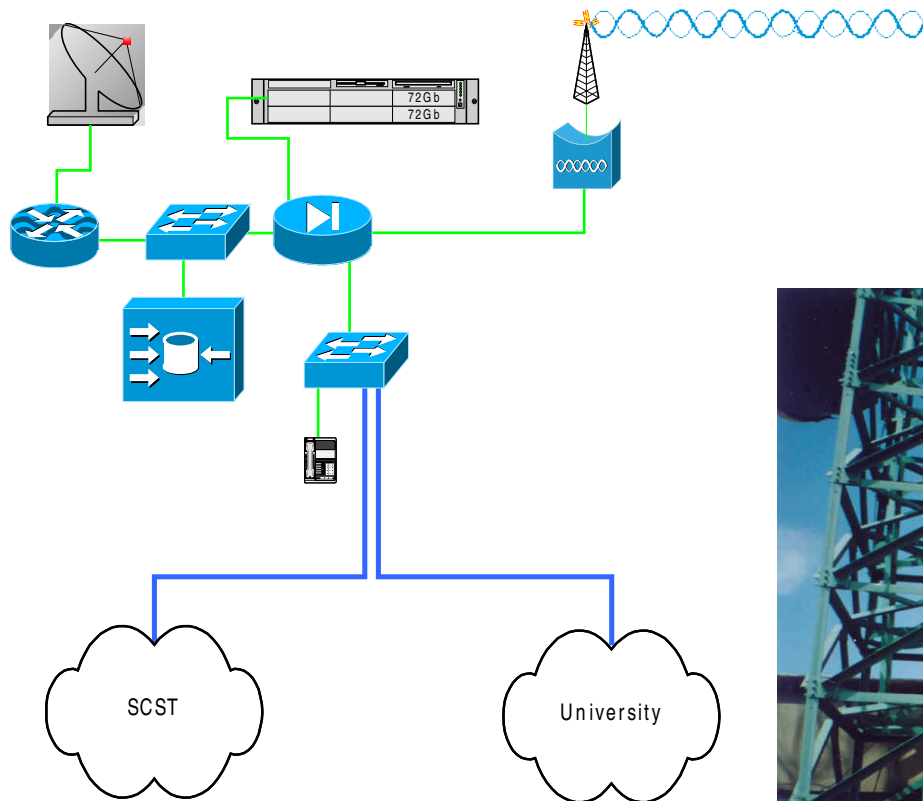
Description

- The Virtual Silk Highway Project is developing with the NATO Science Department's support and oriented on unifying of scientific-research and educational institutes in common scientific-educational network with accessing to Internet. For this purposes we have a satellite terminal for realization of connection to Internet in Hamburg, Germany, where the Center of Satellite Connections for the entrained in The Virtual Silk Highway Project CIS countries located.

In addition...

More detail information about this and other projects of Science Department of NATO is available at NATO website

The Satellite Terminal is located on the Turkmentelecom building, indoor the building there's also tranceiving and input - output distribution equipment: satellite modem, router, content engine, switchboard, and wireless communication access equipment.



Current situation (page 1)

At the moment 21 Science-Education Turkmen organisations are connected to VSH system. The major part of the communication structure has been created by the NIGs.

There are about 100-200 computers in the institutes (many of them from former computer generations) as single workplaces or computer classroom networks.

- Supreme Council on Science and Technology under the President of Turkmenistan
- Turkmen State University named after Magtymguly
- Turkmen Polytechnic Institute
- Turkmen State Institute of Transport and Communication
- Turkmen Institute of National Economy (equipment purchased from Tacis-Tempus Project budget);
- Scientific -Clinical Center of Oncology
- Scientific – Production Association “Gun” of the State Concern “Turkmendokumchihia”
- Turkmen State Medical Institute
- Hospital with Scientific -Clinical Center of Cardiology
- National Institute of World Languages named after D. Azadi (partly equipped from Tacis-Tempus Project budget)
- Turkmen Agricultural University named after S. A Niyazov (communication equipment purchased from Tacis-Tempus Project budget)
- Institute Oil and Gas

Current situation (page 2)

- Scientific Research Institute of Seismology of Ministry of construction and industry of construction materials of Turkmenistan
- Scientific Institute of Deserts, Flora and Fauna
- Scientific Research Geological Exploring Institute
- Institute of History under the Cabinet of Ministries of Turkmenistan
- Scientific Clinical Center of Eye Disease named after S. Karanov
- Science Clinic Center of mother and child named Gurbansoltan Eje
- National Institute of Manuscript named after Turkmenbashi
- Turkmen National Pedagogic Institute named after S. Seidi, located in Turkmenabat (partly equipped from Tacis-Tempus Project budget)
- State Power-Engineering Institute of Turkmenistan located in Mary (equipped from Tempus and OSCE budget)

Wireless Connection

- Merits
 - Comparative low prices
 - Convenience and ease of installation
- Demerits
 - Larger sensitivity to influence of external factors (in comparison with FOC)
 - Limited data transfer rate (up to 11 Mbps)
 - Limited distance from access point

Fiber – Optic Cable

■ Merits

- Stability to influence of external factors
- High data transfer rate (up to 1 Gbps)
- Transfer rate is independent of distance from access point
- High reliability of connection

■ Demerits

- Comparative dearness of cable
- Necessity of additional cable placement work

Current and Planned Internet Centers (under supporting by different donors)



General scheme

Turkmenistan Research and Education Network

