

Turkmen Research and Education Network Association – yesterday and nowadays

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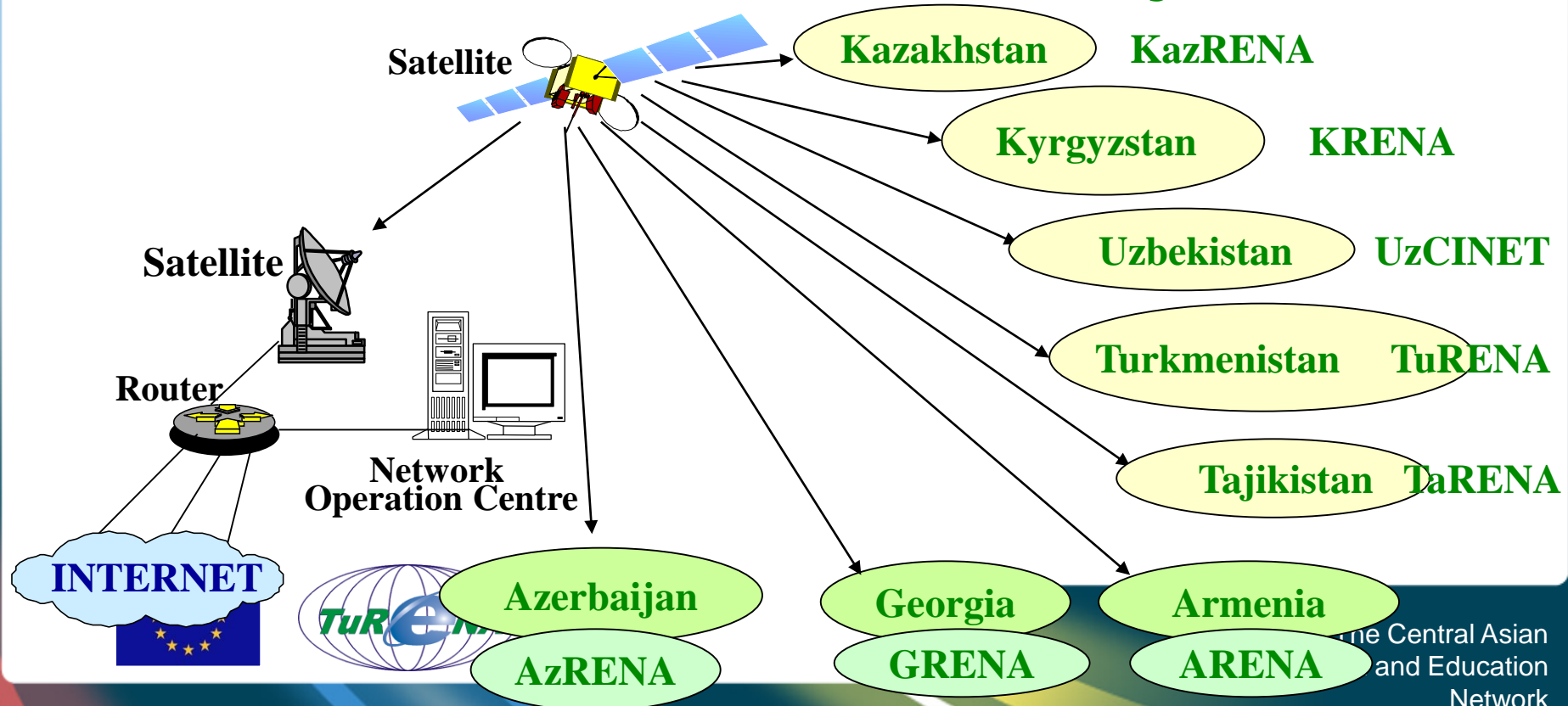


Beginning "NATO Virtual Silk Highway Project"



The goal of Silk Project to bring cost effective Internet connectivity to research and education community of 3 countries in Caucasus and 5 countries in Central Asia.

To increase significantly exchange of information between academic and educational institutions in these regions.



REESTABLISHMENT: JUNE 12, 2009

STATUS: STATE ORGANIZATION

FINANCING: STATE BUDGET

CONDUCT: FUNDAMENTAL AND APPLIED RESEARCH ON PRIOR DIRECTIONS
OF DEVELOPMENT OF SCIENCE AND TECHNIQUE IN TURKMENISTAN

COORDINATES: RESEARCH IMPLEMENTING BY THE BRANCH SCIENTIFIC
ORGANIZATIONS AND UNIVERSITIES



Academy of sciences of Turkmenistan



The Academy of Sciences of Turkmenistan is the state body which primary task is to ensure the practical realization of scientific and technical policy

As one of objectives is to support the development of Turkmen staff for further development of a framework compatible with the ongoing and newly decreed responsibilities and tasks, towards international levels, standards and practices in the spheres of sciences with ICT technology strengthening

The main **role** of the TuRENA in the User group support is focused on the elements of particular expertise, relevant previous experience and contacts. We see the most significant progress in the areas of user support and user services, as well as in the research in the different fields like seismology, e-governance, ecology, e-health, cybersecurity and so on.



The Central Asian Research
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The number of connected institutions to TuRENA CAREN

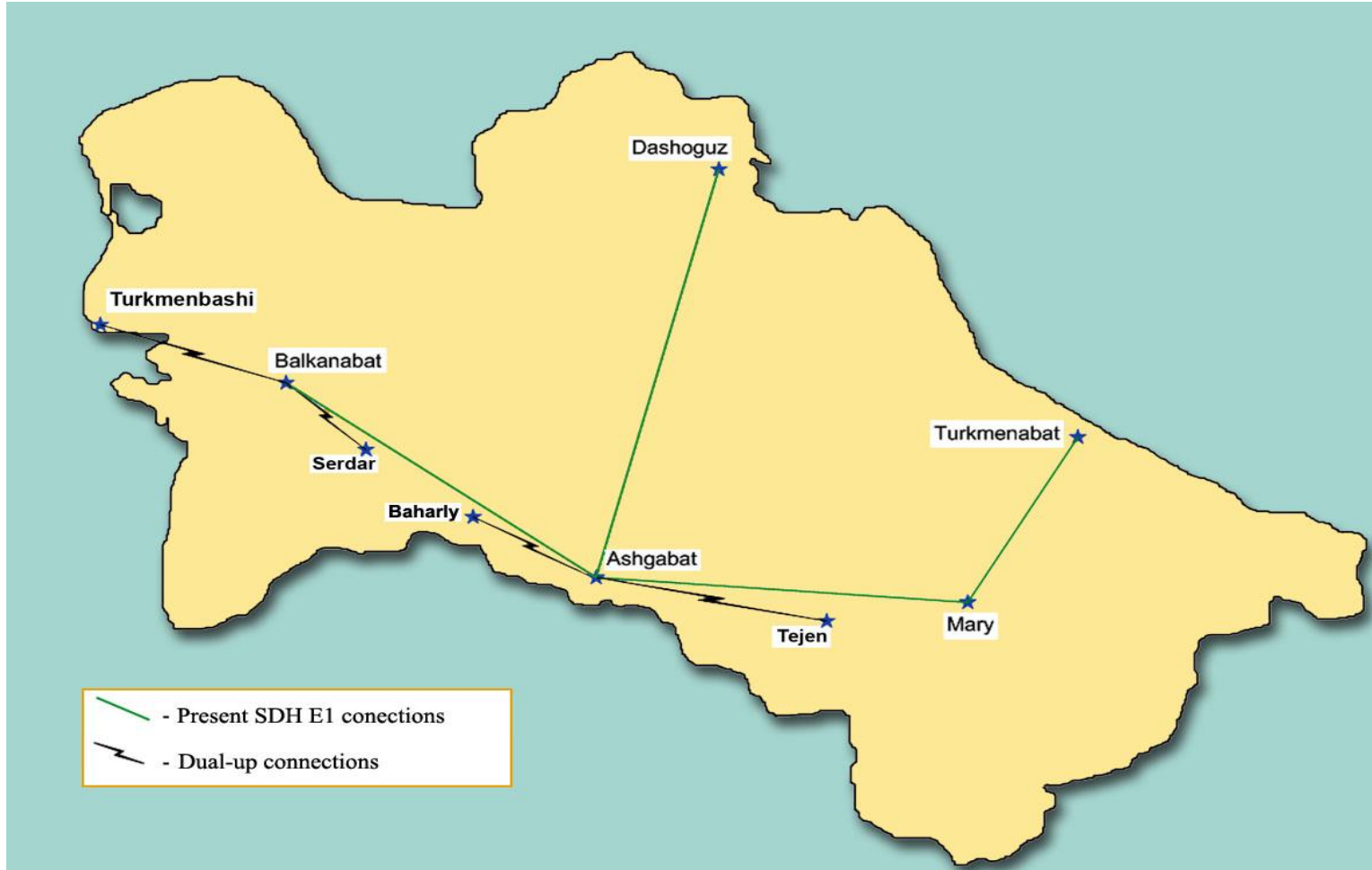


Connected:

- Universities- more than 6500 users
- 12 Scientific Research Institutions- more than 8400 users
- 3 Colleges – more than 4300 users
- 10 Secondary schools- more than 12000 users
- 8 other organizations- more than 9400 users
- **Total: 51 organizations- more than 40600 users**



Overview of the topology



Number of staff – 9. Annual turnover – 24500 Euro

TuRENA's Status:

- The decree of the President of Turkmenistan (№ 6154 , March 3, 2003).
- Supreme Council has created a scientific - educational network of Turkmenistan with the right of a public Council, confirmed by the Vice-Premier (April 1, 2003)
- TuRENA' Training Center was established based on the President of Turkmenistan Decree №11803 dated 26th August 2011
- Order of the Cabinet Ministries of Turkmenistan about participation of Academy of sciences of Turkmenistan in the project CAREN (June 2009)

All expenses related to the equipment supply for the Internet delivery to the Information Training Center are covered by the State Budget



1. Resolution of the President of Turkmenistan № 11454 from 10 January 2011 it was approved the List of priority areas of science, technology and research work
2. Resolution of the President of Turkmenistan № 11037 from April 22, 2010 “On information support and circulation of documents development”
3. Resolution of the President of Turkmenistan № 11309 from 08.10.2010 “On creating and implementing electronic document management systems in health care organizations
4. Law of Turkmenistan on Cybersecurity dated September 6, 2019.
5. Law of Turkmenistan on electronic document, electronic document flow and digital services dated March 14, 2020.
6. State Program for the development of the Digital Economy of Turkmenistan for 2021-2025.



- Hosting: www.science.gov.tm
- E-mail: any@science.gov.tm
- Web-sites creation and technical support
- Consultation support
- News board support
- Educational platform support
- Telemedicine support
- Security issues support
- Training with end users
- Online trainings and events (seminars, conferences)



TuRENA's service

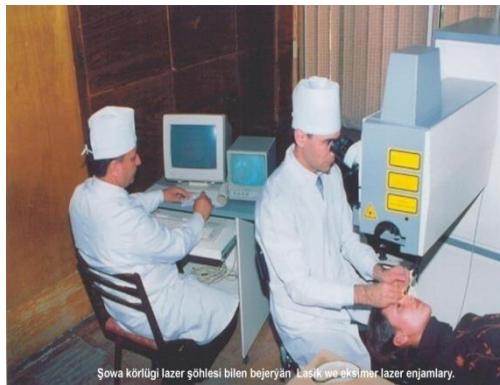
Perspectives of usage of scientific educational network



Education and trainings



Telemedicine



Science and research



Distance management of supplied systems



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Trainings and Consultations (mixed modes)



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Distance management of supplied systems

- Gas,
- Oil,
- Energy,
- Water,
- Sewage.
- **Advantages:**
 - *Expedient resource usage;*
 - *More effective and flexible design;*
 - *Excellent compatibility with subsystems;*
 - *Heightened security through out high speed reaction on unexpected case;*
 - *Improved methods changes and increasing systems;*
 - *Intellectual system of notification;*
 - *Management from any other place connected to Internet;*
 - *Access only after authorization;*
 - *System is ready for update.*



Telemedicine in Turkmenistan



- Telemedicine centers in hospitals;
- National database on, doctors and specialists and patients;
- Medical library – information search;
- Distant consultation e-mail, videoconferences, forums;
- Communication to the main diagnostic centers of Turkmenistan equipped by the modern tools.



Solar Island

(build as a research projects)



- The first project achievement is implementation of the training on solar cell technologies for Turkmen postgraduates, teachers and scientists.
- The second was to create solar laboratory on the base of Turkmen State Institute on Transport and Communication.
- The third one was to construct the Solar Island in Ashgabat.



Project Achievements

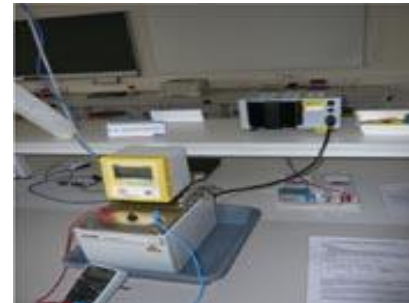


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Solar laboratory at the University of transport and communication



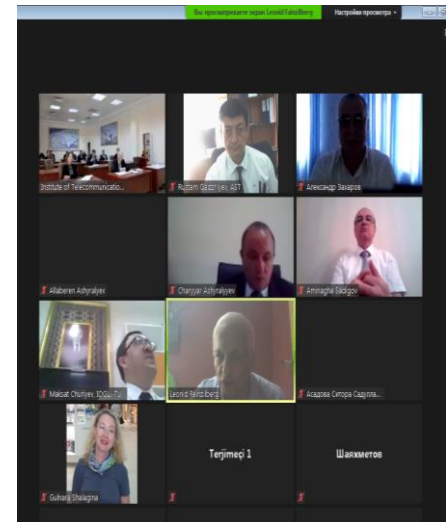
- 5 laboratory experiments has been delivered and installed at the Turkmen State Institute of Transport and Communication
- List of the equipment:
 1. A1 – Photo effect
 2. Hall effect
 3. Solar I lab equipment
 4. Solar II lab equipment
 5. W3 – Heat Radiation



TuRENA Cooperation



- Academy of Sciences of Turkmenistan (AST) has been coordinated 3 projects of Erasmus (MIETC project is ongoing), 1 project of EU Tacis, 2 UNDP projects, and 6 stages of NATO projects until 2009. Presently AST coordinates EU “Erasmus+” project and the main objectives is to build the capacity of the human capital in the HEIs of Central Asian countries on industrial entrepreneurship aiming to provide students skills and competences more aligned to the needs of their labour markets.
- TuRENA communication strategy have been updated in order to avoid any health risk and delays due to Pandemic situation (more online mode communications). Effective cooperation of AST and its partners was made possible to provide all activities in time with more emphasizes on online mode.



AST Interaction on ICT capacity building



(KOIKA) Studying advanced world experience to improve the regulatory framework of Turkmenistan in the fields of science, innovation and informational security application 2021

(ERASMUS+) ICT use in Medicine structural transformation (creation of methodology of preparation of specialists) and Reinforcing ICT policy dialogue between the EU and Turkmenistan – application 2022 (submitted)

(IASP) – Incubator creation (AST center technology involvement)

TEIN*CC – NRENs -Central Asian Research Network (4-th stage, roadmap for the resumption)

UNDP Programme – cooperation with Japan International Cooperation Agency (**JICA**) in the area of Seismology

APCICT – Trainings and support (Modules)



Recent Activity



Capacity Building Webinar on Digital Government and Transformation for North and Central Asia

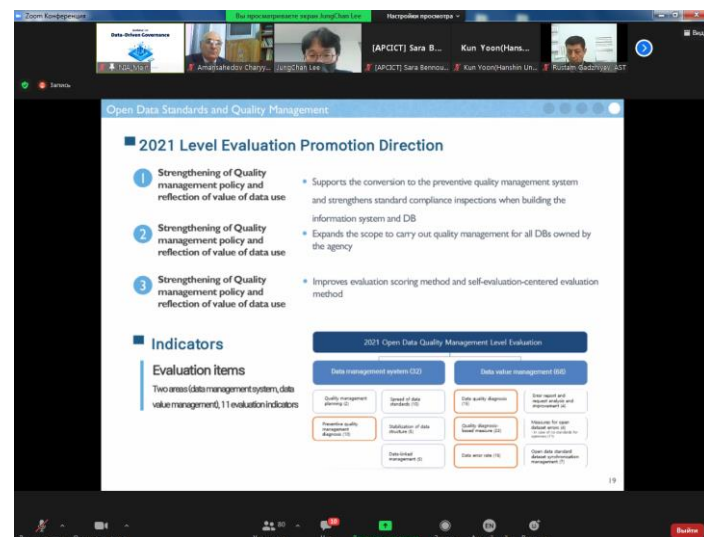


Regional Launch of Capacity Building Programme on ICT for Climate Resilient Development 11 to 13 April 2022 (Virtual)



Webinar on Data-Driven Governance 9 - 12 Nov 2021

- Session 1: Data-Driven Governance & Policy
- Session 2: Korea's Data-Based Policy Cases Using Data Analysis
- Session 3: Country Cases: Data Policy Cases in Asia-Pacific Countries
- Session 4: Issues and Countermeasures of Data-Driven Administration Activation



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Recent Activity



AST and TuRENA hold an annual international conference “Science, technique and innovation in the Epoch of Power and Happiness» devoted to the Science Day of Turkmenistan” (June 12-13 2022)



Main conference subjects are as follows:

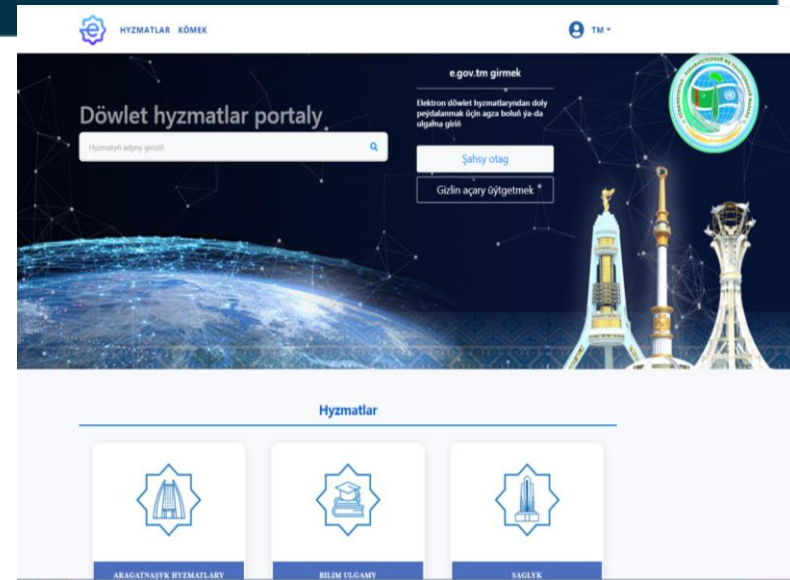
1. Nanotechnology, chemical technologies, the study of new materials, power engineering and technical sciences;
2. Biotechnology, molecular biology, agriculture, ecology and genetics;
3. Information and communication systems, computer technologies, natural sciences;
4. Contemporary medicine and technologies for medicaments production;
5. Innovative economy;
6. Humanities.



National Experience



In accordance with the “**Concept for the Development of the Digital Economy in Turkmenistan in 2019-2025**”, the adoption of the new Program involves the introduction of amendments and additions to the existing legislative acts in the field of digitalization, the definition of tasks in order to create the "Electronic Government" system, improvement of digital education and health care, training personnel, as well as the phased placement of digital services on a single portal of public services - <https://e.gov.tm>



Thank you for your attention!

