The NATO Science for Peace and Security Programme

Country Flyer 2022

August

Developing Practical Cooperation through Science

Turkmenistan has been actively engaged within the framework of the NATO Science for Peace and Security (SPS) Programme since 1993.

The NATO SPS Programme enables close collaboration on issues of common interest to enhance the security of NATO and Partner nations by facilitating international efforts to meet emerging security challenges, supporting NATO-led operations and missions, and advancing early warning and forecasting for the prevention of disasters and crises.

The current SPS Key Priorities include:

- *Counter-Terrorism;*
- *Energy Security;*
- *Cyber Defence;*
- *Defence against CBRN Agents;*
- *Environmental Security;*
- *Security-related Advanced Technology;*
- *Border and Port Security;*
- *Human and Social Aspects of Security*.

Additionally, the SPS Programme helps to promote *regional security* through scientific cooperation among partners. The Programme also helps to *prepare* interested eligible nations for NATO membership. SPS activities often have a high *public diplomacy* value.

TURKMENISTAN

Turkmenistan has been engaged with the NATO Science for Peace and Security (SPS) Programme since 1993. Cooperative activities between SPS and Turkmenistan have focused on enhancing internet connectivity for academic communities. Below are some examples of completed activities led by scientists and experts from Turkmenistan and NATO Allies under the framework of the NATO SPS Programme.

THE SPS PROGRAMME IS OPEN TO ACTIVITIES WITH TURKMENISTAN

The SPS Programme is open to all activities with Turkmenistan, in line with the political guidance from Allies in the form of the 2012 SPS Key Priorities and the 2013 Overarching Guidelines, as well as Turkmenistan's national priorities.

Cooperative Activities

EXPANSION OF THE ACADEMIC AND EDUCATIONAL INTERNET COMMUNICATION SYSTEM IN TURKMENISTAN

In 2008, a Network Infrastructure Grant, which expanded internet connectivity to several academic centres in Ashgabat and medical colleges in other regions of the country was awarded to experts from Turkmenistan. The grant also included training for Turkmen researchers to use the established network. *This activity was led by Turkmenistan and Germany.* [ref. 983409].

VIRTUAL SILK HIGHWAY

Turkmenistan and the other countries of Central Asia have benefited from internet connectivity at academic institutions and universities provided through the SPS "Virtual Silk Highway" initiative since 2002. The connectivity was initially delivered via satellite, but was converted to a fibre-based system in 2010. In addition, networking infrastructure grants from SPS have contributed to the improvement of Turkmenistan's National Research and Educational Network (NREN) through the provision of networking equipment and information technology to universities and academic institutions. These and previous projects have enabled academics and young scientists to have easy access to the World Wide Web and to exchange large documents and datasets with their local and foreign counterparts.

In addition, this project provided researchers with access to distance learning programmes and the ability to enable video conference facilities. It promoted collaboration and integrated local institutes into the international scientific community. The initiative came to a successful conclusion in August 2003. *SILK was a key, high-profile SPS project.* [ref. 978777].

DISTANCE LEARNING FOR SYSTEMS MANAGEMENT FOR TURKMENISTAN

This networking project followed on previous projects aiming to share knowledge and build capacity among Turkmen engineers in charge of systems management for energy and utilities such as oil, gas and water. Teachers from European institutes carried out the training of approximately a dozen Turkmen trainees from different institutions, largely via internet-based distance-learning technologies. The training included real-world applications, followed by the implementation of a pilot project in cooperation with a Turkmen state company. *This project was led by experts from Turkmenistan, Germany and Türkiye.* [ref. 983411].

Satellite for internet connectivity © NATO