

Developing Practical Cooperation through Science

Uzbekistan 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 forecast 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.*

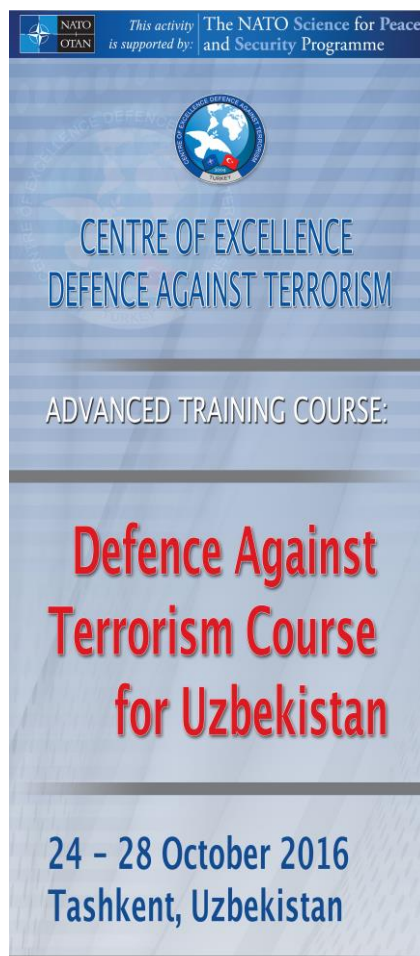
Additionally, the SPS Programme helps to promote *regional security* through scientific cooperation among partners. The programme also helps to *prepare* interested eligible nations for NATO membership. SPS activities often have a high *public diplomacy* value.

UZBEKISTAN

Uzbekistan is an active partner with the SPS Programme and leading areas for cooperation include **Counter-Terrorism, Energy Security, Environmental Security** and **Disaster Forecast & Prevention**. Currently, there are no ongoing SPS activities with Uzbekistan. Below are some examples of completed projects led by scientists and experts from Uzbekistan and NATO member countries under the framework of the NATO SPS Programme.

Cooperative Activities

DEFENCE AGAINST TERRORISM COURSE FOR UZBEKISTAN



Uzbekistan and Central Asia in general face a serious threat from terrorism both domestically and through the potential of their citizens to travel abroad for terrorist action.

Based on a request from the Uzbek Government, an introductory Defence Against Terrorism helped their military and governmental personnel to better understand the threat and its foundations as well as potential actions to combat it. Participants will apply the knowledge they acquire to specific, relevant case studies.

At the end of the Course, participants returned to their post with increased knowledge about terrorism and increased capabilities to participants in, plan, and execute counter-terrorism activities [ref. G5181]. *This Advanced Training Course was led by Turkey and Uzbekistan. It was held in Tashkent, Uzbekistan, in October 2016.*

DISASTER FORECASTING, CRISIS MODELLING AND SUSTAINABLE DEVELOPMENT

On 20-24 May 2013, a NATO SPS workshop took place in Samarkand, Uzbekistan. The main focus of the workshop was to discuss the area of complex system physics and its potential future application in addressing issues like crises and conflicts. One of the most important applications of nonlinear dynamics and statistical physics is in the exploration of complex networks that can be used as models for different natural and social systems. For example, studying complex phenomena in social systems using the complex network could potentially allow experts to predict conflicts and other critical events in society and social systems. The event was organised by project directors from Boston University and the Polytechnic University in Tashkent [ref. 984491]. *This project was led by scientists and experts from Uzbekistan and the United States. In 2013, the proceedings of the conference were published by Springer Publishers.*

ASSESSING TRANSBOUNDARY WATER POLLUTION IN CENTRAL ASIA

The Republics of Uzbekistan, Kazakhstan, Kyrgyzstan, and Tajikistan jointly utilise the Syr-Darya river basin and its divides, and they share common issues with regards to industrial, agricultural and municipal river pollution. The problem is further



complicated by the poor maintenance of closed or still existing industrial plants and cities along the river basin. As a result, monitoring and managing the transboundary area is of crucial importance to the social and economic well-being of populations in the region. This multi-year research project, led by Norway, brought together these Central Asian

republics to conduct an in-depth study of contaminants selected by the participating countries in the basin of Syr-Darya river. Ultimately, it is hoped that the project will become a continuous and self-sustainable monitoring activity within Central Asian [ref. 983945]. *This project was led by scientists and experts from Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan and Norway.*

THE SPS PROGRAMME IS OPEN TO ACTIVITIES WITH UZBEKISTAN

The SPS Programme is open to all projects with Uzbekistan, 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 Uzbekistan's national priorities.



The NATO Science for Peace
and Security Programme

www.nato.int/science