

### Developing Practical Cooperation through Science

Serbia has been actively engaged within the framework of the NATO Science for Peace and Security (SPS) Programme since 2007.

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.

## SERBIA

Serbia has several ongoing activities with the SPS Programme. The leading areas for cooperation include **Defence against CBRN agents, Counter-Terrorism, Cyber Defence, UNSCR 1325 on Women, Peace, and Security, and Energy and Environmental Security.** Below are some examples of ongoing and completed projects under the framework of the NATO SPS Programme.

### Cooperative Activities

#### SPECIALIZED CYBER DEFENCE TRAININGS FOR CIVIL SERVANTS OF SERBIA

Information systems security (INFOSEC) policy is very important for any organisation as a tool to deal with cyber threats. This SPS activity provided civil servants from the Office of the National Security Council and Classified Information Protection of the government of Serbia with a specialized advanced training to deal with INFOSEC in real life situations. The training course addressed essential theoretical and practical aspects of information systems security implementation, best practices and risk assessment methodologies. The participants learned how to develop and implement specific toolkits and roadmaps to address INFOSEC policies within their institutional framework. *This event was led by scientists and experts from Serbia and Estonia [ref. G5331].*



## GENDER MAINSTREAMING: INDICATORS FOR THE IMPLEMENTATION OF UNSCR 1325

This SPS activity supported gender mainstreaming into NATO and partner countries' National Action Plans for the implementation of UNSCR 1325 on Women, Peace, and Security by providing a platform for exchange of best practices and experiences. This SPS activity brought together a wide spectrum of stakeholders, including other international organisations such as the United Nations, the Organisation for Security and Cooperation in Europe (OSCE), and the World Bank through a series of Advanced Research Workshops. These workshops streamlined efforts to address the challenges associated with the implementation of UNSCR 1325 and its related resolutions through the development of a relevant framework of indicators.. *This project was led by scientists and experts from Serbia and the United States*[ref. 984756].

## T-WHEX: A ROBUST ROBOT WITH PHYSICALLY TUNEABLE WHEGS

Robots are increasingly present in security applications, including building reconnaissance, explosives ordinance disposal and demining, and CBRN detection and mitigation. One major limit on the deployment of robots is their inability to navigate obstacles, restricting their usefulness in many scenarios. Completed in 2017, this Multi-Year Project aimed to extend the ability of robots to operate in security-relevant scenarios. The development of a class of robots with 'whegs' (a combination of wheels and legs) was accomplished, which is expected to enhance manoeuvrability in rough terrain, thereby increasing the number of operations in which robots could be deployed [ref. 984560]. *This project was led by scientists and experts from Serbia and Germany.*



## ATMOSPHERIC PLASMA JETS FOR NEUTRALISATION OF CBW

Chemical Biological Weapons (CBWs) present a serious threat to the security of civilian populations. They are also easy to access, produce, and store at a low cost. Completed in 2017, this project aimed to develop a simple atmospheric pressure plasma jet, which could effectively decontaminate surfaces, and destruct or dispose of chemical or biological warfare agents. Tools such as the atmospheric pressure plasma jet can therefore limit the potential threat and mitigate risk caused by CBWs. *This project was led by scientists and experts from Serbia, Montenegro, Greece, Slovenia, and the United Kingdom* [ref. 984555].

## EXPLOSIVE TRACE DETECTION FOR STANDEX (EXTRAS)

Avoiding or reducing casualties from terrorist attacks in mass transportation systems or at large public events, as recently experienced in various NATO and Partner nations, currently requires human operator screening with very slow throughput and very large cost. This project, launched in 2018, and included in the overall context of the STANDEX follow-on programme, aims at offering a screening device able to operate real time at high throughput rate. The project will ultimately aim at the development of a proximal trace explosive detection device capable of investigating in real time a wide range of surfaces that might be contaminated with energetic materials [ref. G5526]. *This Multi-Year project is led by national scientists and experts from Serbia, Italy, Germany, The Netherlands and Ukraine.*



The NATO Science for Peace  
and Security Programme

[www.nato.int/science](http://www.nato.int/science)