The NATO Science for Peace and Security (SPS) Programme

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The Science for Peace and Security (SPS) Programme is...

- Demand-driven
- Versatile
- Flexible
- High public diplomacy value
- Partnership priorities
- Security relevant
- Science
- and beyond...

...in close cooperation with other NATO Divisions & Bodies
Key Priorities of the SPS Programme

**Emerging Security Challenges**
- Counter-Terrorism
- Energy Security
- Cyber Defence
- Defence against CBRN Agents
- Environmental Security

**Support for NATO-Led Operations & Missions**

**New Developments and Crisis Prevention**
- Security-related advanced technology
- Border and port security
- Mine and UXO detection and clearance
- Human and Social aspects of Security

**Other Directly Security-Related Topics**
Euro-Atlantic Partnership (EAPC)
Armenia, Austria, Azerbaijan, Belarus, Bosnia and Herzegovina, Finland, Georgia, Ireland, Kazakhstan, Kyrgyz Republic, Malta, Republic of Moldova, Montenegro, Serbia, Sweden, Switzerland, Tajikistan, Turkmenistan, Republic of North Macedonia, Ukraine, Uzbekistan

Partners around the Globe (PaG)
Afghanistan, Australia, Colombia, Iraq, Japan, Mongolia, New Zealand, Republic of Korea, Pakistan

SPS COOPERATION

Istanbul Cooperative Initiative (ICI)
Bahrain, Kuwait, Qatar, United Arab Emirates

Mediterranean Dialogue (MD)
Algeria, Egypt, Israel, Jordan, Mauritania, Morocco, Tunisia
SPS Grant Mechanisms

**A. Projects**
- Multi-year Projects
  - R&D projects
  - Purchase equipment
  - Reimburse travel expenses
  - Training for young scientists

**B. Training**
- Advanced Study Institute (ASI)
  - High-level tutorial courses
  - Latest developments
  - Young scientists at post-doctoral level
- Advanced Training Courses (ATC)
  - Specialists in NATO countries
  - Share security-related expertise with trainees from partner countries

**C. Workshops**
- Advanced Research Workshop (ARW)
  - Expert workshops aimed at finding solutions for today's security challenges
Some highlights of the SPS Programme

In the past decade, the SPS Programme:

- **5800+** young Scientists and trainees trained
- **160+** multi-year projects completed
- **400+** events organised (Advanced Research Workshops, studies Institute and Training Courses)
- **300+** journal publications supported
- **200+** books published in the NATO Science Series

overall, participating in the dissemination of advanced scientific and technological knowledge and strengthening links between scientific communities

At present:

- **119** on-going activities
- **85** Multi-Year Projects
- **34** Workshops and training events
- **34** Co-directors from more than **50** different countries
Success Stories

Former NATO grantee Prof. Aziz Sancar awarded 2015 Nobel Prize in Chemistry

Aziz Sancar received:

- NATO Fellowship in the 1970s
- 2 Collaborative Research Grants (1980s & 1990s)
- Grants supported award winning research on DNA repair mechanisms

Widely publicized through NATO outreach channels: Website, Social Media, etc.
More than **260 experts from Romania** have participated in the SPS activities as follows:

- **33 MYP** involving 142 experts
- **42 ARW** involving 83 experts
- **17 ASI** involving 33 experts
- **1 ATC** involving 2 experts

facilitated exchange of **378 young scientists through 132 activities**.

Activities developed in the following key priority areas: **counter-terrorism, CBRN, environmental security, support for NATO-led operations, advanced technologies, and human and social aspects of security.**
A Model to predict and prevent possible Disastrous Effects of Toxic Pollution in the Tisza River Watershed

- Multi-year project (MYP) led by Romania and Ukraine
- Launched in 2012 and completed in 2017

☑️ Creation of a system of joint monitoring, forecasting, information sharing, and coordination of actions to prevent pollution of Transboundary Rivers in Romania and Ukraine to be implemented in the Upper Tisza watershed
SPS Activities led by Romania
Counter-terrorism

Countering Hybrid Threats: Lessons learned from Ukraine

➢ ARW led by Romania and the Republic of Moldova

Participants: policy-makers, security and intelligence practitioners, academia, high-ranking officials, experts from NATO member states and NATO partner countries and EU.

Creation of a platform to share knowledge and to enhance stakeholder responsibility and initiative in approaching security challenges in Ukraine.
SPS Activities led by Romania
Counter-terrorism

Black Swans on the Eastern Flank

- New Strategy Center from Romania & World Experience for Georgia
- ARW took place on 18-21 April 2018 in Bucharest

**Aim:**
Generate a tailored set of scenarios that would be in line with the NATO Strategic Concept and address the fundamental security challenges of one of the most vulnerable neighborhoods.

**Results:**
Network of experts from the region
Publication Advanced Research Workshop Black Swans on the Eastern Flank
SPS Activities led by Romania
Advanced Technologies

Creation of New Generation Titanium Diboride Composite Armour Material

- Multi-year project (MYP) led by Romania and Georgia
- Launched in 2019

Goal:

- Development of innovative technology for manufacturing the new generation composite armour material for the protection of personnel, equipment and vehicles.

Outputs:

- Development of a titanium diboride (TiB2) composite material suitable for light-weight ballistic armors;
- Packaging of new composite material into a single monolithic structure;
- Performance of tests according to International Ballistic Standards.
Examples of SPS Activities
Enhance Support for NATO-led operations and missions

A Multinational Telemedicine System for Emergency Situations

- Multi-year project led by Romania and Finland
- Kicked-off in 2014 and concluded in 2017
- Romania, Finland, Republic of Moldova, Ukraine, US.

modern communication technologies allow medical specialists across the globe to assess patients and provide real-time recommendations to the care giver on site, increasing survival rates.
Benefits:

- Improved **access to health services** and **increased survival rates**
- **Dual-use** potential that spans both military and civilian NATO missions
- Development of a **live, real-time** incidents response programme
- **Training** of medical responders to reduce the time to respond, leveraging technology to bring care to those who need it most as quickly as possible.
- Provides the teams on the ground with **expertise** that is not present at the scene of disaster
A Multinational Telemedicine System for Emergency Situations
Book Talk and Closing Conference

Publication


✓ The project concluded with a Book Talk event on 24 February 2017 at NATO HQ in Brussels, Belgium

A Multinational Telemedicine System for Emergency Situations
Live-test during the EADRCC exercises 2015-2018
A Multinational Telemedicine System for Emergency Situations
The Public Diplomacy Impact
A Multinational Telemedicine System for Emergency Situations
Follow-up

➢ Crisis Management Centre in Mauritania follow-on project to include elements of telemedicine

➢ Romania, France and Mauritania

Goal: develop an integrated civil protection health emergencies structures adopted to the needs of the country