



THE NATO  
SCIENCE  
FOR PEACE  
AND SECURITY  
PROGRAMME





NATO EMERGING SECURITY CHALLENGES DIVISION

THE NATO  
**SCIENCE**  
FOR **PEACE**  
AND **SECURITY**  
PROGRAMME

NATO EMERGING SECURITY CHALLENGES DIVISION



# Foreword

The Science for Peace and Security Programme (SPS) is a partnership tool which benefits both Allies and Partners by addressing shared security concerns. The Programme aims to enhance Euro-Atlantic and international security, peace, and stability by fostering cooperation and dialogue with all partners on security-related civil science, innovation, and the sharing of expertise.

The SPS Programme seeks to promote large-scale and more strategic activities with a high political impact and public diplomacy value as outlined in the SPS Overarching Guidelines agreed by the North Atlantic Council in 2013. The reorientation of the SPS Programme beyond scientific cooperation clearly demonstrates its flexibility and adaptability to new political guidance provided by Allies.

Building on NATO's 2010 Strategic Concept and the Berlin Partnership Policy of 2011, the SPS Programme will respond to the Alliance's main goals as clearly stated during the 2014 Wales Summit. The successful implementation of the SPS Programme in the future is assured by its alignment to the political guidance provided by Allies; enhanced coordination between relevant NATO bodies; efficient, transparent, and accountable management.



A handwritten signature in black ink, appearing to read 'Sorin Ducaru', with a long horizontal stroke extending to the right.

**Ambassador Sorin Ducaru**

Assistant Secretary General

NATO Emerging Security  
Challenges Division



# Table of Contents

<b>Introduction</b>	7
<b>What is the NATO Science for Peace and Security (SPS) Programme ?</b>	9
■ About the SPS Programme	9
■ The Evolution of the SPS Programme	13
■ The Importance of the SPS Programme	15
■ The Emerging Security Challenges Division	17
<b>What We Fund</b>	19
■ SPS Grant Mechanisms	19
■ Priority Areas	23
<b>SPS Funded Activities</b>	27
■ Priority Area 1: Emerging Security Challenges	27
■ Priority Area 2: Enhance Support for NATO-led Operations and Missions	33
■ Priority Area 3: Enhance Awareness on Security Developments & Crisis Prevention	35
<b>How to Apply</b>	38
■ Who Can Apply	38
■ Timeline & Application Guidelines	39
■ Selection Procedure	39
<b>Contact Us</b>	40

# Introduction

The Science for Peace and Security Programme (SPS) is an established brand for NATO based on three pillars - science, partnership and security – and has been contributing to the core goals of the Alliance for many decades. Today, the Programme continues to be one of the largest and most important partnership tools used to address 21<sup>st</sup> century security challenges.

Using new guidelines and streamlined working methods developed following a recent comprehensive reform process, the SPS Programme continues to work with NATO Allied and Partner countries on practical and mutually beneficial cooperative activities.

We hope this guide will provide the reader with answers to frequently asked questions, and a clear understanding of how to obtain funding through the SPS Programme for projects, workshops, and training courses that will contribute to international peace and security.

This brochure provides a comprehensive overview of the NATO SPS Programme. It contains information about grants, the application procedure, and SPS key priorities, as well as concrete examples of completed and ongoing SPS activities.







# What is the NATO Science for Peace and Security (SPS) Programme?

## About the SPS Programme

The NATO SPS Programme promotes security-related practical cooperation to address emerging security challenges. It connects scientists, experts, and officials from Allied and Partner countries who work together to address these challenges.

In partnership with Allied and Partner institutions, the SPS Programme provides funding and expert advice and support for security-relevant activities, in the form of workshops, training courses, or multi-year research and development projects.

The SPS Programme also helps to promote the political dimension of NATO in terms of shared values and support to civil society.

The SPS Programme promotes dialogue and regional cooperation among Partners, including those for whom direct engagement is difficult.

SPS provides the Alliance with separate, non-military communication channels and brings together experts

from NATO countries with those from Partner countries, often in situations where other forms of dialogue more directly focused on defence and security are difficult to establish. Accordingly, this often serves as the first concrete link between NATO and a new Partner.

The NATO Science Programme, has evolved continually since it was founded in 1958. Today, as the NATO SPS Programme it is an extremely well established brand, contributing to the Alliance's core goals, and has become one of NATO's most important partnership tools in terms of funding and outreach, connecting with both governmental and civil audiences.

All SPS Programme activities contribute toward the Alliance's strategic objectives as defined in the 2010 Strategic Concept, and set out in the new NATO Partnership Policy adopted in Berlin in 2011. Today, the Programme promotes collaboration and cooperative security based on three core dimensions that define its identity:



“The current SPS Programme provides a unique opportunity to contribute to world peace by enhancing science and innovation cooperation with all partners.”

Prof. Sir Brian Heap, former UK Representative to the NATO Science Committee (2009)

- **Science:** The SPS Programme helps to foster research, innovation, and knowledge exchange in an effort to address mutual security challenges. SPS has a substantial network reaching out to hundreds of universities and institutions across the world.
- **Partnership:** The collaborative framework of the Programme brings together scientists, experts, and policy makers from Allied and Partner countries to address today's security challenges together. The SPS Programme is a partnership tool available to all Partners, proving that practical cooperation is achievable across political barriers through scientific exchange. Over the past five years the Programme has initiated over 450 collaborative activities in more than 40 Partner countries.
- **Security:** According to the scope of the SPS Programme and guidance from NATO nations, all projects developed under SPS must have a relevant security dimension. This fundamental link to Security is reflected in the SPS Key Priorities developed by Allies.

### What security areas do we focus on?

---

The SPS Programme focuses on a growing range of non-traditional risks and challenges including terrorism, defence against chemical, biological, radiological, and nuclear (CBRN) agents, cyber security threats, energy security and environmental security concerns, as well as human and social aspects of security, in particular the implementation of UNSCR 1325.

### Why is the SPS Programme's work important?

---

The SPS Programme links civil society to NATO through activities that address global security challenges. Civil actors – researchers, academics, government experts – have an important role to play in helping the Alliance identify, understand, and respond to contemporary vulnerabilities and threats. NATO aims to ensure that funding and support is available for collaborative activities that address NATO's security objectives while promoting cooperation and partnership.





▲  
The three wise men: Halvard Lange,  
Gaetano Martino and Lester B.  
Pearson were the guiding force  
behind the creation of the NATO  
Science Programme in 1958.

The first Science Committee ►  
from 1958



# The Evolution of the SPS Programme

The NATO Science Programme began in 1958. At the time, one of the Programme's major goals was to promote the training of scientists within NATO countries. Among other activities, it established fellowships for young scientists to study and train in other NATO countries.

Later, during the period of détente, the Alliance identified environmental degradation as one possible source of future conflict, and in 1969, it created the Committee on the Challenges of Modern Society. When the cold war ended, NATO's Science Programme was opened to Partners, including former Warsaw Pact countries and NATO's neighbours in North Africa.

Over its long history, the NATO Science Programme has adapted to the demands of the times. In response to the changing security environment of the 21<sup>st</sup> century, the Programme's mission today is to address emerging security challenges and promote cooperative security with Partners.

In 2006, the NATO Science Programme and the Committee on the Challenges of Modern Society were merged into the NATO Science for Peace and Security Programme which promotes scientific cooperation, increasing scientific capacity and forging ties among scientists from NATO and Partner nations.

Since then the SPS Programme has been assessed and reformed. In 2010 the SPS Programme was embedded in the Emerging Security Challenges (ESC) Division to better align SPS activities with 21<sup>st</sup> century security challenges.

In 2013 the Programme underwent a comprehensive Strategic Assessment to determine its relevance to NATO's core objectives with the principal goal of focusing on the Programme's future strategic orientation.

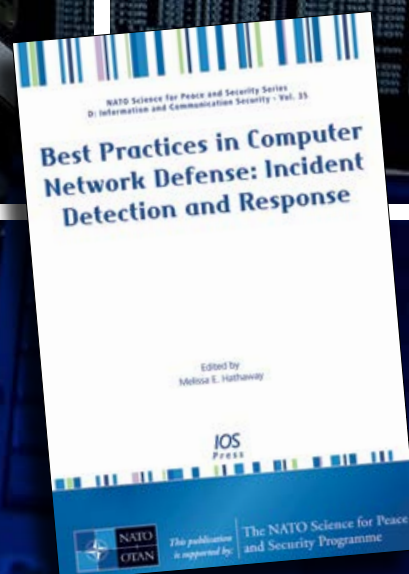
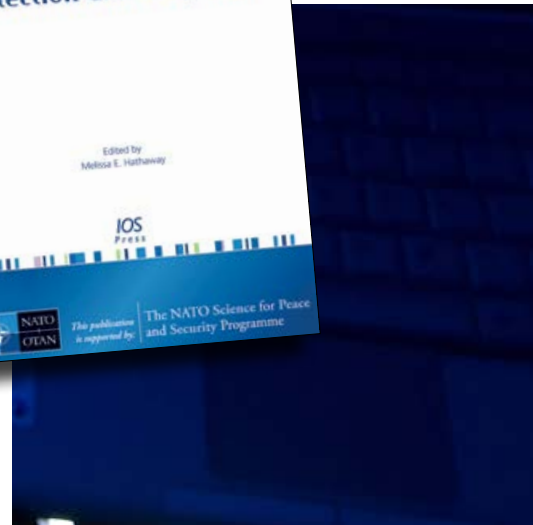
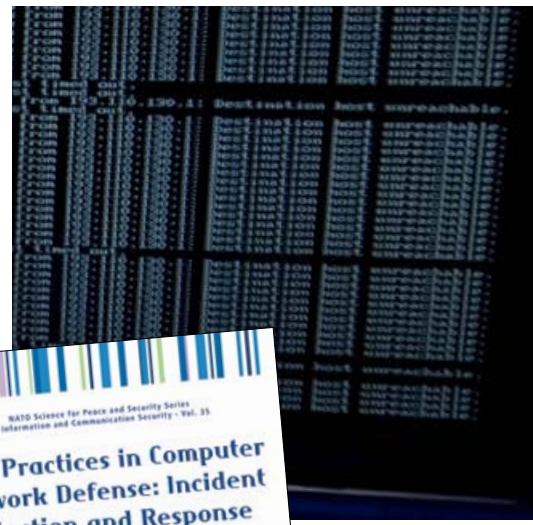
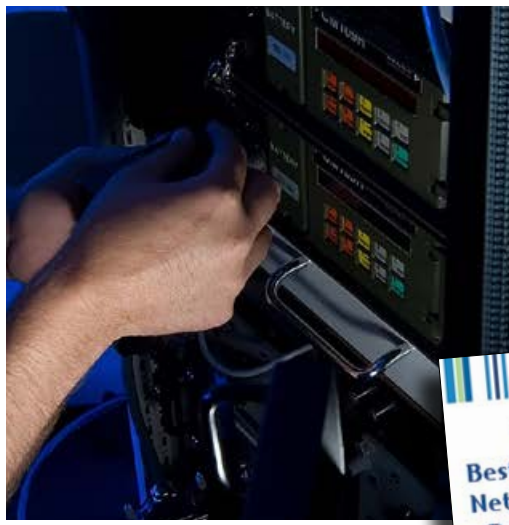
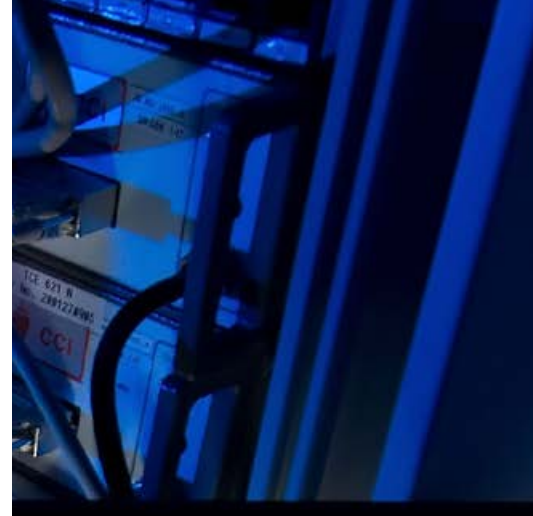
The SPS Overarching Guidelines were approved in October 2013 to ensure that all prior political and strategic guidance for the SPS Programme was interpreted in line with the present political and strategic aims of Allies. Today, the Programme's implementation is guided by the NATO Strategic Concept, the Policy for a More Efficient and Flexible Partnership (2011), the SPS Key Priorities (2012), and the new Overarching Guidelines (2013).

As a result of these guidelines, the SPS Programme has adapted both its scope and governance. One significant change in scope is that the SPS Programme will include activities beyond scientific cooperation while preserving an important scientific dimension.

The SPS Programme will aim to promote large-scale and more strategic activities, with a view to enhancing the political impact on NATO's partnerships, as well as the visibility of the activities vis-à-vis the National Authorities of participating Partner countries.

In light of the new political guidance provided by Allies during the assessment period, the SPS Programme was rapidly aligned towards a fresh, streamlined and goal-oriented managerial approach based on effectiveness, accountability and transparency.







# The Importance of the SPS Programme

## Bringing Civil Society into the Picture

---

The SPS Programme links civil society to NATO through activities that address global security challenges. Civil actors, researchers, academics, and government experts all have an important role in helping the Alliance identify, understand, and respond to contemporary vulnerabilities and threats. Civil society is integral to addressing these threats, and NATO aims to ensure that funding and support are available for collaborative activities that address NATO's security objectives while promoting cooperation and partnership.

## A Comprehensive Approach to Security

---

The SPS Programme addresses contemporary security challenges of mutual concern to NATO and Partner countries by supporting civil science, research, and innovation, providing considerable scientific value for researchers from a broad range of disciplines. In line with the SPS key priorities, the Programme facilitates international efforts to meet emerging security challenges, enhances support for NATO-led operations, and raises awareness of security developments with a view towards preventing crises. The SPS Programme has supported a series of hands-on cyber training events and helped to develop technologies for the stand-off detection of explosive devices in large crowds. At the same time, SPS provides international experts the opportunity to exchange ideas through workshops, and to publish the outcome of these workshops in the NATO SPS Series for the benefit of the global scientific and security community.

## Creating Networks and Synergies

---

Joint SPS projects have created strong and lasting networks spanning the globe and participants have

benefitted from the scientific exchange. At the same time, NATO SPS staff are well placed to provide political advice and expertise regarding emerging security challenges such as cyber defence, energy security, defence against CBRN agents and counter-terrorism.

## Political Dimension

---

The SPS Programme is one of NATO's largest civil partnership tools, and as such, has a considerable political dimension. The Programme allows NATO members to engage with its Partner countries including the Euro-Atlantic Partnership Council, the Mediterranean Dialogue countries, and the Istanbul Cooperation Initiative. The SPS Key Priorities further reflect current developments in the international security environment as well as NATO's political priorities.

## Public Diplomacy

---

SPS activities enjoy a high degree of publicity. Scientific publications raise the profile of participating researchers within the scientific community. In addition, SPS activities are publicized on the NATO and SPS websites and through events such as Book Talks and Information Days.

## Variety of Funding Opportunities

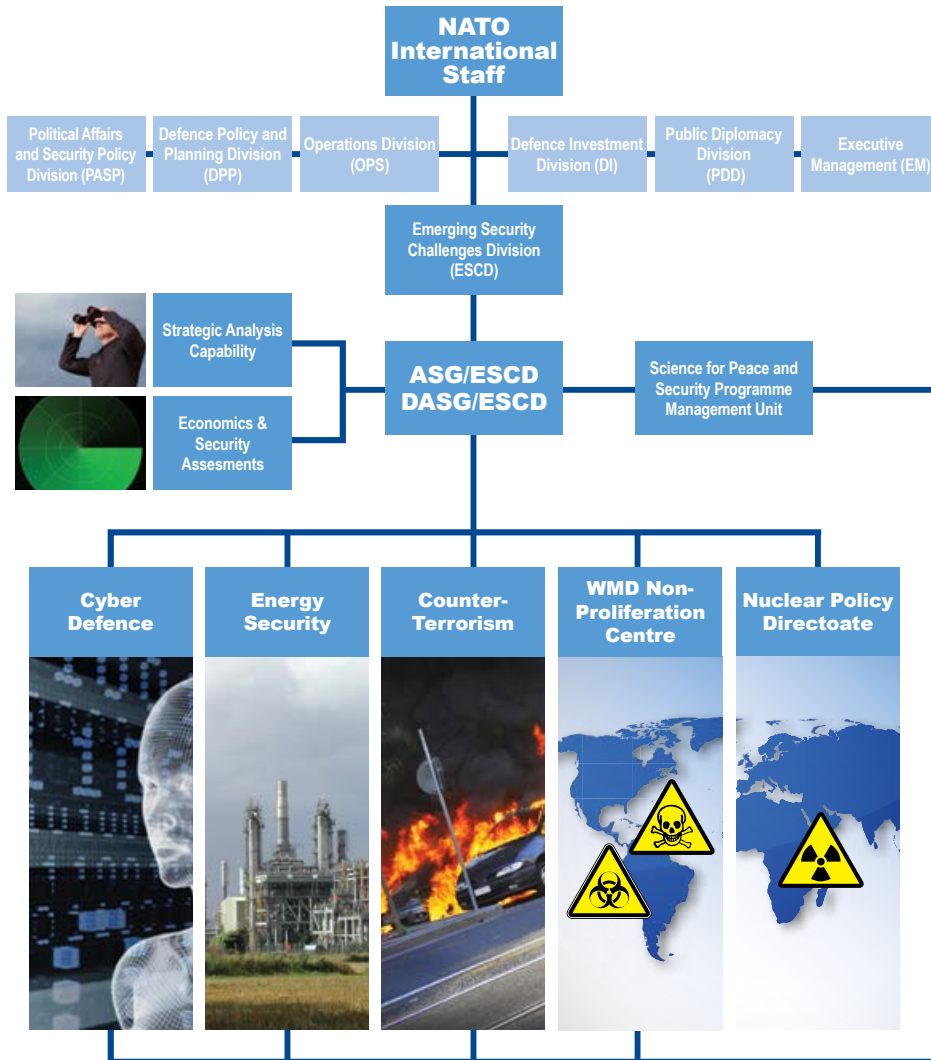
---

The SPS Programme includes for various grant mechanisms. Activities can take the form of multi-year projects, workshops or training courses. This variety of funding schemes allows the SPS Programme to accommodate different needs and project outlooks. At the same time, the application process has been streamlined and simplified, making it even easier to apply for an SPS grant.

## Emerging Security Challenges (ESC) Division

**Raise awareness regarding the emerging challenges:**

- Give emerging challenges a prominent place in NATO's key documents (Strategic Concept, Political Guidance)
- Ensure a foothold for new challenges in NATO's International Staff (ESC Division)



# The Emerging Security Challenges Division

The SPS Programme is embedded in the Emerging Security Challenges Division (ESCD) at NATO. The ESCD was established in 2010 to address a growing range of non-traditional risks and challenges facing NATO and its Partners.

Today, energy security, terrorist attacks, cyber attacks and the threat of weapons of mass destruction are major challenges to peace and security – not only for NATO countries, but worldwide. In an interconnected, globalised world, the Alliance needs to be prepared to deal with a wide range of new security threats.

These new threats, which have the same potential to affect security as traditional warfare and military attacks, have several things in common: they are global in scope; they can be interlinked; they do not stop at national borders, and military solutions are not sufficient. Developing NATO's ability to anticipate and effectively tackle these new challenges is central to the future of the Alliance.

Contemporary challenges require us to re-think many of our basic assumptions about the nature of threats and to shape new responses. This is why NATO Nations and Partners understand the need to become better connected to the broader international community in the spirit of cooperative security. Interconnectedness is critical in addressing non-traditional challenges effectively. Therefore, NATO places great importance on the interaction and engagement with Partners across these domains.

The key tool NATO has to facilitate cooperation in the field of emerging security challenges and beyond is the Alliance's largest and most important partnership programme - the Science for Peace and Security Programme.

The focus of the SPS Programme spans across these new security challenges and strives to bring together scientists, experts, and policy makers from NATO and Partner countries to address emerging security challenges.





# What we fund ?

## SPS Grant Mechanisms

The SPS Programme supports collaboration through three established grant mechanisms: multi-year research projects, research workshops, and training courses. Interested applicants must develop a collaborative activity that fits within one of the following formats:

### 1. MULTI-YEAR PROJECTS (MYP)

---

**WHAT:** Research and development projects related to NATO's strategic goals and relevant to the SPS Key Priorities. Projects enable Partner country scientists to increase contacts in the NATO science community, while building a stronger science infrastructure in their home countries.

**DURATION:** Projects have a typical duration of 2 to 4 years.

**TARGET AUDIENCE:** Applications are submitted jointly by one or more experts residing and working in a NATO country and one or more residing and working in a Partner country. Projects involving more than one Partner country are encouraged, as is the participation of young scientists.

**BUDGET:** NATO funds are provided to cover project-related costs such as scientific equipment, computers, software and training of project personnel as well as of young scientists. Roughly half of the budget is generally allocated to equipment, about 20% to training and travel, and 15% to stipends. These percentages may vary according to the needs of each project. Typical project budgets are €200,000-400,000 over 2-3 years.







## 2. TRAINING COURSES

---

### ADVANCED STUDY INSTITUTE (ASI)

---

**WHAT:** A high-level tutorial course offering the latest developments in subjects relevant to NATO to an advanced-level audience.

**DURATION:** An ASI lasts about 7 working days. Lecturers of international standing report new advances on topics of security-related civil science.

**TARGET AUDIENCE:** Post-doctoral level scientists with a relevant background in the subject matter of the course. In particular, young scientists from NATO Partner countries are encouraged to attend.

**BUDGET:** The SPS grant (average €60,000) pays for direct organizational costs, travel and living expenses for up to 15 lecturers as well as subsidising 60 to 80 students from countries eligible to receive NATO funding and unable to obtain support from other sources.

### ADVANCED TRAINING COURSE (ATC)

---

**WHAT:** A course designed to enable specialists in NATO countries to share their security-related expertise in one of the SPS Key Priority areas. An ATC is not intended to be lecture-driven, but to be intensive and interactive in nature. The course contributes to the training of experts in Partner countries and enables the formation and strengthening of international expert networks.

**DURATION:** 5-7 working days

**TARGET AUDIENCE:** Trainees typically 20 to 50 primarily from Partner countries. These trainees are chosen on the basis of their qualifications and experience and the benefit they may draw from the ATC in their future endeavours.

**BUDGET:** The SPS grant (average €60,000) pays for direct organizational costs, travel, and living expenses of all specialists and subsidising attendance costs of trainees from countries eligible to receive NATO funding and unable to obtain support from other sources.

## 3. WORKSHOPS

---

### ADVANCED RESEARCH WORKSHOP (ARW)

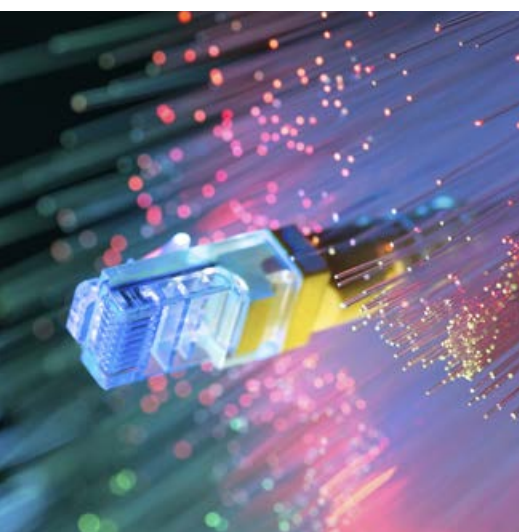
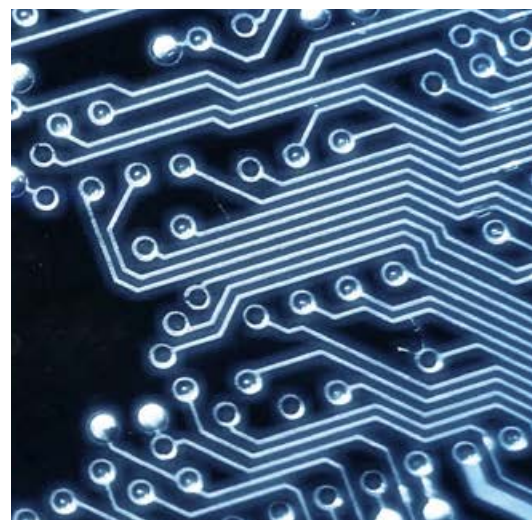
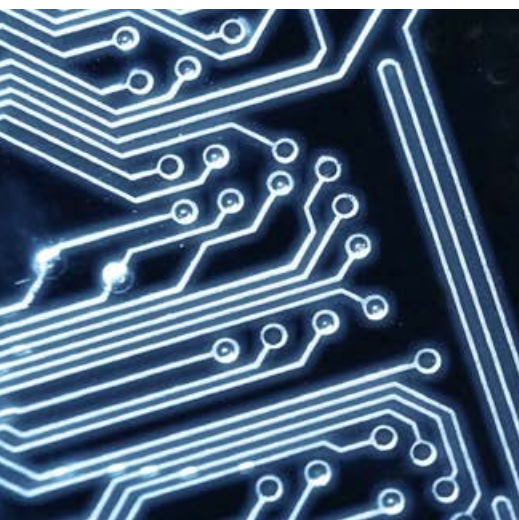
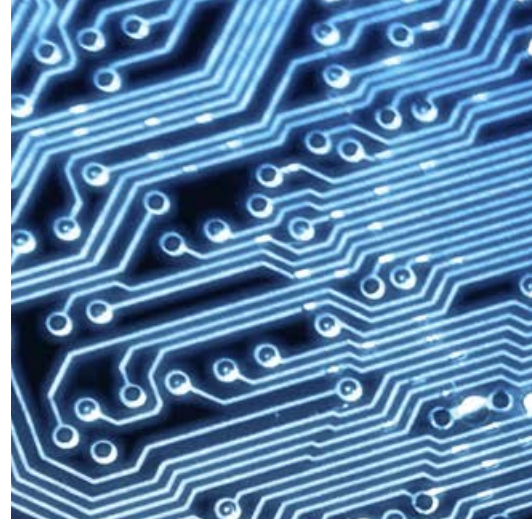
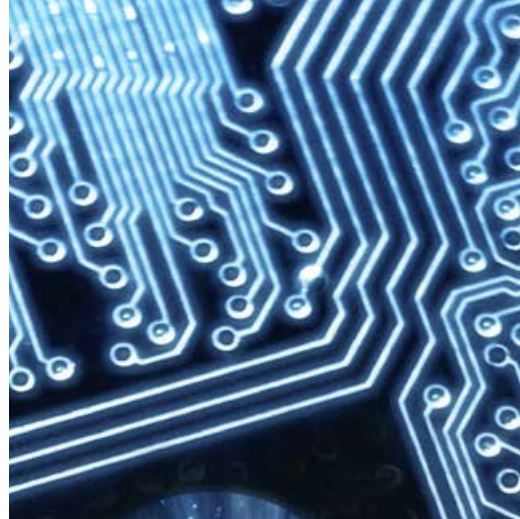
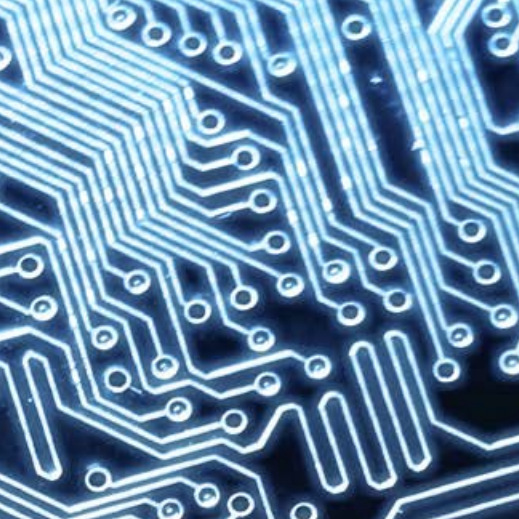
---

**WHAT:** Advanced-level discussions between experts from different countries with the aim of addressing contemporary security challenges.

**DURATION:** 2-5 working days

**TARGET AUDIENCE:** Typically 20-50 participants, with the workshop preferably being held in the Partner country.

**BUDGET:** The SPS grant (average €30,000-40,000) is intended to cover direct organizational expenses of the ARW, travel and living expenses of workshop speakers, as well as subsidising non-speakers from NATO countries and Partner countries eligible to receive NATO funding and unable to obtain support from other sources.





# Priority Areas

All activities funded under the SPS Programme must address one or more of SPS Key Priorities, and have a clear link to security.

The priority areas for the SPS Programme focus principally on contemporary security challenges such as counter-terrorism, energy security, cyber defence, defence against CBRN agents, environmental security, border and port security, mine and unexploded ordnance detection and clearance, human and social

aspects of security such as United Nations Security Council Resolution (UNSCR) 1325 on women, peace and security, and more.

The SPS Key Priorities are based on NATO's Strategic Concept agreed by Allies at the Lisbon Summit in November 2010, and the Strategic Objectives of NATO's Partner Relations agreed in Berlin in April, 2011. Please check if your proposal fits into our Key Priorities listed below:

## SPS Key Priorities

### 1. Facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet emerging security challenges

#### a. Counter-Terrorism

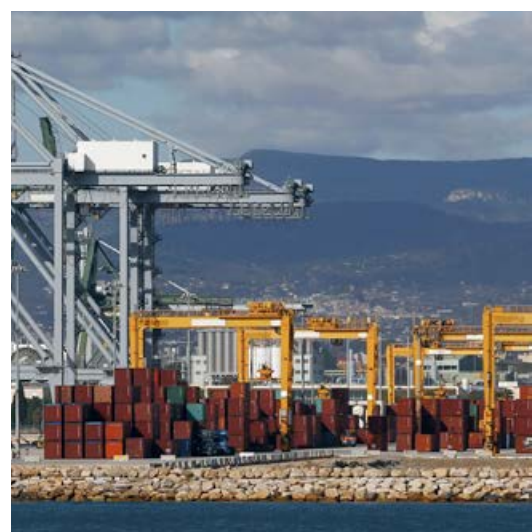
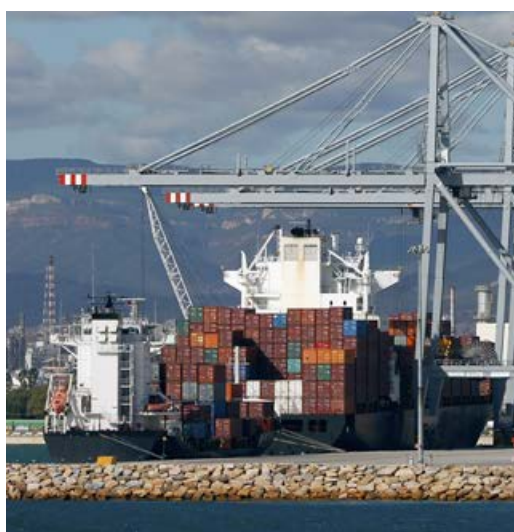
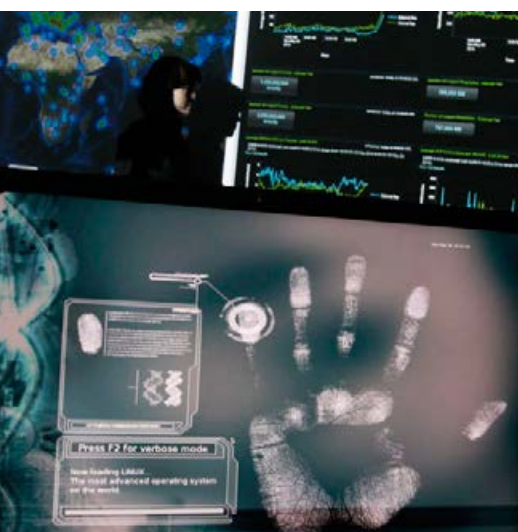
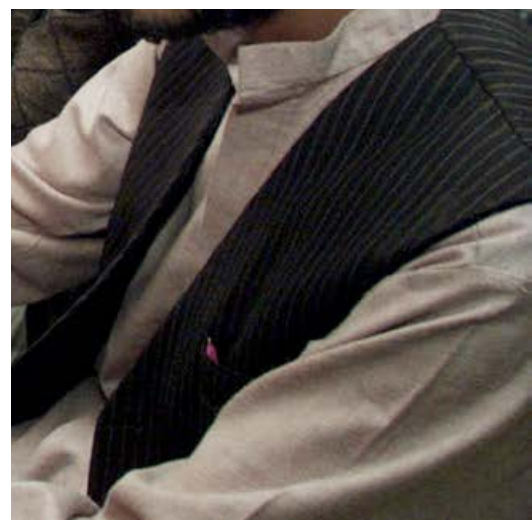
- i. Methods for the protection of critical infrastructure, supplies and personnel;
- ii. Human factors in the defence against terrorism;
- iii. Detection technologies against the terrorist threat for explosive devices and other illicit activities;
- iv. Risk management, best practices and technologies in response to terrorism.

#### b. Energy Security

- i. Innovative energy solutions for the military; battlefield energy solutions; renewable energy solutions with military applications;
- ii. Energy infrastructure security;
- iii. Maritime aspects of energy security;
- iv. Technological aspects of energy security.

#### c. Cyber Defence

- i. Critical infrastructure protection, including sharing of best practices, capacity building and policies;
- ii. Support in developing cyber defence capabilities, including new technologies and support to the construction of information technology infrastructure;
- iii. Cyber defence situation awareness.



#### **d. Defence against Chemical, Biological, Radiological, and Nuclear (CBRN) Agents**

- i. Methods and technology regarding the protection against, diagnosing effects, detection, decontamination, destruction, disposal and containment of CBRN agents;
- ii. Risk management and recovery strategies and technologies;
- iii. Medical countermeasures against CBRN agents.

#### **e. Environmental Security**

- i. Security issues arising from key environmental and resource constraints, including health risks, climate change, water scarcity and increasing energy needs, which have the potential to significantly affect NATO's planning and operations;
- ii. Disaster forecast and prevention of natural catastrophes;
- iii. Defence-related environmental issues.

### **2. Enhance support for NATO-led operations and missions**

- i. Provision of civilian support through SPS Key Priorities;
- ii. Provision of access to information through internet connectivity as in the SILK-Afghanistan Programme;
- iii. Cultural and social aspects in military operations and missions;
- iv. Enhancing cooperation with other international actors.

### **3. Enhance awareness of security developments including through early warning, with a view to preventing crises**

#### **a. Security-related Advanced Technology**

- i. Emerging technologies including nanotechnology, optical technology, micro satellites, metallurgy and the development of Unmanned Aerial Vehicle (UAV) platforms.

#### **b. Border and Port Security**

- i. Border and port security technology;
- ii. Cross-border communication systems and data fusion;
- iii. Expert advice and assessments of border security needs and best practice.

#### **c. Mine and Unexploded Ordnance Detection and Clearance**

- i. Development and provision of advanced technologies, methodologies and best practice;
- ii. Solutions to counter improvised explosive devices (IED).

#### **d. Human and Social Aspects of Security related to NATO's strategic objectives**

### **4. Any related project clearly linked to a threat to security not otherwise defined in these priorities may also be considered for funding under the SPS Programme.**

Such proposals will be examined for links to NATO's Strategic Objectives.







# SPS Funded Activities

## Priority Area 1: Emerging Security Challenges

### 1.a COUNTER-TERRORISM

---

**Iraq Counter-IED train the trainers:** Iraqi Explosive Ordnance Disposal (EOD) experts from the Ministry of Defence followed a “Train-the-Trainer” course on “Countering the Threat of Home-made Explosives”. The course was held at the NATO-accredited EOD Centre of Excellence in Slovakia in November 2013.

The Advanced Training Course was designed to enhance the training and education of the already EOD qualified Iraqi personnel on the fundamentals of identification of individual precursors that are regularly used in the process of manufacturing of home-made explosives (HMEs). The same teaching process as well applies to the identification of HME final products. Great emphasis is also placed on the recognition of various manufacturing equipment and clandestine home-made explosives laboratories. The students were also taught the principles of taking the necessary safety precautions and reporting HME-related incidents.

Additionally, the trainees were familiarized with the Explosive Ordnance Disposal Centre of Excellence’s Home-made Explosives Training Curriculum. The course provides the trainees with the knowledge and understanding required to implement the HME Training Curriculum within their own nation and ultimately enhance interoperability among first responders in national and international response to HME events.



## 1.b ENERGY SECURITY

---

**Smart Energy Team (SENT):** NATO's Smart Energy Team (SENT) formulates recommendations for improving NATO's standards and best practices on saving energy in the military.

Set up after the Chicago Summit in May 2012 SENT is jointly directed by the Lithuania-based NATO Energy Security Centre of Excellence and by the Joint Environment Department of the Swedish Armed Forces. It is made up of experts from eight nations, including six Allies (Canada, Germany, Lithuania, the Netherlands, the United Kingdom and the United States) and two partners (Australia and Sweden).

The Team's overarching goal is to identify the most promising energy-saving solutions for the military and initiate multinational projects to make such solutions work together easily.

## 1.c CYBER DEFENCE

---

**Hands-On Cyber Defence Training Course for System/Network Administrators:** Cyber defence is a key priority area of cooperation for Moldova. A group of Moldovan system/network administrators took part in a two-week training course in Turkey to build expertise and improve the ability to strengthen the defence of critical infrastructure.

Fifteen system/network administrators from six key institutions across Moldova took part in the course at the Informatics Institute at the Middle East Technical Institute (METU) in Ankara, Turkey, from 13 to 24 January 2014. The course was supported by the SPS Programme, and developed in close cooperation with experts from Canada, Georgia and Turkey.

This course is part of a series of successful training courses that have been conducted with other Partner countries of NATO, such as Afghanistan, Montenegro and the former Yugoslav Republic of Macedonia.

## 1.d DEFENCE AGAINST CBRN AGENTS

---

**CBRN First Responders Trainers Course:** It is important to ensure that first responders are prepared for the consequence of either terrorist acts or natural and man-made disasters. To address this need a training course for CBRN first responders was held at the Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence in Vyškov, the Czech Republic in June 2013.

Blending theory with practice, the main aim of the course was to ensure that first responders have a common knowledge base and a minimum level of preparedness when responding to CBRN incidents. To this end, the training course was designed to assist nations in improving their civil emergency plans, including cooperation between first responders, while complementing current national training activities.

Sponsored by the SPS Programme, the event brought 18 participants from Egypt, Jordan, and the United Arab Emirates together with Allied experts for a five-day intensive training course.





**NATO Advanced Training Course Identification and Neutralization of Chemical Improvised Explosive Devices (Chem-IED):** The course offered an advanced knowledge and training in the field of Chem-IED. Participants acquired general knowledge of IED threats, nondestructive investigation of IEDs, chemical warfare agents, toxic industrial chemicals, individual protective equipment, and detection and decontamination equipment. The course also facilitated the exchange of information and experiences regarding solving the problems of IED combined with toxic chemicals and hazardous materials. The course was held with the support of the EOD - CBRN Training Centre in Poland with the participation of twenty five trainees from 11 countries (Algeria, Azerbaijan, Czech Republic, Egypt, Jordan, Kuwait, Mauritania, Poland, Ukraine, Turkey, and United Arab Emirates).

## **1.e ENVIRONMENTAL SECURITY**

---

**(MODUM) Towards the Monitoring of Dumped Munitions Threats:** The MODUM project aims to establish a monitoring network observing chemical weapons dumpsites in the Baltic Sea, using Autonomous Underwater Vehicles (AUV's) and Remotely Operated Underwater Vehicles (ROV's), with existing research vessels of partner institutions as launching platforms.

The best available monitoring solutions for the difficult Baltic Sea environment will be chosen to locate actual objects of concern. Environmental data will be collected close to the objects, in order to provide information on munitions and chemical warfare agents and effective environmental risk assessment procedures in the Baltic Sea.

It will develop a solution for expanding the monitoring network to all areas of concern in the Baltic Sea area. Performed monitoring activities will include habitat status evaluation and modelling of possible threats to adjacent areas.

The project will create a cost-effective, research based monitoring network to enhance control over environmental and human security risks posed by dumped munitions.







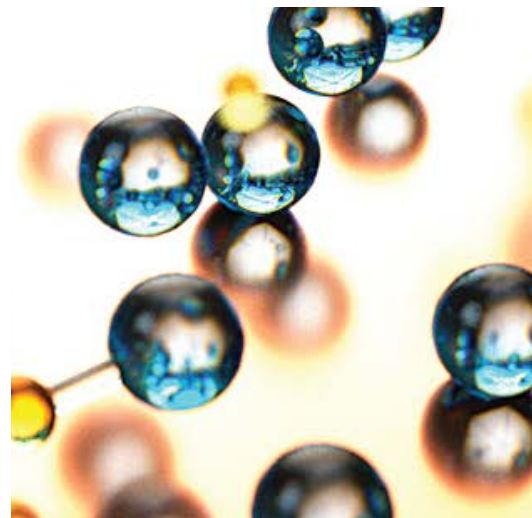
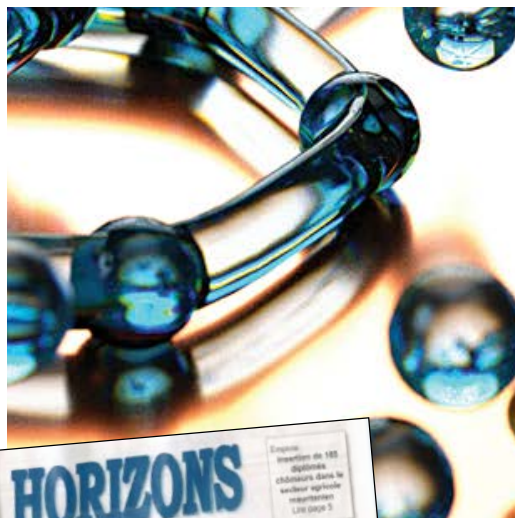
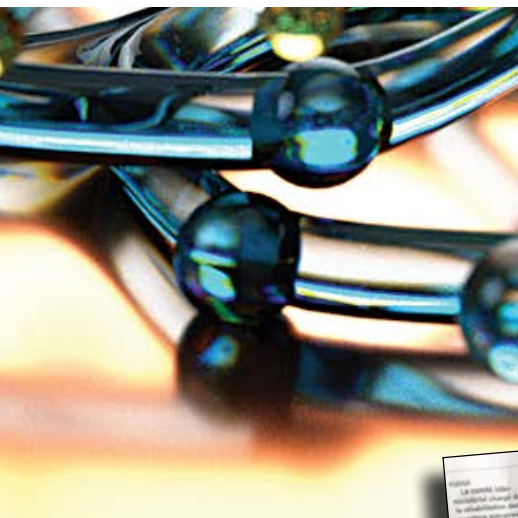
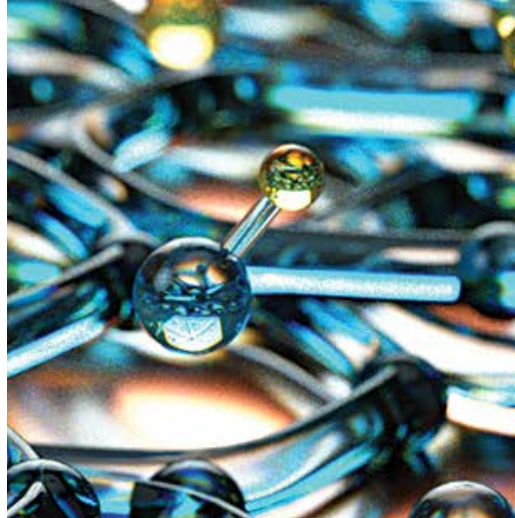
## Priority Area 2: Enhance Support for NATO-led Operations and Missions

**SILK Afghanistan:** The SILK-Afghanistan programme provides high-speed internet access to Afghan universities and some governmental institutions. The project has now moved into its second phase with the signature of a contract between Afghan Telecom and NATO, which signals a shift from the use of satellites towards fibre-optic communications. This is a more sustainable solution going forward and will help prepare the way for a planned handover of the network to a European Union funding mechanism in the future.

The SILK-Afghanistan programme – named after the Great Silk Road trading route linking Asia and Europe – is mainly funded by the NATO Science for Peace and Security (SPS) Programme and the US State Department with further financing provided by the European Commission. The Afghan government covers the costs of domestic traffic and the investment in fibre links from AFTEL's points of presence in the cities to the server rooms of universities.

Launched in Kabul in 2006, the programme has since been expanded to the provinces and currently provides broadband internet connectivity to 18 Afghan universities across the country and a few governmental institutions in Kabul. A further four universities are due to be hooked up to the network this summer. In addition to providing connectivity, the programme funds the building of IT infrastructure and trains IT staff at Afghan universities.

The signature of the contract worth € 750,000 with Afghan Telecom will provide for fibre-optic communications for four sites in the capital Kabul and 13 sites in the provinces.



# Priority Area 3: Enhance Awareness on Security Developments & Crisis Prevention

**Set-Up of a National Operational Coordination Centre in Mauritania:** The project supports the creation of a national operational coordination centre to assist the Mauritanian government's efforts to provide better civil protection services, especially during crisis situations and to establish a national civil emergency planning framework.

The project was initiated in Nouakchott in 2012 to improve national responses to emergencies by developing regulatory standards and operational procedures; enhancing coordination between national, regional and local levels and strengthening capabilities for analysing risks and threats. More broadly, the Centre is intended to support the establishment of a national civil emergency planning framework. The Centre will reduce vulnerability to risks and threats associated with terrorist or illicit activity, in particular in isolated areas, through increased coordination between the various national civil protection and emergency response actors. This project is led by Mauritania and France.

## 3.a SECURITY-RELATED ADVANCED TECHNOLOGY

---

### **Novel nanocomposite materials based on low dimensional carbon systems for electromagnetic shielding**

The Project aims to develop new nanocarbon-polymer composite materials with controllable electric and electrodynamic characteristics to make protective shields that absorb microwave electromagnetic radiation. The technology aims to protect vital equipment from electromagnetic interference that can be applied in a coating or paint.

Scientists from Germany, France, Ukraine and Israel are all involved in this nano technology project which potentially has many important security related applications.

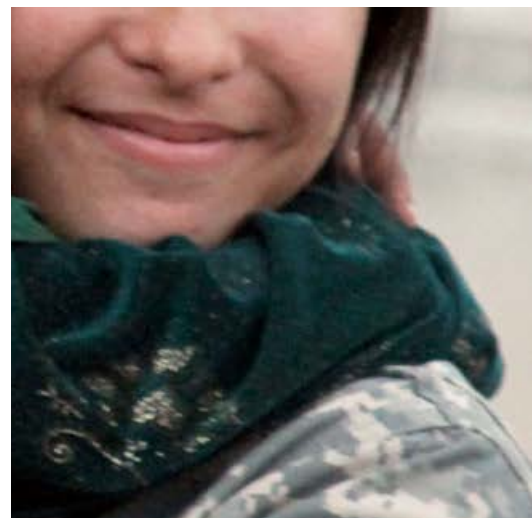
## 3.b BORDER AND PORT SECURITY

---

**Border Security Threats in the Mediterranean Region:** A 2014 advanced research workshop in Malta focused on border security in the Mediterranean region. The International Border Security Forum brought together more than 50 participants to discuss border security challenges in the Mediterranean Sea basin.

The workshop focused on various issues pertaining to border security, including international cooperation within the border security community, cross-border terrorism and its implications for the Mediterranean region, maritime challenges and priorities for regional security, and how natural resources shape border security.





The event provided a unique setting to discuss a wide range of issues, bringing together major stakeholders for border security from think tanks, academia, and public administration from the Mediterranean region, Europe and the United States. It also provided a platform for senior experts and government officials to debate and network in the spirit of building the international border security community.

### **3.c MINE AND UNEXPLODED ORDNANCE DETECTION AND CLEARANCE**

---

**Landmine Detection in Egypt:** Launched in 2012, this project aims to help Egyptian deminers to develop an operational capability for both dual-sensor and deep-search detectors.

The first phase of the project sought to develop dual-sensor technologies with a ground-penetrating radar (GPR), making it possible to not only detect metallic objects but also to deduce volume, allowing metal fragments to be distinguished from mines. GPR technology also facilitates mine-detection operations by enabling the mapping of the sub-surface, as it can detect objects, volumes and areas that have different electromagnetic properties.

As dual-sensor detectors are only able to detect mines and explosive remnants to a depth of between 0.5 and 1 metre, specific deep-search detectors were employed during the second phase of the project. Now that the project is completed the group of Egyptian Military Engineers will benefit from the advanced detection equipment, which will result in better, safer and faster demining of the mine-affected areas in Egypt.

### **3.d HUMAN AND SOCIAL ASPECTS OF SECURITY RELATED TO NATO'S STRATEGIC OBJECTIVES**

---

**Advanced Research Workshops on UNSCR – 1325 NATO Scorecard:** The 1325 NATO Scorecard was designed as an educational tool focusing on how best to increase implementation of UNSCR 1325 and learn from the experiences of others. The project aimed to assist policymakers in identifying shortfalls in existing National Action Plans and allow the elimination of duplicative and/or ineffective programmes that lead to unnecessary costs. In addition, the 1325 NATO Scorecard aimed to facilitate standardization by NATO member and partner nations in training, implementation monitoring, and evaluation of UNSCR 1325 in the context of NATO-led missions and operations.

Within the context of the project three workshops were organized to bring together academics, policy makers, and experts from military and civilian administrations. The first workshop was held in Belgrade May 2014, to gather basic information and exchange best practices and lessons learned with respect to UNSCR 1325 implementation in NATO member and partner nations. The second workshop was held in September 2014 in Washington, DC, which compared and contrasted existing evaluation mechanisms and indicators and focus on the development of the Scorecard methodology. The third workshop will be held in Brussels in 2015 and it will present the 1325 NATO Scorecard to a broad public.

# How to apply

## Who Can Apply?

Applications for funding must be submitted jointly by one or more experts residing and working in a NATO country and one or more residing and working in a Partner country.

Please find an overview of NATO and Partner countries below:

### **NATO Countries**

---

Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Turkey, United Kingdom, United States

### **NATO Partners**

---

Afghanistan, Algeria, Armenia, Australia, Austria, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Egypt, Finland, Georgia, Iraq, Ireland, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic, Malta, Mauritania, Moldova, Mongolia, Montenegro, Morocco, New Zealand, Pakistan, Qatar, Republic of Korea, Russian Federation, Serbia, Sweden, Switzerland, Tajikistan, the former Yugoslav Republic of Macedonia\*, Tunisia, Turkmenistan, Ukraine, United Arab Emirates, Uzbekistan.

\* Turkey recognizes the Republic of Macedonia with its constitutional name.



# Timeline & Application Guidelines

There are normally 2-3 peer review evaluation panels held per year, with deadlines for application submissions corresponding to their scheduling. The deadlines are generally set as follows:

- March
- July
- October

As a decision on funding can take up to 9 months following an application deadline, it is important to take this into consideration when proposing dates for an activity. Please consult the NATO SPS website [www.nato.int/science](http://www.nato.int/science) for the latest application deadline schedule.

All applications must address the SPS Key Priorities and must have a clear link to security and to NATO's strategic objectives.

Applications for funding should be sent to: [sps.applications@hq.nato.int](mailto:sps.applications@hq.nato.int)

**Detailed application guidelines and forms can be found on our website.**

## Selection Procedure

Strategic and political guidance for the SPS Programme is provided by the Partnerships and Cooperative Security Committee (PCSC). The PCSC determines the SPS work programme on an annual basis. This includes a set of priorities consistent with the common security challenges identified in NATO's Strategic Concept and in line with the Alliance Partnership Policy. The PCSC is regularly informed of progress on the SPS Programme activities. In order to keep Partners informed and closely involved in the SPS Programme, a PCSC meeting with Partners will be organized once a year.

The PCSC also gives the final approval on the selection of projects recommended after scientific peer evaluation by an independent group of scientific experts.

The outcome of the selection procedure will be communicated in writing to applicants within nine months. Feedback on applications will be given on a case-by-case basis.

# Contact us

## **Science for Peace and Security (SPS) Programme**

Emerging Security Challenges Division (ESCD)

NATO HQ

Bd. Leopold III

B-1110 Brussels

Belgium

Fax: +32 2 707 4232

Email: [sps.info@hq.nato.int](mailto:sps.info@hq.nato.int)

You can find further information and the latest news about the SPS Programme on our website ([www.nato.int/science](http://www.nato.int/science))

You can also follow the SPS Programme on Twitter @NATO\_SPS.