

# The NATO Science for Peace and Security (SPS) Programme

*Overview of the SPS Programme  
for Cooperation in Civil Science*



- Reaching out to civil societies
  - NATO
  - Partner countries
  - Mediterranean Dialogue countries
- Two components in PDD Division
  - Public Information
  - Civil science cooperation
    - Science for Peace and Security (SPS)

## Outline

- The new SPS Committee and Programme
- Objectives of Science for Peace and Security
- A Unique Network of Cooperation
- Key Priorities
  - *NATO's priorities*
  - *Partner priorities*
- Target Participants & Mechanisms
- Examples



- The new SPS Committee and Programme was established by the NATO Council on 28 June 2006
  - Primary NATO body over a programme for enhancing cooperation with all partnerships based on science and innovation
  - Conducts activities aligned with NATO's Strategic Objectives – especially Partnership
- To have a 'horizon-scanning' role in identifying future threats, raising awareness and finding solutions



*Public Diplomacy Division*  
*Division Diplomatie Publique*

# *The New SPS Committee*



*Inaugural Meeting 20 October 2006 – NATO Headquarters, Brussels*

## SPS Objectives

Establish concrete civil collaboration between NATO countries and Partner and Med Dialogue countries

Contribute to solving problems effecting large societies in Partner and Med Dialogue countries

Promote NATO's values and image in targeted communities in Partner and Med Dialogue countries and society at large

- Young generation of 'Leaders of Tomorrow'

Contribute to Stability and Peace e.g. by promoting regional co-operation

Provide seed money for seed projects to provide the basis for addressing priority needs



# A Unique Network of Cooperation

## NATO Countries

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

## Partner Countries

Albania, Armenia, Austria, Azerbaijan, Belarus, Bosnia & Herzegovina, Croatia, Finland, Georgia, Moldova, Montenegro, Ireland, Kyrgyz Republic, Kazakhstan, Russia, Serbia, Sweden, Switzerland, Tajikistan the former Yugoslav Republic of Macedonia(\*), Turkmenistan, Ukraine, Uzbekistan,

## Mediterranean Dialogue Countries

Algeria, Egypt, Israel, Jordan, Mauritania, Morocco, Tunisia

**Total: 56 countries**

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

# *SPS Characteristics*

- Programme elements
  - Nationally Funded Activities
  - NATO Managed Activities
- Activities involve NATO + Partner / MD countries
- Rapid approval for activities / low bureaucracy
- Non-military, civil science
- Variety of mechanisms
- Special arrangement for NATO-Russia cooperation
- Based on Key Priorities

## ■ Defence Against Terrorism

- Rapid Detection of CBRN Agents and Weapons, and Rapid Diagnosis of their effects on people
- Novel and rapid methods of detection
- Physical Protection against CBRN agents
- Decontamination of CBRN agents
- Destruction of CBRN agents and weapons (e.g., chemical and vaccine technologies)
- Medical Countermeasures
- Explosive Detection
- Food Security
- Information Security
- Eco-Terrorism Countermeasures
- Computer Terrorism Countermeasures



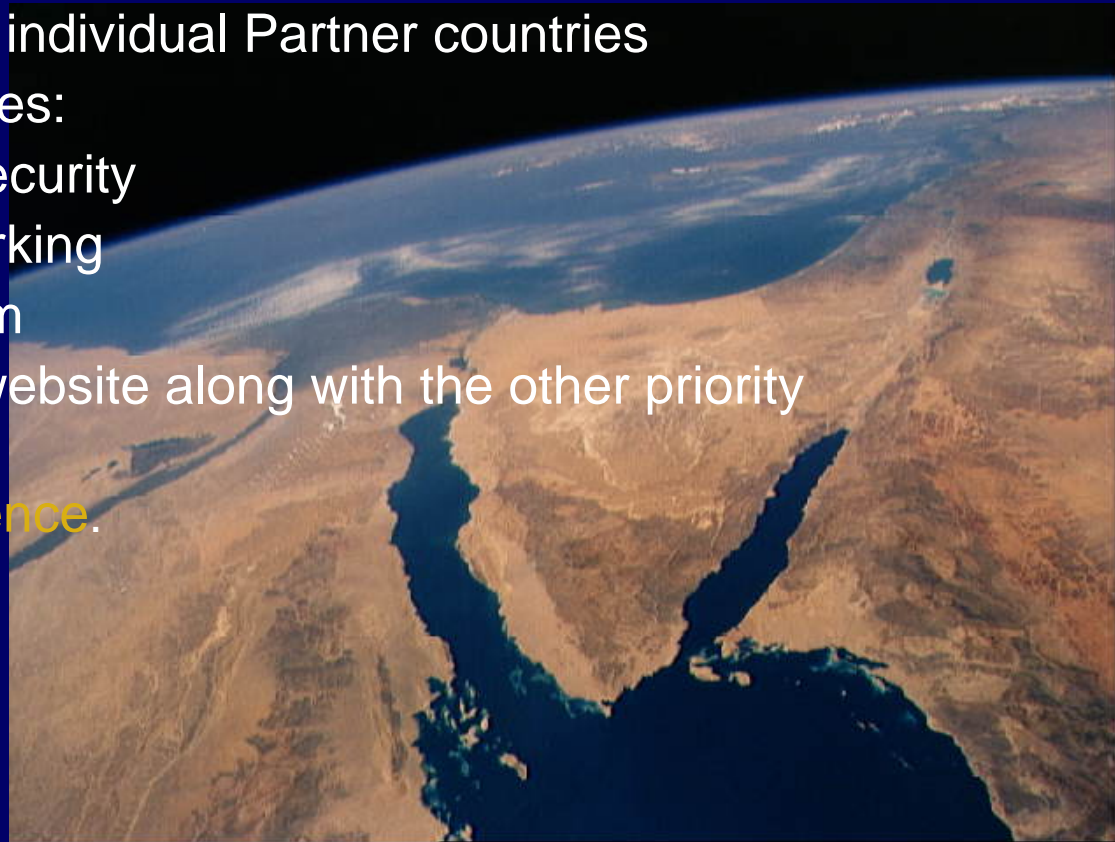
## ■ Scientific Collaboration to Counter Other Threats to Security

- Environmental Security (e.g., desertification, land erosion, pollution, etc.)
- Water Resources Management
- Management of Non-Renewable Resources
- Modelling Sustainable Consumption (e.g., food, energy, materials, fiscal measures and environmental costing)
- Disaster Forecast and Prevention
- Human and Societal Dynamics (e.g. new challenges for global security, economic impact of terrorist actions, risk studies, topics in science policy)



## ■ Partner Country Priorities

- Specific topics for collaborative research have been identified by the Partner countries
  - High priorities for individual Partner countries
- Some common themes:
  - Environmental Security
  - Computer Networking
  - Counter-Terrorism
- Posted on the SPS website along with the other priority areas:
  - [www.nato.int/science](http://www.nato.int/science).



# Target Participants & Mechanisms

## Individuals from Partner countries

**Reintegration Grants** - Return young scientists to home country

## Small research groups

**Collaborative Linkage Grants** - Working together for security

## Large groups of experts

**Workshops (ASI - ARW)** - Studies on security-related priorities

## Institutions

**Projects** - Conduct joint security R&D and upgrade Partner laboratories

## Societies at large

**Projects** - NATO support to solve problems affecting societies

**Computer Networking**- Provides access to the world of communication

## SCIENCE FOR PEACE PROJECTS (SfP)

Grants to collaborate on multi-year applied R&D projects in Partner or Mediterranean Dialogue countries

## ADVANCED RESEARCH WORKSHOPS (ARW)

Grants to organise expert workshops where an intense but informal exchange of views at the frontiers of a subject aims at identifying directions for future actions

## ADVANCED TRAINING COURSES (ATC)

Designed to enable specialists in NATO countries to share their expertise with trainees from Partner and Mediterranean Dialogue countries

## COLLABORATIVE LINKAGE GRANTS (CLG)

To pool ideas and resources on research projects, and create specialist networks

## REINTEGRATION GRANTS (RIG)

To allow young scientists from Partner countries working in NATO countries to return and reintegrate into the research communities of their home countries

## NETWORKING INFRASTRUCTURE GRANTS (NIG)

To assist Partner-country research institutions  
to improve the level and quality of their  
telecommunication facilities

## VIRTUAL SILK HIGHWAY

Satellite-based Internet access for 9 countries of South Caucasus, Central Asia and Afghanistan



## *How to Apply*

- Identify a topic which you wish to open to international cooperation
- Determine the appropriate mechanism
- Find a qualified collaborator
  - ... from a Partner or Mediterranean Dialogue country if you are a NATO country scientist
  - ... or vice versa
  - The SPS Website bulletin board can help
- Visit the NATO SPS website for downloadable application forms and instructions
- Complete the application form with your collaborator and submit it

## *Nationally Funded Activities (NFA)*

- NFA proposals may be presented by any NATO, Partner or Mediterranean Dialogue country
  - Prepared by national authorities and submitted to the SPS Committee by the national SPS member
- National or regional priorities of interest to several nations
- Usual mechanisms
  - Pilot Studies (3-5 years)
  - Short-Term Projects (18 months maximum)
  - Topical Workshops
- Report on NFA activities in 2006
  - EAPC(SPS)D(2007)0006 dated 8 March 2007

## Advanced Study Institutes

- Desertification and Risk Analysis using Satellite Data (*Italy, Tunisia*)
- Mini/Micro Fuel Cells as Energy Generators (*US, Belarus*)
- Fundamentals of Verbal and Non-Verbal Communication and the Biometrical Issue (*Italy, Croatia*)

## Advanced Networking Workshops

- Principles, Strategies and High Technologies of Information Security (*US, Kazakhstan*)
- Challenges for Secure Networking in Developing Countries (*Poland, Albania*)

## Advanced Research Workshops

- Decision Support for Natural Disasters and Intentioned Threats to Water Security (*US, Croatia*)
- Safety, Reliability and Risks Associated with Water, Oil and Gas Pipelines (*France, Egypt*)
- Policing Responses to Terrorist Operations (*US, Georgia*)
- Radiological Risks in Central Asia (*Norway, Kazakhstan*)
- Prevention, Detection and Response to Nuclear and Radiological Threats (*US, Armenia*)
- Cyberterrorism as a New Security Threat (*Bulgaria, Ukraine*)
- Crisis Management and Counter-Terrorism in the Western Balkans (*Slovenia, Croatia*)

## Science for Peace Projects

- Mélange Rocket Fuel Conversion in Azerbaijan (*NATO managed*)
- New Technology of Seismic Resistant Construction (*Turkey, Azerbaijan*)
- Societal Security and Environmental Impacts Concerning Mariculture in the Red Sea (*Germany, Jordan*)
- Biotechnological Exploitation of Uzbek Saline Water Reserves using Halotolerant Microalgae (*Greece, Uzbekistan*)
- Electromagnetic Signature of Edge-Structures for Unexploded Ordnance Detection (*Italy, Israel*)

- Results of SPS awards are published in books under the **NATO Science for Peace and Security Series**
  - Advanced Study Institutes
  - Advanced Research Workshops
- A newsletter is published quarterly
- On-line publications on the Programme website

## *Organization: Four Advisory Panels*

- Advisory Panels composed of recognized national experts nominated by the NATO, Partner and Mediterranean Dialogue countries
- Provide Peer-Review of applications and proposals
  - Ensure quality and relevance
- Current Panels:
  - Chemical / Biological / Physics (CBP) Panel
  - Information and Communications Security (ICS) Panel
  - Environmental Security Panel (ESP)
  - Human & Societal Dynamics (HSD) Panel

- The SPS website is the primary source for applicants and participants on activities and procedures
    - Instructions for applicants
    - Downloadable application forms
    - Deadlines: 1 Mar -- 1 Jul -- 1 Nov
- [www.nato.int/science](http://www.nato.int/science)

# Conclusions

- NATO-sponsored civil science cooperation is focused on security and on NATO, Partner and Mediterranean Dialogue country priorities
- Strong impact in Partner and Mediterranean Dialogue countries
  - Contributes to a positive image of NATO
- Tool for connecting nations through their scientific communities
  - Mature programme with effective mechanisms
- Rapid grant approval / low bureaucracy

Thank you for your attention

*Dr. Keith Gardner  
Deputy Assistant Secretary General for Science Cooperation  
Public Diplomacy Division  
NATO Headquarters  
B-111- Brussels  
Tel: +32 2 707 4207  
E-Mail: [gardner.keith@hq.nato.int](mailto:gardner.keith@hq.nato.int)*