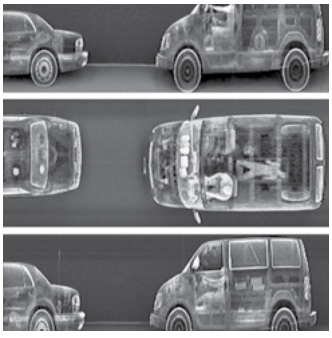
The Emerging Security Challenges Division

The NATO Science for Peace and Security (SPS) Programme






Annual Report 2013

The Emerging Security Challenges Division

The NATO Science for Peace and Security (SPS) Programme

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Forward by Ambassador Sorin Ducaru

New Guidance, New Focus, New Managerial Approach

As we enter into 2014 it is important to look back on the previous year and reflect on our work and ways to improve in the year ahead. Indeed, 2013 was a complex – and in many ways a difficult – year, but it also proved to be an important year for the Science for Peace and Security Programme, that has resulted in new political guidance, new focus, and a new managerial approach.

The first part of 2013 was marked by the Strategic Assessment, and the resultant reorientation and recalibration of the Programme. The last part of the year was characterised by a concerted effort aimed at the rapid alignment to the political guidance provided by Allies and towards a fresh, streamlined, and goal-oriented managerial approach, based on effectiveness, accountability and transparency. Since I took office in September 2013, my efforts in relation to the SPS Programme were focused to this end.

The SPS Programme is an established brand for NATO that is well known amongst Allies and Partners, and has been contributing to the core goals of the Alliance for many decades. It has three core dimensions that define its identity: Science, Partnership, and Security. The Programme continues to be one of the Alliances' largest and most important civilian partnership tools.

Moving forward, the SPS Programme has new guidance, a new focus, and new working methods for 2014. In October 2013, Allies approved the new SPS Overarching Guidelines to clarify the scope, policy objectives, and working procedures of the Programme. Additionally, Allies also approved our new strategic SPS Work Programme for 2014, which will provide guidance in line with the results of the 2013 Strategic Assessment.

This Annual Report gives an overview of our activities for the last year in this new context. We have already begun to launch new activities in line with the new political guidance. So while 2013 proved to principally be the year of assessment, re-focus, and realignment, 2014 will be the year of active implementation, in line with the fresh guidance provided by the Allies.

I hope that you will find the 2013 Annual Report of the SPS Programme informative and interesting, and I believe that 2014 will be a year of even greater progress in terms of results, impact, and value achieved for the resources allocated to SPS activities in tune with the expectations of our stakeholders – Allies and partners.

Ambassador Sorin Ducaru

Assistant Secretary General

Emerging Security Challenges Division

Forward by the Senior SPS & Partnership Cooperation Advisor

Not Business as Usual

As the Senior Advisor of the Science for Peace and Security (SPS) Programme for many years, I have seen the changes and evolution of the Programme. The SPS team has changed in size, form, and location, but the integral aims and objectives remain the same: to reach out to Partner countries with concrete security-related civil science, and to foster and develop cooperation in areas of mutual interest to both the Alliance and its Partners.

2013 was an extremely important year for the Programme, and saw a growth in the number and variety of Partner countries that we actively engaged with. With the lessons we have learned, and the guidance received from Allies, the SPS Programme will continue to increase the focus on larger-scale and more strategic activities with high public diplomacy impact. As a result, the Programme will seek to develop flagship initiatives with high visibility and with an advanced political impact.

Under the leadership of the new Assistant Secretary General for the Emerging Security Challenges Division, Ambassador Sorin Ducaru, the Programme has continued its evolution towards what the Alliance wants and needs in today's world.

As a result of the years of reorganisation, restructuring, revision, and assessment, the Programme is ready to implement its new approach. It will not be business as usual. We continue to recognise the outstanding collaborative and cooperative aspects of science. Indeed, for over 50 years NATO has been leading in this field, and the SPS Programme embodies this spirit. Under the new guidance, and streamlined and refined work methods, we still strive to work with Partner countries in concrete and mutually beneficial cooperative activities.

2013 proved to be an exciting year for the Programme, and this Annual Report provides an excellent opportunity to recap on what we have achieved and learned, and what is ready to be implemented in the coming year.

Dr. Deniz Beten

Senior SPS & Partnership Cooperation Advisor

Emerging Security Challenges Division

Executive Summary

1. The NATO Science for Peace and Security (SPS) Programme is an established brand for NATO, contributing to the core goals of the Alliance since the SPS Programme was founded in 1958. Today, the Programme promotes collaboration and cooperative security based on three core dimensions: science, partnership, and security.

2. The SPS Programme helps to promote scientific research, innovation, and knowledge exchange in an effort to address mutual security challenges with Partners. As a brand, SPS has a vast network reaching out to hundreds of universities and institutions across the world. It is a well known partnership tool, bringing together scientists, experts, and policy makers from Allied and Partner countries. Moreover, it directly promotes security by filling a forward looking role in identifying future security issues, raising awareness, and finding solutions for today's threats, including the cross cutting nature of emerging security challenges.

3. The Programme is one of NATO's most important partnership tools. It represents a key instrument of NATO's partnership policy and enhances practical cooperation and dialogue between NATO and partner countries based on security-related civil science, technology, innovation, and beyond.

4. All SPS Programme activities contribute toward the Alliance's strategic objectives as defined in the 2010 Strategic Concept and as set out in the Policy for a More Efficient and Flexible Partnership, adopted at Berlin in 2011.

5. Since 2010 the SPS Programme has been embedded in the Emerging Security Challenges (ESC) Division to better align SPS activities to address 21st century security challenges. It aims to promote security, stability and solidarity, in both the North Atlantic area and beyond, by encouraging Allied and Partner scientists and experts to work together to address security issues of mutual concern. In particular, emerging security challenges are addressed jointly with partners, recognising the strong interest from Partners to cooperate on these issues. The areas are directly in line with SPS Key Priorities.

6. The NATO Science for Peace & Security (SPS) Programme releases an Annual Report each year to provide Allies and partners with a comprehensive overview of all activities that were peer-reviewed by the Independent Scientific Evaluation group (ISEG), approved by Allies, and implemented over the calendar year.

7. In 2013 the SPS Programme continued to develop collaborative activities that address the Alliance's core goals and priority areas. In particular, 'cooperative security' is stated as one of the Alliance's core tasks according to the 2010 Strategic Concept, therefore all SPS activities aim to foster opportunities for practical cooperation with partners based on security-related issues producing concrete deliverables. This report provides both qualitative and quantitative information on the activities of the SPS Programme during 2013.

8. In 2013 a Strategic Assessment of the Science for Peace and Security (SPS) Programme was undertaken by the SPS Staff as requested by Allies and tasked by the Secretary General. The primary aim of the assessment was to examine past performance over a five year period with a view to determining the SPS Programme's future strategic orientation.

9. The conclusion of the Strategic Assessment resulted in two taskings for the SPS Programme. The first was to develop SPS Overarching Guidelines and the second was to develop a strategic SPS Work Programme for 2014. Both of these tasks were completed by the end of the year.

10. Following the results of the Strategic Assessment in 2013, the SPS Programme will aim to promote larger 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. As a result, the public diplomacy aspect of SPS activities will play an increasingly important role.

11. The year was also characterised by a concerted effort aimed at the rapid alignment to the political guidance provided by Allies and towards a fresh, streamlined, and goal-oriented managerial approach, based on effectiveness, accountability and transparency.

12. Over the course of the assessment period SPS Staff also worked to improve working methods, such as the development of enhanced factsheets for new SPS Proposals and increased reporting to Allies on ongoing activities.

13. In parallel, the SPS Programme continued to implement the 2013 SPS Work Programme. Over the course of the year the SPS Programme is responsible for initiating new activities, overseeing and assessing ongoing activities, and closing up completed projects. This work is primarily undertaken by the SPS Staff, with support provided by other staff within the ESC Division and from various other sections such as the Political Affairs and Security Policy Division (PASP) and the Public Diplomacy Division (PDD). SPS Programme Staff provide governance and management support for all programme activities, including the preparation of the strategic and political guidance documents for the PPC, the preparation of relevant meetings, management and implementation of all SPS funded activities and projects, reporting on the SPS activities, and communication and dissemination strategy for SPS activities.

14. In 2013 a total of 51 new activities were initiated. This report provides important statistical information on these activities and their contribution to NATO's strategic objectives. A comprehensive list of these activities can be found at Annex 2 and statistical data and analysis are provided in Chapter III.

15. In 2013 Allies agreed that one feasibility study looking into a potential project proposed by the United Nations Mine Action Service (UNMAS) on a potential multi-year project entitled "Adaptable Disposal Solution for Obsolete, Surplus, and Unserviceable Ammunition in Libya" would be funded from the 2013 SPS Programme budget, and would be conducted in 2014 in cooperation with the NATO Support Agency (NSPA).

16. SPS activities carry important political significance. The SPS Programme is open to collaboration with all partners, and sometimes the SPS Programme acts as the first point of tangible cooperation between the Alliance and a Partner. In 2013 the SPS Programme achieved further diversification in terms of Partner countries participating in new activities. Various SPS activities from 2013 resulted in the Programme's first cooperation with partners Japan, Iraq, Malta, Pakistan, and the United Arab Emirates.

17. Public diplomacy is a very important aspect of the SPS Programme as it helps to raise the visibility of the Alliance's commitment to cooperative security through the development of concrete activities with all partners. Additionally, it is a key instrument in helping the public to understand the benefits of partnership with NATO, especially in partner countries. Public awareness of SPS as a concrete civil cooperation programme also helps to highlight the non-military components

of NATO's activities. As a result, SPS activities provide stakeholders with the opportunity to promote a positive image of the Alliance and support further cooperation.

18. In 2013 the SPS Stand-Off Detection of Explosives (STANDEX) project was covered by several mainstream media outlets, including AFP, BBC, and Euronews. This coverage provided important visibility of a flagship SPS Programme activity reaching a wider public at large and highlighted one important area of practical cooperation with the Russian Federation.

19. In 2013, the SPS Programme continued to make strong use of a wide range of public diplomacy tools. The SPS website remains a central tool in providing stakeholders and the wider public with critical information on the SPS Programme's structure, mechanisms, and avenues for collaboration. The SPS website is updated frequently with new information and updates on SPS activities. The SPS Programme has collaborated closely with NATOChannel in 2013 and several activities were filmed for the website. The SPS Programme also continued to reach out to partners through the organisation of several Information Days. Other tools, such as the SPS Country Flyers, were also used over the year.

20. In 2013 the SPS Programme organised six SPS Information Days in the following countries: Japan, Moldova, Mongolia, Montenegro, Romania, and the former Yugoslav Republic of Macedonia[1]. An SPS Info Day is an outreach event, typically hosted in a partner country that brings together domestic, political, scientific and industry experts who may be potential applicants for future SPS Programme activities. The events allow the SPS Programme to promote its work and activities in a specific country and foster prospective collaborative opportunities.

21. In 2013, the SPS Programme budget was €12.1M.

(1) Turkey recognises the Republic of Macedonia with its constitutional name.

List of Abbreviations

ARW	Advanced Research Workshop
ASI	Advanced Studies Institute
ATC	Advanced Training Course
CBRN	Chemical, Biological, Radiological, and Nuclear
CMRE	Centre for Maritime Research and Experimentation
EAPC	Euro-Atlantic Partnership Council
ENVSEC	Environment and Security Initiative
ESCD	Emerging Security Challenges Division
ICI	Istanbul Cooperation Initiative
IED	Improvised Explosive Device
IPAP	Individual Partnership Action Plan
IPCP	Individual Partnership Cooperation Programme
IS	International Staff
ISEG	Independent Scientific Evaluation Group
JWGSEC	Joint Working Group on Scientific and Environmental Cooperation
MAP	Membership Action Plan
MD	Mediterranean Dialogue
MODUM	Monitoring of the Dumped Munitions Threat
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organisation
NCIA	NATO Communications and Information Agency
NIG	Network Infrastructure Grant
NRC	NATO-Russia Council
NUC	NATO-Ukraine Commission
NSPA	NATO Support Agency
PaG	Partners across the Globe
PASP	Political Affairs and Security Policy Division
PDD	Public Diplomacy Division
PPC	Political and Partnerships Committee
SENT	Smart Energy Team
SFPP	Science for Peace Project (also Multi-Year Project (MYP))
SPS	Science for Peace and Security Programme
STANDEX	Stand-Off Detection of Explosives
STO	NATO Science and Technology Organisation
UXO	Unexploded Ordnance

CHAPTER I
The SPS Brand

The NATO Science for Peace and Security (SPS) Programme – founded in 1958 – is an **established brand** for NATO, contributing to the core goals of the Alliance. It is one of NATO's most important partnership tools in terms of funding and outreach, reaching both governmental and civil audiences. It represents a key instrument of NATO's partnership policy and enhances cooperation and dialogue between NATO countries and Partner countries based on security-related civil science, technology, and innovation. All SPS Programme activities contribute toward the Alliance's strategic objectives as defined in the 2010 Strategic Concept and as set out in the *Policy for a More Efficient and Flexible Partnership*, adopted at Berlin in 2011. Today, the Programme promotes collaboration and cooperative security based on three core dimensions that define its identity:

Science

The first aspect is *Science*. The SPS Programme helps to foster research, innovation, and knowledge exchange in an effort to address mutual security challenges. As a brand, SPS has a vast network reaching out to hundreds of universities and institutions across the world.

Partnership

The second aspect is *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. Moreover, the SPS Programme is well known as a partnership tool that is 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 over 40 Partner countries.

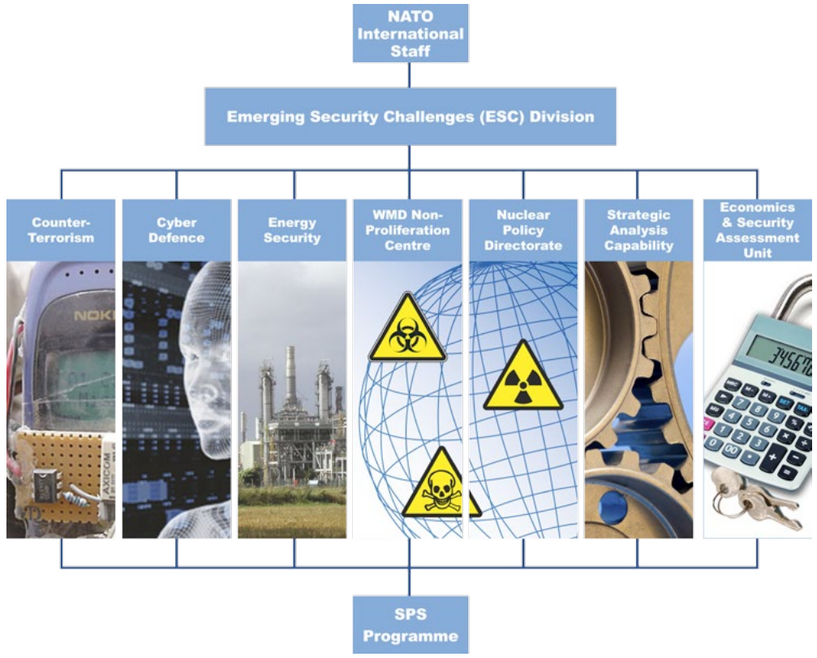
Security

The third aspect is the fundamental link to *Security*. According to the scope of the SPS Programme and guidance, all projects developed under SPS must have a relevant security dimension. This is also reflected in the SPS Key Priorities[2] developed by Allies.

Since 2010 the SPS Programme has been embedded in the Emerging Security Challenges (ESC) Division to better align SPS activities to address 21st century security challenges. It aims to promote security, stability and solidarity, in both the North Atlantic area and beyond, by encouraging Allied and Partner scientists and experts to work together to address security issues of mutual concern. In particular, emerging security challenges are addressed jointly with partners, recognising the strong interest from Partners to cooperate on these issues.

The ESC Division works to address a growing range of non-traditional risks and challenges faced by both the Alliance and the broader international community. Notably, the ESC Division focuses on threats ranging from terrorism, defence against chemical, biological, radiological, and nuclear (CBRN) agents, the proliferation of weapons of mass destruction, cyber threats, and energy security & environmental security concerns. The SPS Programme seeks to address these areas and develop solutions through the development of collaborative activities with all of NATO's partners.

The SPS Programme also helps to counter the image of a purely military Alliance while promoting the political dimension of NATO in terms of shared values and support to civil society. It 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, it enables NATO to become actively involved in such regions, often serving as the first concrete link between NATO and a new partner. Furthermore, the SPS Programme promotes dialogue and regional cooperation among partners, including those for whom direct engagement or dialogue is difficult.



(2) PPC-N(2012)0031-REV3

How does the SPS Programme work?

The SPS Programme serves to facilitate cooperation and collaboration between Alliance and partner country scientists, experts, and officials. The Programme works by providing grants that enable Allied and partner institutions to engage in collaborative, security-relevant activities. To that end, interested parties submit an application for funding that must be led by project directors from at least one Allied and one Partner country. These applications must also directly address the SPS Key Priorities and have a clear link to security. Once an application has been received by the SPS Programme it must undergo a comprehensive evaluation and approval process, taking into account expert, scientific and political guidance. This process ensures that all SPS applications approved for funding have been evaluated by NATO experts, independent scientists, and NATO Nations themselves. The chart below provides an overview of the SPS application and award process.

Begin
- Visit www.nato.int/science

Partnership
- At least one Project Director from a NATO country (NPD)
- At least one Project Director from a Partner country (PPD)

Prepare
- Determine the topic and the grant mechanism.
- Guidelines and Application Forms online.
- 'Top-Down' applications are developed jointly with International Staff at NATO.

Apply
- Submit applications to: sps.applications@hq.nato.int

Review
- Peer-reviewed by the Independent Scientific Evaluation Group (ISEG).
- Final approval by Allies.

Result
- All activities approved for funding by Allies will receive a formal award letter from the SPS Programme.

Top-Down & Bottom-Up Applications

The SPS Programme accepts both 'top-down' and 'bottom-up' applications. A 'top-down' application is one that is initiated and developed by NATO International Staff (IS) – the SPS and ESCD Staff along with support from other NATO Divisions and bodies – with Allies and/or partner delegations. 'Bottom-up' applications are submitted directly to the SPS Programme by independent scientists and experts themselves, mostly via the SPS website. These applications must meet all SPS Programme requirements and address the SPS Key Priorities, received from the Allies. All applications will be peer-reviewed by the Independent Scientific Evaluation Group (ISEG) for scientific and technical merit and presented to Allies for final approval.

A group picture of the Independent Scientific Evaluation Group (ISEG) meeting at NATO HQ in March 2013.

SPS Grant Mechanisms

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

1. Multi-year research & development projects

Multi-year projects These are research and development projects related to NATO's strategic goals and relevant to the SPS Key Priorities. The projects enable partner country scientists to increase contacts in the NATO science community, while building a stronger science infrastructure in their home countries. Projects have a typical duration of 3 to 4 years. Applications are submitted jointly by an expert residing and working in a NATO country and one residing and working in a Partner country. Projects involving more than one Partner country are encouraged, as is the participation of younger scientists.

Network Infrastructure Grants (NIG) These are Computer Networking Projects which, at present, are only available to Afghanistan in the framework of the SILK-Afghanistan Programme, approved by Nations in October 2009. The programme provides free internet connectivity to academic and governmental institutions.

2. Training courses

Advanced Study Institute (ASI) This is a high-level tutorial course teaching the latest developments in a NATO-relevant subject to an advanced-level audience. The training lasts approximately 7 working days, during which lecturers of international standing report new advances on a carefully defined topic in security-related civil science. Participants are 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.

Advanced Training Course (ATC) This is a course designed to enable specialists in NATO countries to share their security-related expertise, in one of the SPS Key Priority areas, with trainees (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 activities. An ATC is not

intended to be lecture driven, rather it is planned to be intensive and interactive in nature. The course contributes to the training and motivation of experts in Partner countries and enables the formation and strengthening of international expert networks. The duration of the ATC is between 5 and 7 working days in order to allow sufficient interaction between the participants.

3. Workshops

Advanced Research Workshop (ARW) This is a meeting of 2 to 5 days' duration, involving between 20 and 50 participants, where advanced-level discussions take place between qualified experts from different countries with the aim of addressing contemporary security challenges. Applications are submitted jointly by an organiser residing and working in a NATO country and one residing and working in a Partner country, with the workshop preferably being held in the Partner country.

SPS Key Priorities

The SPS Programme only supports collaborative activities that address the SPS Key Priorities. These priorities, agreed upon by Allies in 2012, ensure that SPS Programme activities are in line with the NATO priorities identified in the Strategic Concept and NATO's partnership policy. All SPS activities must address the SPS Key Priorities in an effort to facilitate the exchange of know-how, technical knowledge, and specific skills on security issues of mutual interest to Allies and partners. The SPS Key Priorities are:

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

a. Counter-Terrorism

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

b. Energy Security

- Innovative energy solutions for the military; battlefield energy solutions; renewable energy solutions with military applications;
- Energy infrastructure security;
- Maritime aspects of energy security;
- Technological aspects of energy security

c. Cyber Defence

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

d. Defence Against CBRN Agents

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

e. Environmental Security

- 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;
- Disaster forecast and prevention of natural catastrophes and defence-related environmental issues.

2. Enhance Support for NATO-led Operations and Missions

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

3. Enhance Awareness on Security Developments Including through Early Warning, with a View to Preventing Crises

a. Security-related Advanced Technology

- Emerging technologies including nanotechnology, optical technology, micro satellites, metallurgy and the development of UAV platforms.

b. Border and Port Security

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

c. Mine and Unexploded Ordnance Detection and Clearance

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

d. Human and Social Aspects of Security Related to NATO's Strategic Objectives

4. Any 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

Partnership Frameworks

The SPS Programme supports collaboration between NATO and partner scientists and experts from countries that are associated with the Alliance through the Euro-Atlantic Partnership Council (EAPC), the Mediterranean Dialogue (MD), the NATO-Ukraine Commission (NUC), the Istanbul Cooperation Initiative (ICI) and Partners across the Globe (PaG). An additional cooperative programme with the Russian Federation is carried out under the NATO-Russia Council (NRC) SPS Committee.

SPS activities take into account the priorities and preferences of partners, in particular those outlined in approved partnership documents – including, Individual Partnership Action Plans (IPAPs), Individual Partnership Cooperation Programmes (IPCPs) and Membership Action Plans (MAPs). The NATO-Russia Council and the NATO-Ukraine Joint Working Group identify SPS cooperation activities through the development of Action Plans and dedicated committee meetings.

CHAPTER II
Political & Strategic Developments in 2013

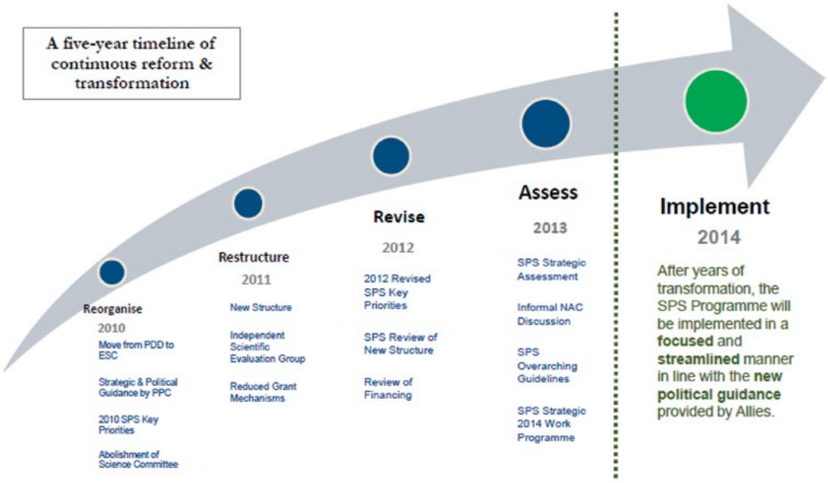
Over its long history, the NATO Science Programme has had to be adaptable and flexible in responding to the demands of the times. Today, its mission is to address emerging security challenges and promote cooperative security with Partners. NATO Allies provide all strategic and political guidance for the SPS Programme and this section of the report will look at the SPS-relevant political and strategic discussions that took place at NATO in 2013.

Strategic Assessment

In 2013 a Strategic Assessment of the SPS Programme was undertaken by the International Staff (IS). Following a request made by some Allies, the Secretary General tasked the IS to undertake a comprehensive assessment of the SPS Programme in February 2013. While the assessment would examine past performance of the Programme, the principal goal would be to focus on the Programme's future strategic orientation.

The assessment outlined the history of major reforms and developments and provided statistics on activities undertaken with a view to determining the relevance of the SPS Programme to NATO's core objectives. The core focus was to enhance accountability and transparency in the management of financial resources made available to Allies and partners through the SPS Programme. The final report highlighted many of the challenges and opportunities inherent in the SPS Programme.

The Strategic Assessment of the SPS Programme was completed by early May and a subsequent report was circulated that provided recommendations for the informal discussion of the North Atlantic Council (NAC). The Council discussion proved that Allies continue to recognise the SPS Programme as a valuable partnership tool that addresses, through concrete cooperation activities, NATO's partnership policy as well as the Alliance's strategic objectives more broadly. However, the strategic assessment period also identified areas for improvement.



The strategic assessment complemented reform efforts from previous years. Over the past five years the Programme has been undergoing a transformation and reform process to better adapt it to the Alliance's aims and objectives today. As this timeline demonstrates, the SPS Programme has been reformed, reorganised, restructured, revised, and assessed since 2010. The chart above outlines the series of reforms and transformations that have taken place regarding the SPS Programme since 2010 and the outlook for 2014.

Overarching Guidelines

During its discussion, the Council agreed that the Political and Partnerships Committee (PPC) would develop SPS Overarching Guidelines for the future implementation of the SPS Programme. These guidelines would also help to clarify the scope, policy objectives, and identify potential areas for continued improvement of the Programme. In turn, these guidelines would inform future SPS Work Programmes and facilitate improved working procedures and decision-making processes.

In October 2013 the SPS Overarching Guidelines were approved 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, the SPS Key Priorities, and the new Overarching Guidelines.

As a result of these guidelines the SPS Programme will adapt both its scope and governance. One significant change in scope is that in the future the SPS Programme will include activities beyond scientific cooperation, while preserving an important scientific dimension of the Programme. Moreover, in the future the SPS Programme will aim to promote larger 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. Both top-down and bottom-up activities will be considered as both types of activities play an important role in the development and implementation of SPS Programme activities.

With a view to improving governance and enhancing working methods, the SPS Programme will seek the early involvement of Allies in the development and implementation of activities. Moreover, Allies will be informed at an early stage when the International Staff is planning new top-down projects together with partners. Regular monitoring and reporting on SPS activities will be conducted as part of a systematic performance evaluation and subsequently shared with Allies as part of efforts to improve the management, accountability and transparency of the Programme.

The Overarching Guidelines also conclude that the significant public diplomacy opportunities generated by the SPS Programme in Allied and Partner countries should be pursued in the future. Existing public diplomacy tools and in-house expertise, especially in close cooperation with the Public Diplomacy Division, will be fully engaged in this effort.

(3) PPC-N(2013)0187-REV4

Strategic 2014 SPS Work Programme

Notably for the first time, the SPS Work Programme for 2014[3] was agreed before the close of the year, marking a clear start in terms of guidance and direction. The 2014 SPS Work Programme will guide the development and implementation of activities over the calendar year and will continue to be governed by the SPS Key Priorities, as agreed by Allies in 2012.

This work programme will seek to promote larger scale and more strategic activities with a high public diplomacy value, which will help to improve the image of the Alliance in partner countries. It will be implemented with a view to applying and further enhancing high-quality management standards, accountability, and transparency. This will be achieved through regular monitoring and assessment, and systematic financial and performance evaluation.

Reorientation and Recalibration

In light of the new political guidance provided by Allies over the assessment period, the SPS Programme was rapidly aligned towards a fresh, streamlined and goal-oriented managerial approach, also based on effectiveness, accountability and transparency. The new SPS Overarching Guidelines and the new strategic 2014 SPS Work Programme have led to the reorientation and recalibration of the Programme.

New Guidance	New Focus
• SPS Overarching Guidelines • SPS 2014 Strategic Work Programme	• Larger scale and more strategic activities with high public diplomacy impact • Enhanced political impact • Activities beyond purely scientific cooperation

Moving forward, the SPS Programme will have new guidance and a new focus in 2014. The Programme will also streamline and enhance its working methods with Allies and Partners in the following ways:

With Allies

One of the requests made by Nations during the Strategic Assessment period was to enhance good governance, transparency and accountability. The SPS Programme will seek to improve horizontal coordination between the SPS Team and relevant parties at NATO including, amongst others, PASP, PDD, and the Office of the Chief Scientist.

Allies have requested more information on SPS Programme activities and as a result several areas have been enhanced. The SPS factsheets – containing all of the information relevant to a potential SPS activity and disseminated to delegations for their approval – have been improved and now contain more information as requested by Allies. For ongoing activities, Performance Assessment forms have been developed to enhance the appraisal of all multi-year projects.

With Partners

Partners engage with NATO on the basis of self-differentiation, and therefore one-size cannot fit all. In line with a Partners' national and regional objectives, Partner nations should include specific reference to the SPS Programme in their partnership document (such as Individual Partnership Cooperation Programmes (IPCPs)). Along these lines, Partners should also come up with concrete SPS activity proposals, in line with their national objectives and the SPS Key Priorities with a clear link to security. Finally, feedback and input from Partners during and after activities strengthens lessons learned, and what we can do to improve in future, and in some cases follow-up with further activities. To better streamline cooperation with Partners, the SPS Programme will improve coordination across relevant Divisions and Bodies, including PASP and PDD.

The Way Forward

- Allies and Partners are expected to take joint political ownership of SPS projects and be actively involved in their development and implementation;
- As one-size does not fit all, Partners are expected to provide specific topics of national interest to the SPS Programme, especially in their partnership documentation (e.g. IPCPs) based on self-differentiation;
- Implementation of concrete projects has to be pursued in close cooperation of Allies and Partners, with the support of the SPS Team;
- Allies and Partners are expected to provide feedback and follow-up to the SPS Team for continuous improvement of the Programme;
- Project co-directors will complete self-assessments based on criteria for success;
- The fresh streamlined and goal-oriented managerial approach for the SPS Programme emphasises effectiveness, transparency, and accountability;
- The SPS Programme is subject to continual performance assessment.

Meetings with Allies in 2013

In parallel to the important PPC and NAC discussions that took place on the strategic assessment of the programme, dialogue with Allies and partners on more general matters continued to take place. The PPC-SPS Committee met on 22 formal occasions to approve new activities, to discuss strategic guidance, and to listen to feedback on ongoing and completed SPS activities. Over the course of the year the PPC continued to receive relevant information and reports related to SPS activities.

Meetings with Partners in 2013

In a spirit of transparency and continued outreach to partners, the PPC also meets in various other formats with partners, for example in regionally specific partnership frameworks such as the Euro-Atlantic Partnership Council, the Mediterranean Dialogue, and the Istanbul Cooperation Initiative. The PPC can also meet with individual non-member countries in a "28+1" format, as well as in "28+n" formats on particular subjects. In 2013 the SPS Programme met with partners in the following formats:

- In 2013 the PPC organised a meeting held in Euro-Atlantic Partnership Committee (EAPC) format. The primary objective of the meeting was to explain the recent reforms of the SPS Programme and to outline the new strategic orientation. EAPC partners learned that future SPS activities must address the SPS Key Priorities and be in line with the new political and strategic guidance. A selection of SPS activities was presented to partners and opportunities for future cooperation were discussed.
- The NATO-Russia Council Committee on Science for Peace and Security (NRC-SPS) facilitates NATO-Russia science cooperation on specific security-related issues. The Terms of Reference of the NRC-SPS were approved by the NRC in 2006[4] and an NRC-SPS Action Plan is updated every two years. The NRC-SPS Committee meets twice a year and in 2013 three new SPS activities were launched under the NRC-SPS.
- The NATO-Ukraine Commission (NUC) Joint Working Group on Scientific and Environmental Cooperation (JWGSEC) met in 2013 at NATO Headquarters in Brussels, Belgium.

(4) NRC(SPS)D(2006)0001

CHAPTER III
Implementation of the SPS Programme in 2013

In parallel to the Strategic Assessment, the development of the SPS Overarching Guidelines, and the completion of the 2014 SPS Work Programme, the SPS Programme continued to implement the 2013 SPS Work Programme. Over the course of the year the SPS Programme is responsible for initiating new activities, overseeing ongoing activities, and closing up completed projects. This work is undertaken by the SPS Team and within the framework of the SPS Working Group. SPS Programme Staff provide governance and management support for all programme activities, including the preparation of the strategic and political guidance documents for the PPC, the preparation of relevant meetings, management and implementation of all SPS funded activities and projects, reporting on the SPS activities, and communication and dissemination strategy for SPS activities.

SPS Applications in 2013

In 2013, the SPS Programme received 191 applications, of which 144 were passed on to the multi-disciplinary Independent Scientific Evaluation Group (ISEG), who peer-review all SPS applications for scientific and technical merit. Allies provide the final approval for all SPS Programme activities and a total of 51 new collaborative activities were approved for funding through the SPS Programme in 2013. A more detailed breakdown can be found below:

SPS APPLICATIONS IN 2013

	'Top-down'	'Bottom-up'	Total
Received by SPS for Pre-screening	21	170	**191**
Rejected by SPS	*0*	*-47*	*-47*
Reviewed by ISEG	21	123	**144**
Rejected by ISEG	*-4*	*-30*	*-34*
Recommended by ISEG	17	93	**110**[5]
Reviewed by PPC	17	54	**71**
Rejected by PPC	*-2*	*-18*	*-20*
Approved by PPC	**15**	**36**	**51**

New Activities in 2013

In 2013 the PPC approved funding for 51 new activities. This section of the report provides statistical information on the breakdown of these new activities according to partnership framework, key priority, and grant mechanism.

(5) Please note that because of the two-step review process for multi-year projects, the process of evaluation carries on over several ISEG meetings so not all proposals are presented to PPC in the same calendar year.

NEW ACTIVITIES BY PARTNERSHIP FRAMEWORK

PARTNERSHIP FRAMEWORK	'Top-Down'	'Bottom-Up'	Total
EAPC - Euro-Atlantic Partnership Council	9	16	25
MD - Mediterranean Dialogue	1	11	12
NUC - NATO-Ukraine Commission	1	8	9
NRC - NATO-Russia Council	2	0	2
PaG - Partners across the Globe	1	1	2
IO – International Organisation	1	0	1
ICI - Istanbul Cooperation Initiative	0	0	0
Total	**15**	**36**	**51**

NEW ACTIVITIES BY KEY PRIORITY

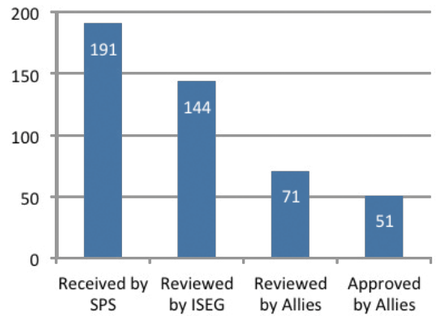
SPS KEY PRIORITY		'Top-down'	'Bottom-up'	Total
1.a.	Counter-Terrorism	2	14	16
1.b.	Energy Security	1	1	2
1.c.	Cyber Defence	3	4	7
1.d.	Defence Against CBRN Agents	4	9	13
1.e.	Environmental Security.	0	1	1
2.	Enhance Support for NATO-led Operations and Mission	3	2	5
3.a.	Security-Related Advanced Technology.	0	3	3
3.b.	Border and Port Security	0	1	1
3.c.	Mine and Unexploded Ordnance Detection and Clearance.	2	0	2
3.d.	Human and Social Aspects of Security Related to NATO's Strategic Objectives	0	1	1
Total		**15**	**36**	**51**

NEW ACTIVITIES BY GRANT MECHANISM

MECHANISM	'Top-down'	'Bottom-up'	Total
Advanced Research Workshop (ARW)	6	15	21
Advanced Study Institute (ASI)	0	7	7
Advanced Training Course (ATC)	5	2	7
Science For Peace Multi-Year Projects	3	12	15
Network Infrastructure Grants (NIG)	0	0	0
Feasibility Study	1	0	1
Total	**15**	**36**	**51**

At a Glance: New Applications in 2013

The SPS Programme is a partnership tool that serves to foster cooperation between Allies and all partner countries. To that end, the SPS Programme aims to foster collaborative activities between Allies and partners that address security issues of mutual concern. This section provides more information on the number of applications received by the SPS Programme in 2013 and will look at trends and comparisons measured against previous years. The awards cycle covers applications received, pre-screened by Staff, evaluated by scientific experts, and finally approved by Allies.



Applications Received by SPS

- In 2013, the SPS Programme received a total of **191** applications for new activities.
- This represents an increase of 16% compared to the previous year.

Expert Evaluation

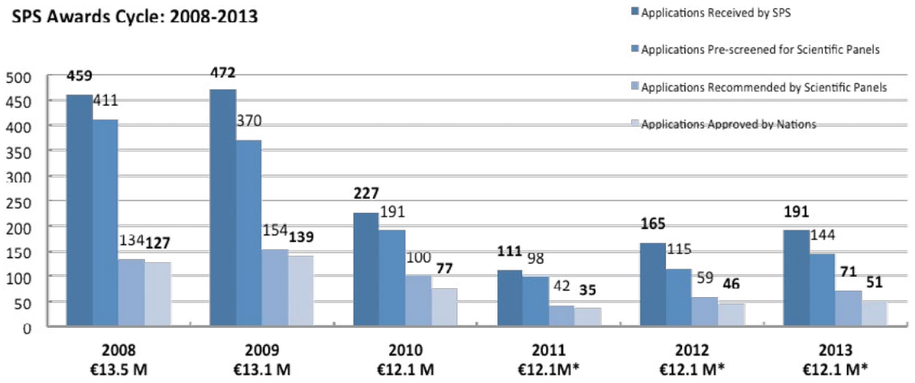
- SPS Staff assess all of the applications received by the SPS Programme for content and completion before they are passed on for scientific review.
- In 2013 the SPS Programme received **191** applications; of these SPS Staff filtered **144** for scientific consideration and removed **47**, primarily because the applications were weak and/or did not adequately address the SPS Key Priorities.

Scientific Review

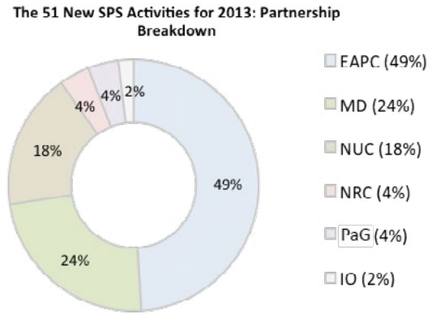
- A total of **144** applications were forwarded on to the Independent Scientific Evaluation Group (ISEG) for peer-review.
- Of these, a total of **107** were recommended based on scientific and technical merit.

Political Approval

- The Political and Partnerships Committee (PPC) was presented with a total of **71** award recommendations, all of which had been pre-screened and peer-reviewed for scientific and technical merit.
- Of these, a total of **51** were approved for funding under the SPS Programme.



At a Glance: Partnership



The SPS Programme is one of NATO's most important partnership tools, in terms of both funding and outreach. In 2013, the SPS Programme continued to promote dialogue and practical cooperation with many of the Alliance's partner countries on a broad range of security-related issues. This section focuses on the 51 new activities initiated with partners in 2013 after approval by Allies. As the data shows, the SPS Programme launched 51 new activities with a total of 21 different partner countries this year. The following charts provide some information on the impact of the SPS Programme on NATO's partnerships.

Euro-Atlantic Partnership Council (EAPC)

- In 2013, the SPS Programme initiated 25 new activities with 12 different countries associated with the EAPC.
- The focus of activities was broad and addressed most of the SPS Key Priorities.
- The first ever SPS activity with Malta was launched.

Mediterranean Dialogue (MD)

- A total of 12 new activities were developed within the framework of the MD.
- Activities engaged 5 different countries.
- The primary focus of activities was on Counter-terrorism, Defence Against CBRN, and Cyber Defence.

NATO-Ukraine Commission (NUC)

- A total of 9 new activities were developed with Ukraine.
- Activities addressed many of the SPS Key Priorities, with a slightly greater focus on Counter-terrorism.
- Over half of new activities were multi-year research and development projects.

NATO-Russia Council (NRC)

- A total of 2 new activities were developed with the Russian Federation within the framework of the NRC.
- The activities addressed the security areas of Counter-terrorism and Support for Emergency Operations & Environmental Security.
- The flagship SPS activity 'Developing a Multinational Telemedicine System for Emergency Situations' was launched.

Partners Across the Globe (PaG)

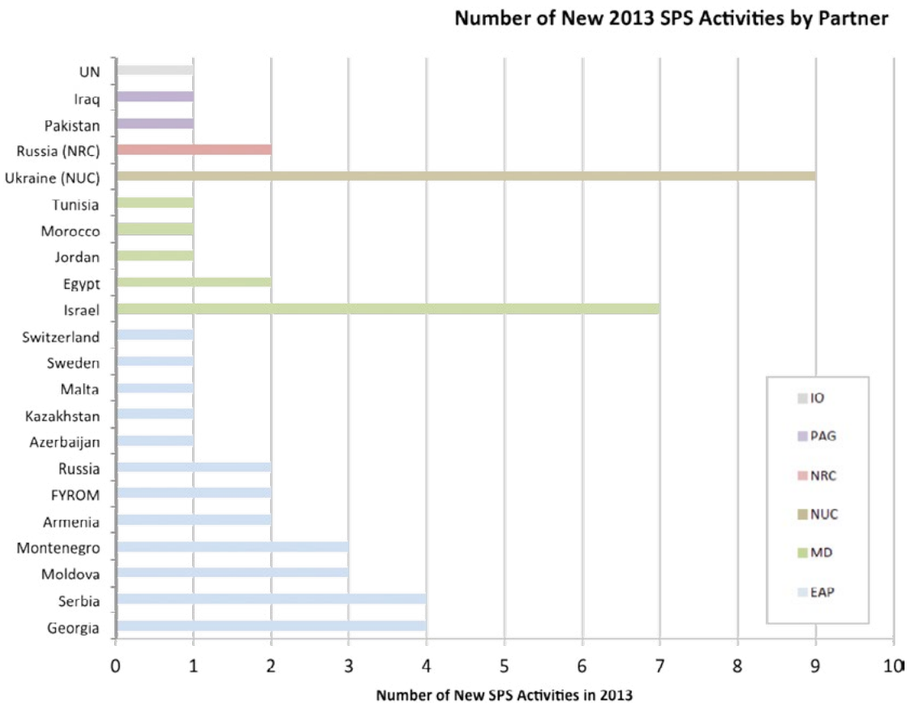
- A total of 2 new activities were developed with partners across the globe.
- The first SPS activities with Iraq and Pakistan were launched.
- Additionally, the SPS Programme continues to support cooperation with Afghanistan within the framework of the SILK-Afghanistan Programme.

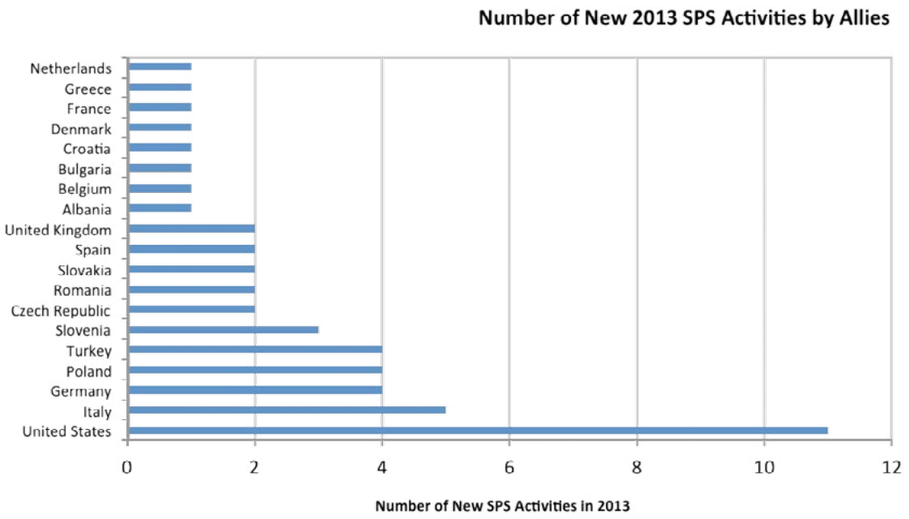
International Organisations (IO)

- A feasibility study into a potential project proposed by the United Nations Mine Action Service (UNMAS) and lead by the NSPA on a potential multi-year project in Libya was launched.

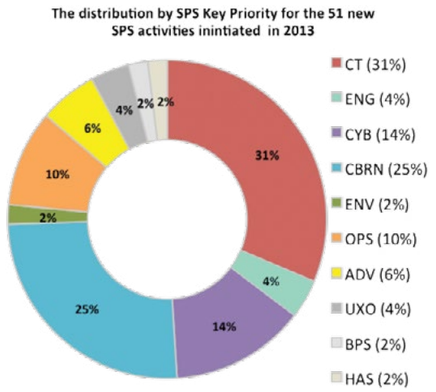
NATO Allies

- A total of 49 activities were led by scientists and experts from Allied countries; 2 other activities were led by NATO Project Directors.
- These activities engaged 19 Allied countries.
- The most active countries were the United States, Italy, Germany, Poland, and Turkey, who led a combined 28 activities.





At a Glance: Key Priorities



The SPS Programme only supports collaborative activities that address the SPS Key Priorities. These priorities, agreed upon by Allies in 2012, ensure that SPS Programme activities are in line with the NATO priorities identified in the Strategic Concept and NATO's partnership policy. All SPS activities must address the SPS Key Priorities in an effort to facilitate the exchange of know-how, technical knowledge, and specific skills on security issues of mutual concern to Allies and partners. The following table provides more information on how the 51 new SPS activities addressed the various key priorities in 2013.

1.a. Counter-Terrorism (CT)

- A total of 16 new activities were developed that addressed the area of counter-terrorism.
- The majority of these activities were ARWs (9) and Multi-Year Projects (6).
- Mediterranean Dialogue countries were especially active in this area (6 new activities), followed by EAPC countries (5 new activities).
- The majority of these activities were 'bottom-up'.

1.b. Energy Security (ENG)

- A total of 2 new activities were developed in this area.
- A conference on 'Emerging Security Challenges: Enhancing Energy Security in the XXI Century' was held in Baku, Azerbaijan in May, 2013.

1.c. Cyber Defence (CYB)

- A total of 7 new activities were developed in this area.
- All of the activities were events (ARW, ASI, ATC), and largely included EAPC partners.
- The series of successful 'Hands on Cyber Defence Training Courses' continued to take place this year.

1.d. Defence Against CBRN Agents (CBRN)

- A total of 14 activities were developed in this area.
- This was distributed between 6 multi-year projects and 8 events (ARW, ASI, and ATC).
- The SPS Programme's first activity with Iraq addressed the area of counter-explosives.
- In 2013, NATO-SPS organised a flagship 'Defence Against CBRN Workshop'.

1.e. Environmental Security (ENV)

- 1 new activity was developed in this area.
- This represents a sharp decrease from last year where a total of 12 activities were initiated in the area of Environmental Security.

2. Enhance Support for Operations & Missions (OPS)

- A total of 4 new activities were developed in this area.
- All of these activities were Advanced Research Workshops and three were developed with EAPC countries.

- One workshop was developed with Pakistan on ‘Post-2014 Regional Security through Partnership’.
- Another SPS activity in this area is the series of workshops on ‘Gender Mainstreaming: Indicators for the Implementation of UNSCR 1325’, whose findings will assist in future NATO operations and Missions.

3.a. Advanced Technology (ADV)

- One new activity was developed in this area.
- The activity ‘Border Security Threats in the Mediterranean Region’, also represented Malta’s first engagement with the SPS Programme.

3.b. Border & Port Security (BPS)

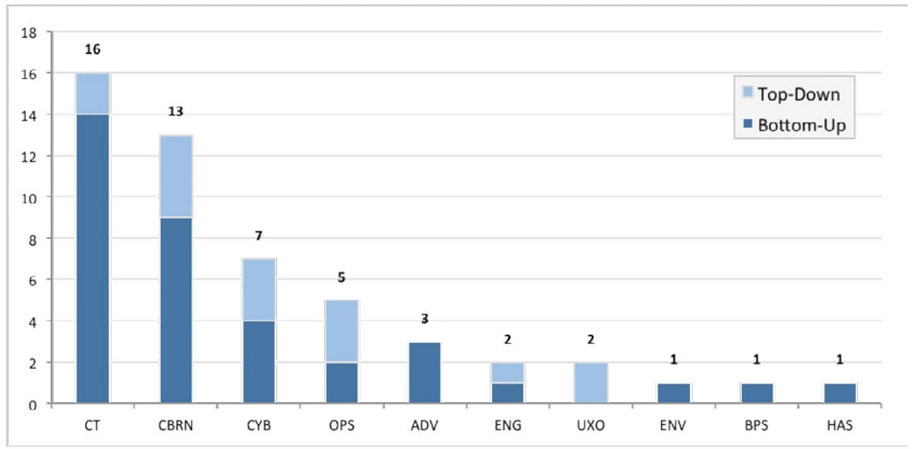
- A total of 3 new activities were developed in this area.
- This was distributed between one ARW and two ASIs.
- These activities fell within the EAPC and NUC partnership frameworks.

3.c. Mine & Unexploded Ordnance Detection (UXO)

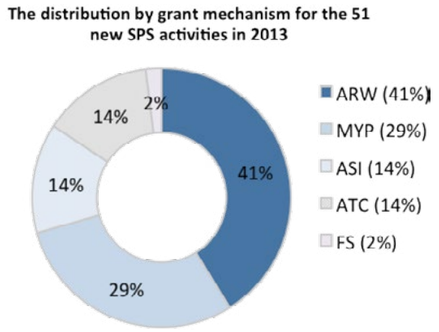
- Two new activities were developed in this area.
- One feasibility study into a potential project proposed by the United Nations Mine Action Service (UNMAS) on a multi-year project “Adaptable Disposal Solution for Obsolete, Surplus, and Unserviceable Ammunition in Libya”
- The other was a multi-year project on ‘Increasing the Clearance Capacity for Unexploded Ordnance (UXO) in Montenegro’.

3.d. Human & Social Aspects of Security (HAS)

- One new activity was developed in this area.
- This activity was developed with Ukraine and focused on ‘Enhancing Analytical and Strategic Capabilities’.



At a Glance: SPS Grant Mechanisms



The SPS Programme has several types of grant mechanism for engaging in collaborative activities with partners. To provide flexibility, and to meet the various needs of both Allies and partners, the SPS Programme fosters cooperation through workshops, trainings, or multi-year projects (MYP). This section provides some additional information on the use of the various grant mechanisms over the calendar year. In 2013, the most well used mechanism was the advanced research workshop followed by multi-year projects.

Advanced Research Workshops (ARW)

- In 2013, the most used grant mechanism was the ARW, with 22 new workshops developed this year.
- They covered a range of topics and addressed most of the key priority areas.
- This mechanism was used across all partnership frameworks, with the majority of workshops set to take place in partner countries.
- This mechanism proved useful in engaging partners, like Malta and Pakistan, who launched their first ever activities with the SPS Programme.

Multi-Year Projects (MYP)

- This year a total of 15 new multi-year research and development projects were launched.
- The vast majority of these projects addressed the areas of Counter-terrorism and Defence Against CBRN Agents.
- The majority of new SFPPs were developed with partners who have a long and established history of engaging with the SPS Programme, such as Ukraine and the Russian federation.
- The majority of new research projects were ‘bottom-up’.

Advanced Study Institute (ASI)

- A total of 7 new ASIs were launched this year.
- They largely addressed the areas of Advanced Technology, Defence Against CBRN Agents, and Cyber defence.
- New ASIs were distributed across all partnerships.
- All of these activities were ‘bottom-up’ in 2013.

Advanced Training Course (ATC)

- A total of 7 new ATCs were launched this year.
- They largely addressed the areas of Counter-terrorism, Defence Against CBRN Agents, and Cyber defence.
- Almost all of the new training courses were ‘top-down’.
- One ATC on explosive detection training engaged Iraq for the first time with the SPS Programme.

Feasibility Study (FS)

- While not a defined grant mechanism, one such study was granted to scope a potential multi-year project with the United Nations on Libya.

Network Infrastructure Grant (NIG)

- No new NIGs were launched in 2013.

Cooperation with International Organisations

The SPS Programme also aims to foster and enhance cooperation with International Organisations on security issues of mutual concern. In 2013, the SPS Programme engaged in the following initiatives with international organisations:

United Nations (UN)

In November 2013, the SPS Programme received a proposal from the United Nations Mine Action Service (UNMAS) outlining a potential SPS multi-year project entitled "Adaptable Disposal Solution for Obsolete, Surplus, and Unserviceable Ammunition in Libya". After an initial presentation to the Allies in the PPC there was a positive response and political encouragement for cooperation with the United Nations (UN) on this issue. Resultantly, Allies agreed that a feasibility study on the potential project would be funded from the 2013 SPS Programme budget, and would be conducted in the first half of 2014 in cooperation with the NATO Support Agency (NSPA). The feasibility study will in particular assess the required specifications and nature of the equipment and other support, including supporting training and infrastructure, as required; the detailed risk assessment; and the development of a cost estimate, in order to provide a sound basis for Allied consideration.

Environment and Security Initiative (ENVSEC)

In 2012, Allies agreed that NATO, through the SPS Programme, could continue its associated membership with the Environment and Security Initiative (ENVSEC) until 2015. Launched in 2003, ENVSEC is a partnership of six international organisations – the OSCE, the Regional Environment Centre for Central and Eastern Europe (REC), the United Nations Development Programme (UNDP), the United Nations Economic Commission for Europe (UNECE), the United Nations Environment Programme (UNEP), and NATO as an associated partner – with specialised but complementary mandates and expertise, seeking to provide an integrated response to environmental and security challenges. SPS Cooperation with ENVSEC contributes to NATO's strategic objective "Cooperation with other International Organisations", with the aim to pool expertise, avoid duplication and share information. It also contributes to disaster preparedness and prevention and serves to reduce regional tensions over shared resources.

NATO joined ENVSEC in 2004 and confirmed its continuous partnership through Memoranda of Understanding (MOU), signed by all six organisations, the latest covering 2013-2015. Since its launch in 2003, ENVSEC has completed 80 activities, plus an additional 31 associated SPS projects. At present, 34 core projects are ongoing, plus an additional 4 associated SPS projects. The last detailed Progress Report on ENVSEC was released in 2012. Since then, two SPS projects that were approved by PPC and awarded in 2012 will be offered to ENVSEC once the activities have commenced and, if approved by the ENVSEC Management Board, be added to the ENVSEC portfolio.

A Selection of New Activities

The following section provides a selection of some activities approved by Allies for funding in 2013. The full list of new SPS activities can be found at Annex 1.

1. DEVELOPING A MULTINATIONAL TELEMEDICINE SYSTEM FOR EMERGENCY SITUATIONS

Country Directors	Romania & Russian Federation
SPS Key Priorities	2. Provision of Civilian Support through SPS Key Priorities
Partnership Framework	NATO-Russia Council (NRC)

The overall aim of this NRC(SPS) project is to develop a multinational telemedicine system capability, including an international network of medical specialists, to improve access to health services and increase survival rates in emergency situations. Through the use of modern communication technologies, a medical specialist will be able to assess a patient, determine a diagnosis and provide real-time recommendations to an on-site or in theatre caregiver. This capability is particularly valuable when medical attention is needed in remote and/or volatile environments. Once developed, this telemedicine capability will have a dual-use potential for civilian as well as military end users.

The End-users that will contribute to the sustainability of the project are:

- Ministry of Health of Romania
- General Inspectorate for Emergency Situations, Ministry of Internal Affairs of Romania
- Ministry of Health of the Russian Federation
- Ministry of Emergency Situations of the Russian Federation (EMERCOM)

The project which is included in the NRC(SPS) Action Plan 2013-2015 has been coordinated with and supported by various stakeholders including:

- NATO Euro-Atlantic Disaster Response Coordination Centre (EADRCC) from the Operations Division,
- NATO Telemedicine Expert Team (TMED ET),
- NATO Committee of the Chiefs of the Military Medical Services (COMEDS/IMS)
- NATO Centre of Excellence for Military Medicine in Hungary (MIL-MED CoE)
- United States Department of Health and Human Services

Over the next two years the project team will work to connect three national telemedicine systems – from Romania, the Russian Federation and the United States – and will conclude with a proof of concept exercise to test the capability by 2016. This proof of concept will be part of a big exercise conducted by the NATO Euro-Atlantic Disaster Response Coordination Centre. It is also envisaged to develop a set of guidelines based on existing standards so that other countries can connect their national telemedicine systems into the wider multinational network.

There was a series of two Advanced Research Workshops on telemedicine organised first in Bucharest in September 2012 and then in Moscow in March 2013 to discuss civilian and military telemedicine applications. These discussions resulted in a joint application for a multi-year project which was recommended by ISEG and approved by the PPC in November 2013.

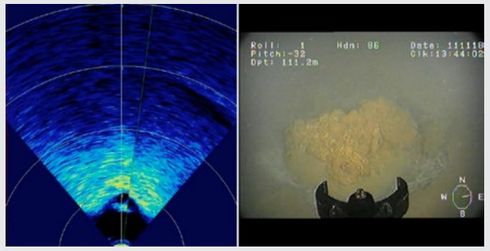
2. TOWARDS THE MONITORING OF DUMPED MUNITIONS THREAT (MODUM)

Country Directors	Poland & the Russian Federation
Other Participants	Canada, Denmark, Estonia, Germany, Lithuania, Poland, Finland, Russian Federation, and Sweden.
SPS Key Priorities	1.d. Defence against CBRN Agents, 1.e. Environmental Security, 3.c. Mine and Unexploded Ordnance Detection
Partnership Framework	Euro-Atlantic Partnership (EAPC)

With the participation of six NATO and three partner countries, this project aims to create a cost-effective, research based monitoring network to enhance control over the environmental and human security issues posed by munitions located on the Baltic Sea bed. The project is supported by the NATO Centre for Maritime Research and Experimentation (CMRE, through coordination with the office of the NATO Chief Scientist and approval of Allied Command Transformation (ACT).

The project will allow NATO to reach out to partners through capability development, such as a monitoring network, and knowledge transfer. Furthermore, it exemplifies the strategic value of regional cooperation by showing how a common security threat can be effectively addressed when all countries in the region, Allied and partner, cooperate closely together.

The MODUM project will strengthen partnership with Russia and enhance their contribution to Euro-Atlantic and international security. It will create a platform for communication regarding marine security with Russian institutes and ministries and promote the integration of maritime administrations of Baltic countries. The project activities were formally started on October 07-09, 2013, with the kick-off meeting organised in Sweden at the Swedish Defence Research Agency (FOI) in Kista. [SPS Reference: 984589]



3. GENDER MAINSTREAMING: INDICATORS FOR THE IMPLEMENTATION OF UNSCR 1325

Country Directors	United States & Serbia
SPS Key Priorities	2.d. Enhance Support for NATO-led Operations and Missions – Enhance Cooperation with Other International Actors
Partnership Framework	Euro-Atlantic Partnership (EAPC)

This series of Advanced Research Workshops aims to support gender mainstreaming into NATO and partner countries' National Action Plans for the implementation of UNSCR 1325 and its related resolutions through the development of a relevant indicators framework.

Developed in close cooperation with Mari Skåre, the NATO Secretary General's Special Representative for Women, Peace and Security, this activity is the first of its kind to be approved in the framework of the SPS Programme. It marks a significant achievement in taking forward concrete cooperation at NATO on UNSCR 1325. To this end, the workshops will respond directly to NATO's policy and operational objectives, notably the 2011 Overarching Policy on the Implementation of UNSCR 1325.

The framework of indicators to be developed will provide a concrete tool that will be made available to NATO bodies, delegations and partners to facilitate efforts underway within NATO and across Allied and partner institutions to build, further elaborate, and implement UNSCR 1325. In line with the first progress report of the Secretary General's Special Representative for the UNSCR 1325 on Women, Peace and Security, a set of activities on UNSCR 1325 are envisaged to be developed within the framework of the SPS Programme in the near future. [SPS Reference 984756].

4. TRAIN THE TRAINERS' COURSE ON COUNTERING THE THREAT OF HOME-MADE EXPLOSIVES

Country Directors	Slovak Republic & Iraq
SPS Key Priorities	1.d. Defence Against CBRN Agents
Partnership Framework	Partners across the Globe (PaG)

The Advanced Training Course was developed in coordination with the PASP Division and the former NATO Transition Cell (NTC) in Iraq. Additionally, representatives of the embassies of NATO countries in Iraq, including the Contact Point Embassy (Italy), have given their full support to the initiative. The training course was developed based on the request by the Ministry of Defence of Iraq

for training assistance from NATO on mine clearance and the clearance and disposal of explosive ordinances (EOD), unexploded ordinances (UXO) and improvised explosive devices (IED).

The course, held from 18-22 November 2013, was the first SPS activity to take place with Iraq and the Explosive Ordnance Disposal Centre of Excellence (EOD-COE) in Novaky, Slovak Republic. The aim of the course was to enhance the training and education of Iraqi personnel on the identification of individual precursors used in the process of manufacturing home-made explosives (HMEs). At the end of the course, a total of 14 Iraqi military officers were trained, acquiring the competencies to plan, organise, and deliver basic HME training in their countries. A NATO TV video story of the training is available on the NATO website. [SPS Reference 984749]

5. CBRN FIRST RESPONDERS TRAINING COURSE

Country Directors	Czech Republic & Jordan
SPS Key Priorities	1.d. CBRN Defence
Partnership Framework	Mediterranean Dialogue (MD)

The training course was conducted in May 2013 with the participation of 18 trainees from Egypt, Jordan and the United Arab Emirates (UAE). 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.

Not only was this the first SPS training activity which was hosted by the Joint CBRN Defence Centre of Excellence but also the first time a partner from the Istanbul Cooperation Initiative – the United Arab Emirates – participated in an SPS event.

The duration of the course was 5 days (7 hours a day), conducted through theoretical classroom lessons and practical training. There was also a demonstration exercise by the CBRN Brigade of the Czech Army which took place in Liberec, Czech Republic. The training was designed to assist nations in improving their civil emergency plans, complementing national training systems and enhancing cooperation between first responders.

This course has enabled participants to clarify and establish standards required for successful cooperation in the event of a CBRN incident, both at a national level and between Allies and partners. [SPS Reference 984671]

6. HANDS-ON TRAINING FOR SYSTEM/NETWORK ADMINISTRATORS

Country Directors	Turkey & Montenegro; Turkey & Georgia; Afghanistan
SPS Key Priorities	1.c. Cyber Defence
Partnership Framework	Euro-Atlantic Partnership (EACC) & Partners across the Globe (PaG)

A top-down initiative, this series of advanced training courses (ATCs) were organised by the Informatics Institute of the Middle East Technical University (METU) in Turkey, in cooperation with experts from the NATO Cyber Defence Section, Georgia, and Canada. The goal of the training courses is to provide hands-on training to network/system administrators and to enhance the resilience of national IT-structures in the respective partner nations.

The general approach of the courses is to supplement state-of-the-art network security theory with hands-on practical experience. Resultantly, trainees benefited from both an overview of essential theoretical insights and from the practical applications in lab sessions. This better equipped the trainees with the required practical skills to protect their networks and systems from several kinds of cyber threats.

The first ATC of this type was conducted last year with Afghanistan (May 2012), and a further course has been approved by the PPC in December 2013, which will be with Moldova and is expected to be conducted in early 2014. [SPS Reference 984744 & 984749]

7. COOPERATION WITH MONGOLIA

Country Directors	NATO and Mongolia; Slovakia and Mongolia
SPS Key Priorities	1.c. Cyber Defence & 1.e. Environmental Security.
Partnership Framework	Partners across the Globe

The first two civil cooperation projects between NATO and Mongolia within the framework of the Science for Peace and Security (SPS) Programme were officially launched in February 2013 at a public diplomacy event in Ulaanbaatar hosted by the Mongolian Ministry of Foreign Affairs, the Ministry of Defence, and the Academy of Sciences.

Information Technology Support to the Mongolian Academy of Sciences

Through improved IT infrastructure and training of network administrators at the Informatics Institute of the Mongolian Academy of Sciences, the multi-year project is designed to have a multiplier effect in the provision of information and training to

other Mongolian ministries and institutions. Furthermore, the IT upgrade and training will increase the protection of the Academy's networks while raising awareness of cyber defence more largely. The project will be carried out the by the NATO Communications and Information (NCI) Agency in cooperation with the Mongolian Academy of Sciences. [SPS Reference 984367].

Establishment of a Geo-Database on the Ecological Health of Former Military Sites

The project will evaluate selected former military sites in Mongolia and categorise and prioritise them according to their degree of risk. This information will be captured in a database to track rehabilitation and restoration of contaminated areas. The knowledge provided will form the basis for strengthening future remediation abilities of Mongolian experts. An important element of this project is that it also brings together military and civilian organisations to further understanding with respect to the rehabilitation and restoration of former military sites. This activity is led by scientists and experts from the Geo-ecology Institute of the Mongolian Academy of Sciences and the Slovak Environmental Agency. [SPS Reference 984366].

8. SPS CBRN WORKSHOP

Country Directors	NATO SPS Programme
SPS Key Priorities	1.d. CBRN Defence
Partnership Framework	All

In October 2013, the SPS Programme organised the workshop in Brussels, Belgium with the aim to review the results of recent and current research and to explore future trends and recommended directions for the SPS Programme with respect to the topic of CBRN defence. The event was attended by over 70 experts and scientists from academia, research institutes from Allied and partner countries, including many co-directors of SPS activities as speakers, and relevant NATO bodies.

The workshop proved to be successful in enhancing the technological capacities, knowledge and competencies of Allies and partners in CBRN Defence and, thus, has helped setting the foundation for improved practical cooperation in the future. The cross-cutting nature of many SPS activities is clearly in line with the opinion of many experts and co-directors that effective scientific cooperation must integrate the expertise from all disciplines related to CBRN defence.

Based on these findings, the workshop provided concrete recommendations regarding the most relevant topics of CBRN defence for future SPS activities. Finally, the workshop also provided a forum for establishing new initiatives for collaboration. Several participants took the opportunity to meet in the margins of the workshop to agree on the development of potential SPS activities. [SPS Reference 984654].

CHAPTER IV
Ongoing & Completed SPS Activities in 2013

This section of the report will provide an overview of all ongoing and completed SPS activities. The first part will provide information on all Multi-Year Projects (including Network Infrastructure Grants) that were in progress or completed in 2013. The second part will provide information on all SPS Events: these are workshops (ARW), training activities (ATC and ASI) and conferences that were approved or took place during the calendar year.

In 2013, the SPS Programme developed 51 new collaborative activities with partners. In addition to these new activities, the Programme is responsible for the management and supervision of activities approved in previous years. These ongoing activities are divided into two categories: multi-year research projects, which typically run for three years, and events, which take place over one to a few days.

Multi-Year Projects

In 2013, the SPS Programme was responsible for a total of 72 ongoing or completed Multi-Year Projects. This number includes all SPS Multi-Year Projects and Network Infrastructure Grants (NIG). The breakdown of these projects by project status is as follows: 57 projects were ongoing; and 15 were completed by the end of the year (see Annex 2).

Throughout the calendar year, the SPS Staff receives and reviews progress reports for all ongoing activities. Furthermore, throughout the duration of any Multi-Year Project, additional funds are provided only in accordance with a project plan and subject to acceptable project progress and documentation. Once a project is completed, project directors must submit a final report to the SPS Programme.

The evaluation of multi-year SPS projects is carried out internally by SPS Staff and externally by 'God-parents' who are made up of ISEG members. The progress reports – which include information on planning, criteria for success, deliverables, budget and scientific progress etc. – are sent to the SPS Staff by Project Directors every six months. A final report is provided once a project has been completed. The results of these projects are often disseminated at national and international conferences and often yield patents as deliverables.

Events

In 2013, 26 new collaborative events with partners were hosted. A total of 1021 NATO and partner scientists and experts were involved in the events that took place in 2013. A list of the events and locations hosted in 2013 can be found at Annex 3.

A Selection of Ongoing & Completed Activities

The following activities provide a selection of examples of ongoing and completed SPS activities for 2013.

1. REMEDIATION OF A HYDROCARBON POLLUTED MILITARY SITE IN UKRAINE

Country Directors	France & Ukraine
SPS Key Priorities	1.e. Defence-Related Environmental Issues
Partnership Framework	NATO-Ukraine Commission (NUC), SPS Joint Working Group on Scientific and Environmental Cooperation

The main goal of the project is to develop more efficient technologies to eliminate pollution emanating from a Ukrainian military base which is used as a fuel depot near a residential area of Kyiv, Ukraine. The extensive use of the base during former Soviet times has caused significant ground water pollution. This constitutes a serious threat to the population in the proximity of the military base.

The project will conduct measurements of the geological and hydro-geological environment to develop the most effective remediation models as well as to design the appropriate devices. A pilot plant, comprising an integrated set of remediation equipment will validate the results obtained by the remediation models.

The project will conduct an in-depth analysis of the requirements for remediation and a detailed specification of equipment to be applied. Furthermore, the process of competitive bidding for the key equipment has been launched with first sets of experimentation to be started after the winter season 2013/2014. The Ukrainian Ministry of Defence intends to use the remediation technologies in all areas of the military site. In a second step, these technologies are to be applied to other polluted military sites. There are many military air bases in Ukraine with a similar level of pollution. Therefore, the project's deliverables can support the Ukrainian authorities in addressing a country-wide security challenge. [SPS Reference 984585].

2. SET UP OF A NATIONAL OPERATIONAL COORDINATION CENTRE

Country Directors	France & Mauritania
SPS Key Priorities	1.e. Disaster Forecast and Prevention of Natural Catastrophes
Partnership Framework	Mediterranean Dialogue (MD)

This project aims to set up a pilot centre of operational coordination for civil emergency planning and response in Nouakchott, Mauritania. The centre will work towards strengthening the overall civil emergency planning and response capabilities of the

Mauritanian government, such as natural and urban disaster response, protection against intentional and accidental exposure to hazardous agents and acts of terrorism. In April 2013 Canada provided a national contribution of €0.6 million Euros to this Multi-Year Top-Down project.

In an incremental approach, the project will provide both concrete civil emergency planning and response capabilities in local crises as well as competencies that facilitate the establishment of a national civil emergency planning framework. Towards these goals, the project aims to improve the national response to emergencies by setting up regulatory standards and operational procedures. It will enhance coordination between the national, regional and departmental (local) levels of relevant authorities. It will strengthen the risk and threat analysis capabilities of these authorities and optimise the mobilisation of human and material resources, including through the training of civil protection experts.

After an in-depth assessment of the requirements for equipment and qualified personnel, key equipment, indispensible for the daily operational tasks, has been procured to the national and one regional coordination centre. [SPS Reference 984451].

3. SILK-AFGHANISTAN PROGRAMME

Country Directors	NATO
SPS Key Priorities	2.d. Enhance Support for NATO-led Operations and Missions
Partnership Framework	Partners across the Globe (PaG)

Named after the Great Silk Road trading route linking Asia and Europe, the SILK-Afghanistan Programme provides high-speed internet access to Afghan universities as well as a few other academic and governmental institutions in Kabul. The network became operational at Kabul University in 2006 and has since been expanded to other provinces. SILK-Afghanistan is jointly funded by the NATO Science for Peace and Security (SPS) Programme and the US Department of State.

In 2013, Allies approved the request to extend the funding of SILK-Afghanistan Programme to version "2.0" until 30 June 2015, together with the provision of an additional budget of 2.5 M€ for the duration of the extension period. In addition to providing increased internet capacity, this new version will focus on the Afghan Ministry of Higher Education's request to expand the SILK network to include the remaining nine provincial universities, which raises the number of connected institutions to 31.

The United States Department of State also contributes funding toward this project. In 2013 they agreed to sponsor a network monitoring project which remotely monitors the performance of the network, the usage of the bandwidth by the universities, the type of usage, the failure of equipment, the availability of electrical power, or the shut-down of equipment as the reason for an outage.

Over 2013 the network was successfully transitioned away from a satellite-based network to a primarily fibre optics-based network, supplemented by links on microwave radio to those remote sites which are not yet accessible by Afghan Telecom's fibre connections. This achievement means that the project is able to reduce the connectivity costs for universities connected via fibre by a factor of 13.

This important transition was made possible via the signing of a new contract in 2013. A 'Virtual Contract Signing Ceremony' between NATO and Afghan Telecom for a high-speed internet link (155 Mbps) via sea cable back into the pan-European academic network, GEANT, was conducted over the network via VTC in May. The contract ceremony was witnessed by the Minister of Higher Education in the presence of the NATO Senior Civilian Representative in Afghanistan Ambassador Jochems, other dignitaries from the Ministry of Higher Education, and the Ministry of Communication and Information Technology. The ceremony was also watched via VTC by nine provincial and Kabul-based universities. Moreover, Afghan TV reported about the event in their evening news.

As before with the link via satellite, the European Commission (EC), through the GEANT network, makes this high-speed connectivity available to Afghan academic institutions free of charge. The EC has also accepted Afghanistan as its 19th member in the neighbouring regional academic network, TEIN-4, in South East Asia in June 2013 and is preparing for a possible handover of the SILK-Afghanistan project for its continued co-funding and provision of high-speed internet beyond June 2015 as a TEIN-4 member.

The EC's acceptance of Afghanistan in the TEIN network is a direct result of NATO's ongoing work with all stakeholders in Afghanistan towards the set-up of a national Afghanistan Research and Education Network (AfgREN) which has been pursued through a series of SPS-funded advanced research workshops since June 2012 and which will continue through three more workshops until Spring 2015. The existence of AfgREN, together with the need of handing over a mainly fibre-based network, are pre-conditions by the EC for their continued co-funding of the network.

4. ADVANCED DETECTION EQUIPMENT FOR DEMINING AND UXO CLEARANCE IN EGYPT

Country Directors	Netherlands & Egypt
SPS Key Priorities	3.c. Mine and Unexploded Ordinance Detection and Clearance
Partnership Framework	Mediterranean Dialogue (MD)

This project was initiated in 2012 to introduce and equip new mine detection technologies to the Egyptian Military. This allows a more accurate and faster detection of mines and, thus, reduces considerably the duration of demining operations in the Egyptian Western Desert.

In Egypt, large desert areas have not been cleared from landmines. Therefore economic development in these areas is not possible as long as this problem is not solved. Egypt has been mainly using metal detectors for the detection of landmines, which has led to a considerable number of false alarms and has significantly slowed down mine clearance operations.

As part of the project 26 hand-held dual-sensor detectors and 6 deep-search systems were delivered to Egypt along with operational and maintenance training for the Egyptian de-miners. With the completion of the project Egypt has gained a minimum operational capability on demining at the platoon level, comprising 24 de-miners. [SPS Reference 984653].

5. STAND-OFF DETECTION OF EXPLOSIVES (STANDEX) PROGRAMME

Country Directors	France & Russian Federation
Contributing Institutes	France, Germany, Italy, & Netherlands
Financial Contributors	France, Italy, Turkey, United Kingdom, United States, & Russian Federation
SPS Key Priorities	1.a Counter-Terrorism
Partnership Framework	NATO-Russia Council (NRC)

Counter-terrorism remains a high priority on the agenda of the NATO-Russia Council (NRC). In direct support of this priority, the STANDEX Programme has developed cutting-edge technologies to video-track and identify suicide bombers in mass transit environments in real-time. The project aimed to develop technology to detect explosives concealed on a person moving through a crowd, for example in a metro station. At the same time, the detection efforts are designed to cause minimal inconvenience to the large numbers of people who depend on mass transport in their daily lives.

First initiated in 2009, STANDEX is a multinational 'top-down' programme run by a consortium of laboratories and research institutes. Participants include France, Germany, Italy, the Netherlands and the Russian Federation. The project brings together and integrates various techniques and technologies to allow for the detection, recognition, localisation and tracking of would-be suicide bombers in mass transportation. STANDEX is funded under authority of the NRC(SPS) for a total of €3.2M EUR and by national contributions from six countries on the executive board (France, Italy, the Russian Federation, Turkey, United Kingdom and United States) for a total of €1.8M EUR.

A flagship initiative of the NRC, STANDEX has received high-level support and has been raised on several occasions at NRC Ministerial meetings as well as at the 2010 Lisbon Summit. STANDEX also received high public visibility with a series of update stories and videos in the NATO Chronicles series. The video was widely picked up in major media outlets including BBC, EuroNews, and Russia Today.

The technology was tested at a Big City Trial in June 2013 and the project is now complete. The successful trial was significant in that it marked the first real-time

system test of this kind of technology in the world. As planned in the original STANDEX project documents, STANDEX technology is being transferred to industry for commercialisation. The first such transfer has taken place, and the technology underlying the Data Merging and Alert System (DAMAS) project is available commercially from Egidium Technologies (France) under the trade name “Target Locker”. Preparations are underway for the commercialisation of other STANDEX technologies.

6. NATO AND RUSSIA: TOWARDS COMMON PERCEPTIONS OF EMERGING SECURITY CHALLENGES

Country Directors	United Kingdom and Russian Federation
SPS Key Priorities	1.a. Counter-Terrorism; 3.d. Human and Social Aspects of Security related to NATO’s strategic objectives
Partnership Framework	NATO-Russia Council (NRC)

On 18 and 19 November 2013 an Advanced Research Workshop (ARW) entitled “NATO and Russia: Towards Common Perceptions of Emerging Security Challenges” was hosted at the Russian Academy of Sciences, Institute of Europe, in Moscow, Russia.

Coordinated by the Department of European Security at the Russian Academy of Sciences and with the University of Birmingham, UK, the aim of the ARW was to bring together experts and officials from Russia and NATO Allied countries to elaborate common understandings and perceptions of shared challenges, threats and risks in the sphere of emerging security challenges, particularly terrorism and associated problems. Participants in the ARW came from the Czech Republic, Finland, France, Germany, Norway, Poland, Russia, Sweden, Switzerland, United Kingdom, United States, NATO IS (PASP), as well as the NATO Information Office in Moscow

The workshop was a success, and the project co-directors reported on a beneficial and stimulating discussion between the various participants. The co-directors are looking at how they can hold a follow-up to the workshop to capitalise on the constructive first steps.

7. THE SMART ENERGY TEAM (SENT)

Country Directors	Lithuania & Sweden
SPS Key Priorities	1.b. Energy Security
Partnership Framework	Euro-Atlantic Partnership (EAC)

In 2012, the SPS Programme launched the Smart Energy Team (SENT), an inter-disciplinary group of experts in the field of energy efficiency in the military (‘smart energy’). SENT’s goals include information sharing and consultation, as well as identifying opportunities for multinational smart energy projects and activities within the Smart Defence framework and the SPS Programme. Particular attention is paid to facilitating the development of effective and interoperable capabilities that better enable Allied forces to reduce the logistical footprint in the military, thus improving operational capabilities, reducing force protection obligations and saving costs. During its first meeting in January 2013, SENT decided to focus on land forces because energy efficiency in the other services should be covered by other NATO structures.

Towards this goal, SENT has been drawing together NATO and external stakeholders of ongoing national and international activities related to ‘smart energy’, including activities at NATO HQ, NATO bodies and Centres of Excellence. In 2013, SENT conducted three plenary meetings of which two were organised at NATO HQ (January and September 2013) to ensure the exchange of information among all stakeholders. In February 2013, SENT members visited the Integrated Camp Technologies (ICE-T) demonstration in Varennes, Canada. In June 2013, SENT supported the Smart Energy component that was set-up at the military exercise “Capable Logistician 2013” that was organised by the Multinational Logistics Coordination Centre, located in Prague, Czech Republic, together with the CL13 Host Nation Slovakia. The Smart Energy component attracted more than 500 visitors and resulted in several news and features stories as well as a video clip and photo gallery. Based on the observations made at CL13, SENT contributed conclusions to the CL13 Evaluation Report that was distributed to various NATO committees at the end of 2013. SENT members also visited various demonstrations and exhibitions in the US.

SENT’s work has received support from Allied and partner nations, with several Allies stating that SPS activities on smart energy are one of the topics they would like the SPS Programme to focus on.

With regards to SPS activities, SENT is working on several SPS proposals for workshops and multi-year projects, including a conference and exhibition to take place in Vilnius, Lithuania on 12-14 November 2014, and another multi-year project proposal on energy storage systems. The work of the SENT has also attracted other stakeholders to the SPS Programme. Currently, an application is being drafted to organise a workshop to bring military procurers and relevant industry together in order to better understand the needs of buyers and sellers of smart energy technology.

SENT aims at proposing a concrete Smart Defence project on a tangible, interoperable smart energy capability. Three concrete ideas have been put into project drafts. SENT will further elaborate them as soon as sufficient input from Allies to the SENT questionnaire (PCC-N(2013)0200) is provided. Collecting information on ongoing national smart energy activities is essential in order to propose a strong Smart Defence project. The data from the questionnaire will also be used for the

Comprehensive Report on Nations' Needs for Energy in Military Activities that SENT is currently drafting. The report will include a detailed overview of national programmes and projects of Allies on smart energy.

Within the framework of SENT, ESCD established in 2013 an Internet information sharing platform hosted by the NATO Multimedia Library and targeted at experts working on 'smart energy'. The platform has been well received with an average of 300 views per month: http://natolibguides.info/smartenergy. Furthermore, several public diplomacy products relating to the work of SENT and the topic of smart energy (e.g. update stories, NATO TV stories, videos, articles) have been issued by NATO PDD, the NATO Energy Security Centre of Excellence and external journals.

The first SENT Progress Report was released to Allies and a shorter version to Partners in summer 2013. [SPS Reference 984653].

CHAPTER V
Public Diplomacy

The SPS Programme is first and foremost a partnership policy tool and operates according to the strategic objectives of NATO's partner relations. However, there is also a public diplomacy value in the SPS Programme as it demonstrates NATO's commitment to peace and security through scientific collaboration with all partner countries. The SPS Programme, as directed by Allies, makes considerable efforts to ensure that all SPS activities promote a positive image of NATO and achieve some level of public visibility. This public diplomacy dimension is achieved by making sure that the SPS Programme takes full advantage of all communication tools at its disposal, such as: the NATO SPS website, SPS country flyers, SPS Info Days, the SPS e-newsletter, SPS exhibitions and conferences, NATO Internet TV, etc.

Public diplomacy is a very important aspect of the SPS Programme as it helps to raise the visibility of the Alliance's commitment to cooperative security through the development of concrete activities with all partners. Additionally, it is a key instrument in helping the public to understand the benefits of partnership with NATO, especially in partner countries. Public awareness of the SPS Programme as a concrete civil cooperation programme also helps to highlight the non-military components of NATO's activities. As a result, SPS activities provide stakeholders with the opportunity to promote a positive image of the Alliance and support further cooperation. SPS activities often carry important political significance. The SPS Programme is open to collaboration with all partners, and sometimes the SPS Programme acts as the first point of tangible cooperation between the Alliance and a partner.

The important public diplomacy aspect of the SPS Programme is highly valued by Allies. Following the results of the Strategic Assessment in 2013, the SPS Programme will aim to promote larger 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. As a result, the public diplomacy aspect of SPS activities will play an increasingly more important role.

In 2013, the SPS Programme continued to make strong use of a wide range of public diplomacy tools. The SPS website remains a central tool in providing stakeholders and the wider public with critical information on the SPS Programme's structure, mechanisms, and avenues for collaboration. The SPS website is updated frequently with new information and updates on SPS activities. The SPS Programme has collaborated closely with NATO TV in 2013 and several activities were filmed for the website. The SPS Programme also continued to reach out to partners through the organisation of several Information Days. Other tools, such as the SPS Country Flyers, were also used throughout the year.

Mainstream Media Coverage

In 2013 the SPS STANDEX project was covered by several mainstream media outlets, including AFP, BBC, and Euronews. This coverage provided important visibility of a flagship SPS Programme activity reaching a wider public at large and highlighted one important area of practical cooperation with the Russian Federation. The following is a list of all mainstream media coverage in 2013:

31 Oct. 2013

BBC – Interview with Jamie Shea on the NATO-Russia STANDEX technology

31 Oct. 2013

EURONEWS – Coverage on the NATO-Russia STANDEX project

4 Nov. 2013

STARS AND STRIPES – NATO, Russia advance tech to search crowds for explosives

31 Oct. 2013

RUSSIA TODAY – NATO, Russia say device used to scan crowds for explosives near completion

30 Oct. 2013

AFP – NATO, Russia hail joint test to detect bombers in crowds

Also picked up by International Herald Tribune, Global Post, Dow Jones, Yahoo!

NATO TV

SPS activities also receive visibility via NATO TV, which features stories profiling NATO operations and activities. This coverage provides important visibility to SPS activities and highlights the strong link between the SPS Programme and the Public Diplomacy Divisions (PDD). The following videos were made on SPS activities in 2013:

13 Dec. 2013

The real Iraqi "Hurt Locker" team: Behind the scenes

On SPS advanced research workshop 'Train the Trainers Course on Countering the Threat of Home-Made Explosives' led by Slovakia and Iraq and held in Novaky, Slovak Republic from the 18-22 November 2013.

23 Aug. 2013

Towards a zero footprint camp

Solar panels, fuel cells, rechargeable batteries - efforts within NATO in the field of "Smart Energy" aim to reduce fuel consumption in military camps. A recent exercise showcased the difference these technologies could make in the field. This activity is supported by the SPS Programme.

NATO SPS Website

One of the most important public diplomacy tools of the Programme is the SPS website. The website keeps viewers up to date on the work of the Programme and publishes relevant news stories on major SPS projects and recent developments. In 2013, 16 SPS update stories were published, providing both news and visibility for the selected SPS activities. More importantly, the website acts as the first point of contact for individual scientists and experts looking to apply to the SPS Programme through a 'bottom-up' application. The SPS Website is maintained constantly to ensure that all applicants are provided with up-to-date guidelines on the application

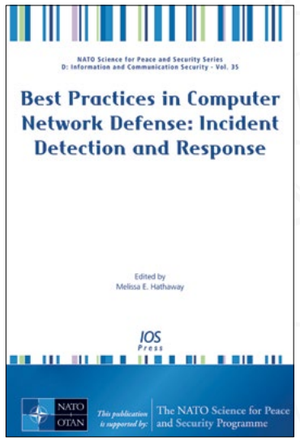
IN DEPTH: TOP VISITS TO THE SPS WEBSITE IN 2013

Title	Page views	Unique Page views	Avg. Time on Page	URL
SPS Website Home	62,561	38,210	01:24	http://www.nato.int/cps/en/natolive/78209.htm
Projects with Mongolia	515	452	02:48	http://www.nato.int/cps/en/natolive/news_99089.htm
Cyber training in the former Yugoslav Republic of Macedonia[6]	482	438	02:40	http://www.nato.int/cps/en/natolive/news_99718.htm
Info Day Romania	476	436	02:07	http://www.nato.int/cps/en/natolive/news_104491.htm
Info Day Montenegro	374	334	02:23	http://www.nato.int/cps/en/natolive/news_99426.htm
Smart Energy Team in Canada	332	289	02:33	http://www.nato.int/cps/en/natolive/news_99173.htm
Oil Spill in Baltic Project	311	280	02:02	http://www.nato.int/cps/en/natolive/news_94466.htm
SPS CBRN Workshop	282	226	03:27	http://www.nato.int/cps/en/natolive/news_105004.htm
Info Day Moldova	255	228	01:42	http://www.nato.int/cps/en/natolive/news_101429.htm
Info Day former Yugoslav Republic of Macedonia[6]	246	221	02:25	http://www.nato.int/cps/en/natolive/news_101427.htm
Armies smart on energy	186	139	01:08	http://www.nato.int/cps/en/natolive/news_101902.htm
CBRN First Responder Course	170	136	02:01	http://www.nato.int/cps/en/natolive/news_101948.htm
Japan Info Day	118	88	01:38	http://www.nato.int/cps/en/natolive/news_102417.htm
STANDEX follow on meeting	116	99	01:25	http://www.nato.int/cps/en/natolive/news_105888.htm

(6) Turkey recognises the Republic of Macedonia with its constitutional name.

process, the SPS Key Priorities, and important dates. In 2013, the home page of the SPS website was viewed a total of 62,561 times. A full list of SPS activities covered by various outlets can be found at Annex 4. The chart above provides some more in depth information on the most visited SPS web stories in 2013.

SPS Science Publications



The SPS Programme publishes findings in the NATO Science Series. These publications present the results of the SPS events supported by the SPS Programme and aim to disseminate important information on advanced scientific and technological knowledge, with a view to strengthening links between scientific communities. The NATO Science Series only publishes the results of SPS Events (workshops and trainings). In 2013, the NATO Science Series published 26 new books and a full list can be found at Annex 5.

One such example includes a workshop on 'Best Practices for Computer Network Defense: Incident Detection and Response,' which was held in September 2013. Following the workshop, a collection of papers from the expert panel discussions formed the basis of a book that was published as part of the NATO Science Series. The Editor and Co-Directors of the project were invited to brief senior leaders and policymakers at the relevant committee responsible for cyber defence at NATO on the findings of the workshop and subsequent publication. A 'Book Talk' was also organised at NATO HQ in February 2014 and brought together leading experts to discuss this important subject with a wider audience, including partner countries, industry, and academia.

SPS Country Flyers

The SPS Programme creates and maintains SPS country flyers for each NATO and partner country involved with the Programme. These flyers are important because they provide a brief, country-specific overview of all activities. They are frequently distributed to visiting diplomats and authorities at NATO HQ and show the Programme's commitment to each country individually. The flyers are also distributed at Contact Point Embassies, local information centres, and SPS events, where applicable.

SPS Information Days

In 2013, the SPS Programme held five SPS Info Days. An SPS Info Day is an outreach event, typically hosted in a partner country that brings together domestic, political, scientific and industry experts who may be potential applicants for future SPS Programme activities. The event allows the SPS Programme to promote its work and activities in a specific country and foster prospective collaborative opportunities. In 2013, the SPS Info Days led to two approved SPS activities and two applications currently under evaluation. Furthermore, the events helped to identify concrete priorities of partner countries within the framework of the SPS Key Priorities. SPS Info Days were convened in the following countries:

1. Podgorica, Montenegro – 29 January 2013

The event was hosted by the Ministry of Foreign Affairs of Montenegro. During the visit, SPS staff conducted bilateral meetings with governmental representatives, e.g. representatives from the Ministry of Science and Ministry of Interior, to identify potential areas of cooperation. Approximately 70 scientists, experts and students followed the proceedings throughout the day. The questions posed to the speakers were mostly related to project ideas regarding environmental security, CBRN defence and cyber defence. The Info Day proved successful in raising awareness of NATO's support to civil science and innovation to promote NATO's image among the Montenegrin public. While in Montenegro NATO experts were also invited to visit the NATO Information Centre in Podgorica for 'Citizen Hour', an interactive meeting with members of the public. Senior SPS Advisor, Dr. Deniz Beten, and Montenegrin Minister of Science, Dr. Sanja Vlahovic, spoke with local citizens, mainly students, and shared their thoughts on the SPS Programme and the role of science in peace and security today. The visit to Montenegro provided visibility of NATO's ongoing support to civil scientific communities, especially in the Balkans region. The SPS Programme continues to provide Partner countries, including those wishing to join the Alliance in the future, with the opportunity to address global emerging security challenges jointly with Alliance member states. Furthermore, the Info Day resulted in the application for the Multi-Year Project "Increasing the Clearance Capacity for Unexploded Ordnance in Montenegro" with the Netherlands [SPS Reference 984754]. The project was approved by Allies for funding in December 2013.

2. Ulaanbaatar, Mongolia – 28 February 2013

The event was hosted by the Mongolian Academy of Sciences in Ulaanbaatar. More than 50 participants from government departments, research institutes, and universities attended a briefing on the SPS Programme, which included short presentations by the project Co-Directors for two current projects in Mongolia – one on cyber defence and the other in the field of environmental security. The event attracted high-level attendance, including Vice Defence Minister A. Battur (pictured) who underlined the Mongolian contribution to NATO-led operations and welcomed the new civilian cooperation with the Alliance through the SPS Programme. He further emphasised his government's commitment to 'continue working closely with NATO in the future'. The event was also attended by several Allied Embassies in Ulaanbaatar, including the Ambassadors of France, Canada, and Turkey, with representatives from Germany and the United States also present.

3. Skopje, the former Yugoslav Republic of Macedonia[7] – 3 June 2013

The event was hosted by the Ministry of Defence and the Ministry of Foreign Affairs and attended by around 50 scientists, experts and high level representatives from several Ministries. The Info Day was followed by bilateral meetings and visits by the SPS staff on 3-4 June to assess the progress of current SPS activities and consult on opportunities for future activities. Governmental representatives elaborated on the government's particular priority areas for cooperation with the SPS Programme,

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i.e. counter-terrorism, cyber defence and counter-IED and environmental security, especially flood monitoring, activities. The visits to the academic institutions were very useful to evaluate the progress achieved in various multi-year projects and to observe the concrete deliverables. The Info Day resulted in the application for the Advanced Training Course “Regional Summer School on Cyber Defence” with Slovenia [SPS Reference 984632]. The ATC was approved by the PPC and successfully conducted in October 2013. Furthermore, officials showed particular interest in taking an active part in SPS activities which support the development of telemedicine capabilities. This interest resulted in an application for the Multi-Year Project “SIARS (Smart I (eye) Advisory Rescue System) towards the development of a telemedical information system with Slovenia [SPS Reference 984753].

4. Chisinau, Moldova – 5-6 June 2013

The event was jointly hosted by the Ministry of Foreign Affairs and European Integration and the Moldovan Academy of Sciences. Approximately 80-90 participants attended, including press and media coverage. The event was also attended by two Ambassadors of Allied countries in Chisinau: Bulgaria (NATO Contact Point Embassy) and Hungary. The Moldovan governmental representatives expressed strong interest in the field of cyber defence. The Info Day resulted in the application for the Advanced Training Course “Hands-on Cyber Defence Training Course for System/Network Administrators of Moldova” with Turkey [SPS Reference 984751]. The ATC was approved by the PPC and successfully conducted in November 2013. Another initiative, discussed during the Info Day, was the organisation of a workshop to provide advice on how to develop a national cyber defence strategy.

5. Tokyo, Japan – 27 June 2013

The event was hosted by the Japanese Ministry of Foreign Affairs. The Info Day brought together around 80 governmental officials, experts and scientists from Japan and introduced them to the work and the activities of the SPS Programme. Japanese officials expressed an interest in two main topics for cooperation with the SPS Programme, namely defence against CBRN agents and cyber defence. Japanese representatives informed the NATO delegation that the event was highly valued in Japan as a strong first step in developing practical cooperation with the Alliance, in direct response the goals set out in the joint political declaration. In the area of cyber defence, a SPS-funded conference or workshop on cyber defence was suggested, involving all ‘like-minded’ countries in the region (such as Australia, Republic of Korea, New Zealand and possibly Singapore). This workshop would look at the regional dimensions of cyber defence and discuss how the region can cooperate on these issues with the Alliance. On CBRN defence, it was discussed that a workshop could be developed to exchange relevant experience and review best practices on civil-military cooperation in CBRN consequence management between NATO and Japan. Another idea involved a workshop on lessons learned from the Fukushima disaster with the aim of sharing best practices for the future on disaster response and disaster preparedness.

6. ISEG Meeting and SPS Information Day in Bucharest, Romania – 24 September 2013

The event was hosted by the Romanian Ministry of Foreign Affairs at the University Politehnica in Bucharest. The opening address was given by Prof. Tudor Prisecaru, Secretary of State for the Ministry of National Education. More than 70 Romanian experts, scientists, academic and students attended the Info Day which focussed on opportunities for SPS activities, in particular in the Balkan and the Black Sea region. The event provided a forum to discuss the many challenges facing Romania and the wider region. Specific areas of importance to Romania were noted as the environmental impact of Black Sea oil exploration on the Danube Delta and coastal areas, and the problems associated with obsolete pesticides and the dumping of pollutants and munitions. Potential areas for cooperation were noted in fields such as energy security and cyber security.

Several high-level bilateral meetings were conducted by the Senior Advisor, Dr. Deniz Beten, in the margins of this event, mainly with Dr. Raed Arafat, Romanian Secretary of State for Health, Mr. Dan Pica, Romanian Minister of Information Society, and with Prof. Tudor Prisecaru. The ISEG members visited the National Telemedicine Centre and also the Nuclear Physics Institute. A site visit was organised by the SPS staff for the progress evaluation of the multi-year project on Development of a Novel Immunoassay for Early Detection of Biothreatening Bacterial Infections.

CHAPTER VI
Assessment & Evaluation

Improving Monitoring and Assessment Methodology

Over the course of 2013, improvements were made to the monitoring of SPS activities and the assessment methodologies and criteria for success were expanded. To ensure ownership of and accountability for all SPS activities, the following management and evaluation methodologies will be applied to SPS events and multi-year projects:

- **For SPS Events (ARW, ASI & ATC)** – IS Staff are actively involved in the various stages of the planning and organising of all events with the project directors, including the review of event programmes, participant lists, and compliance with visual identity guidelines.
- **For Multi-year Projects** – Every six months throughout the duration of the project, a Progress Report, which includes information on planning, criteria for success, deliverables, budget breakdown, and any relevant scientific progress, is sent to IS Staff by the project directors. This report is first reviewed by the SPS scientific advisor and then by the Independent Scientific Evaluation Group (ISEG) "god-parent" who prepares an evaluation sheet. Based on the "god-parent's" recommendations, a site visit and/or assistance from an external expert is decided upon on a case by case basis.

Final Evaluations

For each SPS activity that is completed, an SPS 'Questionnaire' is filled out by the project directors. Questions are aimed at discerning the output of the activity in terms of: number and level of participants involved (including young researchers and experts); number of publications and patents resulting from the activity; and, the way in which the results of the activity will be implemented, including the immediate stakeholders who stand to benefit. Those questions most pertinent include the overall value of NATO's involvement in the activity, how the results will address the specific security challenge, in addition to the impact on the NATO-Partner relationship. For SPS events and multi-year projects, the specific evaluation methodologies are as follows:

- For SPS Events (ARW, ASI & ATC) – At the conclusion of an SPS event (workshop, training course) a General Report is submitted to IS Staff which highlights the results of the activity against the original objectives, reports on the feedback received from participants, and makes proposals for any spin-off activities, as appropriate. SPS workshops and training courses are often one-off events and the final publication is a book published through the NATO Science Series by Springer and/or IOS Press.
- For Multi-year Projects – Upon completion of a project, a Final Report is sent to the SPS Programme by the project directors. As a first step, the Final Report is reviewed following the same rules as the progress report. Secondly, a specific evaluation sheet is established and the results obtained are evaluated against the initial project objectives set out in the Project Plan, resulting in a qualitative assessment of the success of the project comparing what was expected and what was achieved. The evaluation tables contain the deliverables, criteria of success, and publications resulting from each project, as well a communications strategy.

For the 15 projects completed in 2013, the following figures apply:

- 14 Final Reports have been preliminary reviewed by IS Staff and have either already been or will be forwarded to the relevant ISEG member for their final review;
- 8 questionnaires from project Co-Directors have been received and those 7 remaining are expected to be submitted shortly;
- 10 on-site visits by ISEG members will take place as a final assessment in the coming months – in some cases accompanied by SPS Staff.
- For all SPS activities, external evaluations may also be performed through the participation of ISEG or IS Staff on a case by case basis.

Over the course of 2013, a review and update of SPS evaluation and questionnaire templates (for Co-Directors and participants) was undertaken to ensure consistency and to improve the quality and depth of the feedback collected on SPS activities. On-site evaluations and reports of SPS activities – notably for SPS events – by ISEG members and IS staff members also took place. To this end, IS Staff attended 14 SPS events and completed 22 on-site visits of multi-year projects in 2013. To continually improve upon the current evaluation process and to make it more systematic, further steps were considered and concepts developed in 2013, notably with respect to including more external expertise to assess scientific results and to measure the impact of multi-year projects.

In the case of a 'top-down' high visibility project, such as STANDEX or SILK-Afghanistan, a steering committee is established at the request of the ASG-ESC. In the case of STANDEX, this group of independent scientists, including from the Sensors and Electronics Technology (SET) Panel of the Science and Technology Organisation (STO), conducted several site visits to research laboratories in France, Italy, and the Russian Federation over the course of the project. They also attended the final Big City Trial in a Paris metro station. The group conducted evaluations, which have been presented to Allies and the Russian Federation at NRC(SPS) meetings.

Similarly, the SILK-Afghanistan Programme has its own board to conduct regular monitoring and assessment in the implementation of the activity along with IS Staff. The SILK-Afghanistan Board interacts on a regular basis through workshops, tele-conferences and e-mail with all Afghan stakeholders in the project from the Ministries of Higher Education and of Communication & Information Technology, the universities, the internet service providers under NATO contracts, the international academic networking community and networking industry, as well as with the potential donors community to secure the sustainability of the network beyond its funding by NATO and the U.S. Department of State.

CHAPTER VII
Key Achievements & Conclusions

Important Milestones

Over the course of 2013, several important conceptual milestones were achieved with the overall aim to ensure the continuous improvement of the SPS Programme through streamlined guidance, working methods, and decision-making procedures, thereby ensuring that it remains one of the Alliance's foremost tools for practical partnership cooperation.

The key findings of the Strategic Assessment process noted in particular the reforms undertaken in previous years in terms of streamlining policy, structure, governance, and SPS funding, together with the revision of SPS Key Priorities. The report also highlighted areas for further improvement in order to achieve maximum efficiency and impact and to ensure that the SPS Programme is 'fit for purpose' through: recognising practical partnership cooperation as the key goal of the SPS Programme; reaching a durable consensus on widening activities beyond scientific cooperation to encompass other areas supporting the 'Cooperative Security' core task as outlined in the Strategic Concept; and, streamlining complex and lengthy decision-making processes while ensuring full accountability and transparency in the management of the Programme.

During the discussions at the informal North Atlantic Council (NAC), the Council tasked the PPC to develop Overarching Guidelines for the implementation of the SPS Programme. Approved by Allies in October 2013, the Overarching Guidelines served to clarify the scope and objectives of the SPS Programme. Developed in parallel was a Work Programme for 2014, which outlines priorities for the coming year to ensure a focused effort with measurable results for the timely and efficient implementation of SPS activities.

Taken together, the above-mentioned milestones represent key achievements of the SPS Programme in 2013 and contributed to its adaptation to the shifting demands and priorities of an evolving partnership and security landscape.

Diversification of SPS Activities

In 2013, the SPS Programme saw a diversification of its activities both in terms of partner country engagement as well as thematic areas. Such diversification enriches not only the scope of the Programme, but also the breadth of its outreach and impact across NATO's partnership platform. With respect to partnership diversification, several partners participated in SPS activities for the first time. The below points represent a few examples of the SPS Programme expanding its outreach through concrete activities that bring mutual benefit to partners and Allies alike:

- **Japan** hosted a 'Symposium on Japan-NATO Cooperation on Emerging Security Challenges: Information Day on the NATO Science for Peace and Security (SPS) Programme', the first of its kind which provided the impetus for several follow-up proposals for concrete SPS activities, notably in the field of CBRN and cyber defence;

- **Iraq** was also engaged for the first time through a 'Train the Trainers' course on countering the threat of home-made explosives that was hosted at the Centre of Excellence in the Slovak Republic;
- The first two multi-year projects with **Mongolia** were launched at a widely attended event in Ulaanbaatar in February 2013;
- The **United Arab Emirates** participated for the first time in an SPS-sponsored CBRN First Responders Training Course last May;
- A workshop on border security was approved to be hosted by **Malta** in 2014, the first activity to engage Malta as a leading country in an SPS activity;
- A workshop was approved to be hosted by **Pakistan** for the first time to discuss regional security in South Asia in light of the departure of NATO-led International Security Assistance Force (ISAF) by the end of 2014.

With regard to diversification of thematic areas of cooperation through the SPS Programme, new areas were explored, such as:

- **UNSCR 1325 Women, Peace, and Security** with the first activity of its kind approved within the framework of the SPS Programme;
- An activity in the field of **border security** was also developed and approved, which will engage Malta as a partner country for the first time and will look at border security threats in the Mediterranean Region.

In addition to the diversification of SPS activities, it was also important to balance SPS Key Priorities to ensure a better distribution of SPS activities by SPS Key Priority. For example, the number of environmental security projects decreased from 50% in 2012 to 2% in 2013, with an increase in the number of SPS activities approved in the fields of counter-terrorism, CBRN, and security-related advanced technology.

Increased Visibility of the SPS Programme

The combination of renewed conceptual guidance for the implementation of the SPS Programme, along with improved working methods and increased diversification of SPS activities, will have a significant impact on the public diplomacy dimension of the SPS Programme. In 2013, emphasis was placed on larger scale and more strategic activities to enhance the public diplomacy impact of the SPS Programme through the development of high visibility flagship projects.

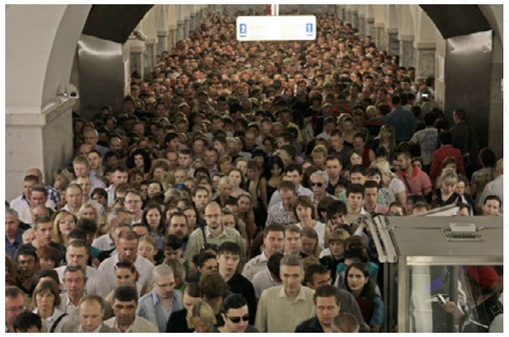
To this end, a number of forward-looking SPS flagship activities were approved and launched in 2013, notably, 'Towards the Monitoring of Dumped Munitions Threat' (MODUM) (pictured) and 'Developing a Multinational Telemedicine System for Emergency Situations'. Smaller activities, such as the series of workshops on 'Gender Mainstreaming: Indicators for the Implementation of UNSCR 1325' and the 'Train the Trainers' course on countering the threat of home-made explosives' also have an important public diplomacy dimension as they provide an avenue to engage new partners on new issues of security relevance to the Alliance (for more detailed information on these activities, please see Chapter III). Moreover, the diversification of SPS activities both in terms of partner countries and thematic areas has contributed to, and will continue to contribute significantly to, NATO's overall outreach efforts.

In addition, several high visibility SPS flagship projects were completed in 2013 with concrete results. A snapshot of such activities includes:

- 'Advanced detection equipment for demining and UXO clearance in Egypt', which resulted in surveys of large land areas and improved detection rates of minds deeply buried in the desert through the use of dual-sensor equipment. A minimum operational capability at platoon level for both dual-sensor and deep-search detectors was also delivered to the Ministry of Defence as part of the project;
- 'Stand-off detection of explosives (STANDEX) programme', which, within the framework of the NATO-Russia Council (SPS), resulted in a Big City Trial held on 11 June 2013 in the Paris metro. A final report that marked the closure of the four-year STANDEX Programme was also delivered, detailing the technologies that had been developed and integrated as part of the STANDEX system.

For both of these activities targeted public diplomacy activities were conducted. In particular, the STANDEX project was covered by several mainstream media outlets, including AFP, BBC, Euronews, and Russia Today (pictured). This coverage provided important visibility of a flagship SPS Programme activity reaching a wider public and highlighted one important area of practical cooperation with the Russian Federation.

More generally, for all activities in 2013, the SPS Programme continued to make use of and improve the public diplomacy tools at its disposal, including feature stories through NATO TV, stories on the SPS web-portal, and the organisation of SPS Info Days (please see Chapter VI for more information and Annex 4 for a full list of SPS relevant media coverage).



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Outlook

In 2013 the SPS Programme continued to develop, initiate, and complete practical collaborative activities that directly respond to NATO's Strategic Concept and Berlin Partnership Policy by promoting cooperative security in support of the Alliance's strategic objectives. Today, and in an increasingly interconnected world, dialogue and cooperation with Partners through the SPS Programme allows Allies to better understand contemporary security challenges and develop solutions together with Partner scientists, experts, and governmental officials.

This year was marked by assessment and reform, and following on from the recalibration and reorientation over the course of the year, the SPS Programme has developed the right conditions to implement future activities in line with Allied strategic and political guidance and support. The SPS Programme proves to be an invaluable tool in allowing Allies to focus on the issues that matter in the regions that are important with Partners who share the same concerns. To that end, the SPS Programme provides a unique platform for engaging in practical cooperation on mutually beneficial and security-relevant activities. Therefore, and in view of the 2014 Summit and the intended focus on partnership, the SPS Programme has great potential to enhance NATO's strategic objectives and partnerships by providing a platform for the development of tangible cooperation initiatives with all of NATO's Partners.

Under the new political guidance, leadership, and ownership from Allies the SPS Programme will continue to serve the Alliance's strategic objectives in the future. Following the important period of reforms this year the SPS Programme will in the future be defined by more effective management, good governance, transparency, and accountability with the aim of insuring increased political impact, visibility and value for the resources allocated to the Programme by Allies in a context which will continue to be defined by financial austerity.

Annex 1: New SPS Activities Approved by the PPC in 2013

Security Area	Key Priority	Ref. Number	Top-Down	Grant Mechanism	Title	NATO Country	Partner Country	Partnership Framework
CT	1.a.	984596		ARW	Nuclear Radiation Nanosensors and Nanosensory Systems	Greece	Georgia	EAPC
CT	1.a.	984715		ARW	Managing Terrorism Threats to Critical Infrastructure - Challenges for South Eastern Europe	Slovenia	Serbia	EAPC
CT	1.a.	984716		ARW	Engaging the Public to Fight the Consequences of Terrorism and Disasters	Germany	Georgia	EAPC
CT	1.a.	984560		SFPP	T-Whex: A Robust Monitoring Robot with Tuneable Compliant Actuators	Germany	Serbia	EAPC
CT	1.a.	984595		SFPP	Protection of Underground Structures from Fuel Cloud Explosion	United States	Georgia	EAPC
CT	1.a.	984573		ARW	Resiliency: Enhancing Coping with Crisis and Terrorism	Croatia	Israel	MD
CT	1.a.	984621		ARW	Preparedness for Nuclear and Radiological Threats	United States	Israel	MD
CT	1.a.	984667		ARW	Terrorist Threats in North Africa from a NATO Perspective	Turkey	Egypt	MD
CT	1.a.	984678		ARW	Hospitals under Fire - Planning and Operating a Tertiary Hospital under Fire and Extreme Circumstances	Czech Republic	Israel	MD
CT	1.a.	984712		ARW	Countering Violent Extremism among Youth to Prevent Terrorism	Italy	Egypt	MD
CT	1.a.	984520		SFPP	Secure Implementation of Post-Quantum Cryptography	Slovak Republic	Israel	MD
CT	1.a.	984668	X	ARW	NATO and Russia: Towards Common Perceptions of Emerging Security Challenges	United Kingdom	Russia	NRC
CT	1.a.	984656	X	ATC	Identification and Neutralization of Chemical Improvised Explosive Devices	Poland	Ukraine	NUC
CT	1.a.	984544		SFPP	Uncooled Terahertz Arrays for Imaging Explosives	Spain	Ukraine	NUC
CT	1.a.	984605		SFPP	A New Fast Neutron Detector to Counter Nuclear Terrorism	France	Ukraine	NUC
CT	1.a.	984655		SFPP	Hand-Held Gamma Detector Based on High-Pressure Xenon Gas	United States	Ukraine	NUC
ENERGY	1.b.	984672	X	ARW	Emerging Security Challenges Enhancing Energy Security in the XXI Century	United States	Azerbaijan	EAPC
ENERGY	1.b.	984536		SFPP	Thermoelectric Materials and Devices for Increasing of Energy Saving and Security	Turkey	Ukraine	NUC
CYB	1.c.	984615	X	ARW	Best Practices for Computer Network Defence: Incident Detection and Response	Italy	Switzerland	EAPC
CYB	1.c.	984632		ATC	Regional Summer School on Cyber Defence (RSSCD)	Slovenia	the former Yugoslav Republic of Macedonia[1]	EAPC
CYB	1.c.	984744	X	ATC	Hands-on Cyber Defence Training Course for System/Network Administrators of Montenegro	Turkey	Montenegro	EAPC
CYB	1.c.	984751	X	ATC	Hands-on Cyber Defence Training Course for System/Network Administrators of Moldova	Turkey	Moldova	EAPC
CYB	1.c.	984546		ASI	Software Systems Safety	Germany	Israel	MD
CYB	1.c.	984714		ASI	Dependable Software Systems Engineering	Germany	Israel	MD
CYB	1.c.	984708		ARW	Strengthening Cyber Defence for Military Critical Infrastructure	Poland	Ukraine	NUC
CBRN	1.d.	984627		ARW	Nanotechnology to Aid Chemical and Biological Defence	United States	Georgia	EAPC
CBRN	1.d.	984657	X	ARW	CBRN Defence and Border Security Capability Building in the Western Balkans	Albania	Montenegro	EAPC
CBRN	1.d.	984733		ASI	CBRN Security Culture: Concept, Assessment and Enhancement	United States	Armenia	EAPC
CBRN	1.d.	984747		ASI	Crystallography in Drug Discovery: A Tool against CBRN Agents	United States	Russia	EAPC
CBRN	1.d.	984537		SFPP	Development of Biosensors Using Carbon Nanotubes	Italy	Armenia	EAPC
CBRN	1.d.	984555		SFPP	Atmospheric Pressure Plasma Jet for Neutralisation of CBW (Chemical Biological Weapons)	Slovenia	Serbia	EAPC

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CBRN	1.d.	984589	**X**	SFPP	Towards the Monitoring of Dumped Munitions Threat (MODUM)	Poland	Russia	EAPC
CBRN	1.d.	984671	**X**	ATC	CBRN First Responders Trainers Course	Czech Republic	Jordan	MD
CBRN	1.d.	984713		ATC	Non-Proliferation from an International Perspective	Italy	Morocco	MD
CBRN	1.d.	984511		SFPP	Multisensing Platform for Warfare Agent Detection (MPWAD)	Spain	Tunisia	MD
CBRN	1.d.	984662		SFPP	Towards Radiation Hard AlGaN/ GaN HEMTs for Homeland Security New Title: Radiation Resistant High-Speed Transistors for Security Applications	United States	Israel	MD
CBRN	1.d.	984481		SFPP	Nanostructured Materials for the Catalytic Abatement of Chemical Warfare Agents (“NanoContraChem”)	Italy	Ukraine	NUC
CBRN	1.d; 3.c.	984749	**X**	ATC	Train the Trainers Course on Countering the Threat of Home-Made Explosives	Slovak Republic	Iraq	PaG
ENV	1.e.	984631		ARW	Improving Disaster Resilience and Mitigation - New Means, Tools, and Trends	Romania	Moldova	EAPC
OPS	2.a; 1.e	984748	**X**	SFPP	Developing a Multinational Telemedicine System for Emergency Situations	Romania	Russia	NRC
OPS	2.b	984847		ARW	Post-2014 Regional Security through Partnership	Denmark	Pakistan	PaG
OPS	2.c	984745		ARW	Central Asian Context Factors & the Comprehensive Approach to Regional Security	United States	Kazakhstan	EAPC
OPS	2.d	984756	**X**	ARW	Gender Mainstreaming: Indicators for the Implementation of UNSCR 1325	United States	Serbia	EAPC
OPS	2.d	984766	**X**	ARW	Building Regional Security in the Afghan Regional Context, Post-2014	NATO	Sweden	EAPC
ADV	3.a.	984723		ASI	Nanoscience Advances in CBRN Agents Detection, Information and Energy Security	Bulgaria	Moldova	EAPC
ADV	3.a.	984602		ARW	Functional Nanomaterials and Devices for Electronics, Sensors, Energy Harvesting	Belgium	Ukraine	NUC
ADV	3.a; 1.c	984724		ASI	Hyperelliptic Curve Cryptography	United States	the former Yugoslav Republic of Macedonia[2]	EAPC
BPS	3.b; 1.a	984863		ARW	Border Security Threats in the Mediterranean Region	Poland	Malta	EAPC
UXO	3.c.	984754	**X**	SFPP	Increasing the Clearance Capacity for Unexploded Ordnance (UXO) in Montenegro	Netherlands	Montenegro	EAPC
UXO	3.c.	984870	**X**	SFPP	**Feasibility Study:** Adaptable Disposal Solution for Obsolete, Surplus, and Unserviceable Ammunition in Libya	NATO NSPA	United Nations Mine Action Service (UNMAS)	IO
HSA	3.d	984711		ASI	Enhancing Analytical and Strategic Capabilities	United Kingdom	Ukraine	NUC
TOTAL		51						

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Annex 2: SPS Multi-Year Projects Completed in 2013

Security Area	Key Priority	Ref. Number	Top-Down	Title	NATO Country	Partner Country	Partnership Framework
CT	1.a.	983154		Artificial Receptors for Bacillus Anthracis Specific Anthrose Detection	United States	Croatia	EAPC
CT	1.a.	983805		Designing Intelligent, Resilient, Scalable and Secure Next Generation SCADA (Supervisory Control And Data Acquisition) Infrastructures (SCADA-NG)	Italy	Croatia	EAPC
CT	1.a.	983789		Highly Sensitive Standoff Detection of Explosives in Condensed and Gas Phase	Germany	Israel	MD
CT	1.a.	984196		NATO STANDEX (Stand-off Detection of Explosives) Programme (IS Funds)	France; Netherlands; Italy; Germany	Russia	NRC
CBRN	1.d.	983807		Nanoparticle-based Sensors for Detection of Chemical and Biological Threats	Spain; United States	Israel	MD
CBRN	1.d.	982836		Highly Sensitive NQR/NMR Technique for Explosive Detection	Turkey	Russia	NRC
ENV	1.e.	982227		Water Resources Management of Agro-Ecosystems in the South Caucasus Transboundary Regions (Armenia, Azerbaijan, Georgia)	United States	Georgia; Armenia; Azerbaijan	EAPC
ENV	1.e.	982678		Bio-Optical Characterization of the Black Sea for Remote Sensing Applications	Turkey; Bulgaria; Romania	Ukraine; Russia	EAPC
ENV	1.e.	983038		Seismic Hazard and Risk Assessment for Southern Caucasus-Eastern Turkey Energy Corridors	Turkey	Georgia; Azerbaijan	EAPC
ENV	1.e.	983142		Geo-Environmental Security of the Toktogul Hydroelectric Power Station Region, Central Asia	United Kingdom; Italy	Kyrgyz Republic; Uzbekistan	EAPC
ENV	1.e.	983828		Seismic Upgrading of Bridges in South-East Europe by Innovative Technologies	Germany	the former Yugoslav Republic of Macedonia[3]; Serbia; Albania; Bosnia	EAPC
ENV	1.e.	983134		Investigating Salinity and Radioactivity in Water Resources in Morocco	United States	Morocco	MD
ENV	1.e.	983368		Assessment and Monitoring of Desertification in Jordan Using Remote Sensing and Bioindicators	Canada	Jordan	MD
ENV	1.e.	983516		Flood Monitoring & Forecasting in Pripyat River Basin	Slovakia	Ukraine; Belarus	NUC
UXO	3.c.	984444		Advanced Detection Equipment for Demining and UXO Clearance in Egypt	Netherlands	Egypt	MD
TOTAL		15					

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Annex 3: SPS Events – ARW, ASI, ATC – Hosted in 2013

Security Area	Key Priority	Ref. Number	Top-Down	Grant Mech.	Title	NATO Country	Partner Country	Start	End	Location	Partnership Framework
CT	1.a	984503		ARW	Examining Robustness and Vulnerability of Critical Infrastructure Networks	United States	Ukraine	3-Jun-13	5-Jun-13	Kyiv, Ukraine	NUC
CT	1.a	984575		ARW	Nanotechnology in the Security Systems	Slovenia	Ukraine	29-Sep-13	3-Oct-13	Yalta, Ukraine	NUC
CT	1.a.	984467		ARW	Advanced THz Technologies for Civil and Military Security	Italy	Ukraine	26-May-13	29-May-13	Kyiv, Ukraine	NUC
CT	1.a.	984495		ARW	The Perseverance of Terrorism: Focus on Leaders	Poland	Serbia	24-Apr-13	26-Apr-13	Belgrade, Serbia	EAPC
CT	1.a.	984569		ASI	Nanomaterials and Nanoarchitectures	Czech Rep.	Ireland	30-Jun-13	8-Jul-13	Cork, Ireland	EAPC
CT	1.a.	984482		ASI	Nano-Structures for Optics and Photonics: Optical Strategies for Enhancing Sensing, Imaging, Communications and Energy Conversion	United States	Belarus	4-Jul-13	19-Jul-13	Erice, Italy	EAPC
CT	1.a.	984667		ARW	Terrorist Threats in North Africa from a NATO Perspective	Turkey	Egypt	19-Nov-13	20-Nov-13	Ankara, Turkey	MD
CT	1.a.	984668	X	ARW	NATO and Russia: Towards Common Perceptions of Emerging Security Challenges	United Kingdom	Russia	18-Nov-13	19-Nov-13	Moscow, Russia	NRC
ENERGY	1.b.	984672	X	ARW	Emerging Security Challenges Enhancing Energy Security in the XXI Century	United States	Azerbaijan	23-May-13	24-May-13	Baku, Azerbaijan	EAPC
CYB	1.c	984586	X	ATC	Hands-on Cyber Defence Training Course for System/Network Administrators of the former Yugoslav Republic of Macedonia*	Turkey	Georgia	8-Apr-13	19-Apr-13	Ankara, Turkey	EAPC
CYB	1.c.	984377		ARW	Best Practices and Innovative Approaches to Develop Cyber Security and Resiliency Policy Framework	United States	FYROM	10-Jun-13	12-Jun-13	Lake Ohrid, the former Yugoslav Republic of Macedonia[4]	EAPC
CYB	1.c.	984615	X	ARW	Best Practices for Computer Network Defence: Incident Detection and Response	Italy	Switzerland	11-Sep-13	13-Sep-13	Geneva, Switzerland	EAPC
CYB	1.c.	984744	X	ATC	Hands-on Cyber Defence Training Course for System/Network Administrators of Montenegro	Turkey	Montenegro	16-Sep-13	27-Sep-13	Ankara, Turkey	EAPC
CYB	1.c.	984632		ATC	Regional Summer School on Cyber Defence (RSSCD)	Slovenia	FYROM	20-Oct-13	26-Oct-13	Ohrid, the former Yugoslav Republic of Macedonia	EAPC
CYB	1.c.	984546		ASI	Software Systems Safety	Germany	Israel	30-Jul-13	11-Aug-13	Bayrischzell, Germany	MD
CBRN	1.d	984542		ASI	The Future of Dynamical Structural Science - Links to Energy and Environmental Security and Early Detection of CBRN Agents	United Kingdom	Russia	31-May-13	8-Jun-13	Erice, Italy	EAPC
CBRN	1.d.	984657	X	ARW	CBRN Defence and Border Security Capability Building in the Western Balkans	Albania	Montenegro	26-Mar-13	28-Mar-13	Budva, Montenegro	EAPC
CBRN	1.d.	984457		ASI	Detection of Chemical, Biological, Radiological and Nuclear Agents for the Prevention of Terrorism	Canada	Morocco	25-May-13	5-Jun-13	Castelnuovo Berardenga, Italy	MD
CBRN	1.d.	984671	X	ATC	CBRN First Responders Trainers Course	Czech Republic	Jordan	17-Jun-13	21-Jun-13	Vyskov, Czech Republic	MD
CBRN	1.d.	984654	X	ARW	Defence Against CBRN Workshop	NATO	N/A	22-Nov-13	24-Nov-13	Brussels, Belgium	NATO
ENV	1.e.	984491		ARW	New Challenges in Complex System Physics: Disaster Forecasting, Crisis Modeling and Sustainable Development	United States	Uzbekistan	20-May-13	24-May-13	Samarkand, Uzbekistan	EAPC
ENV	1.e.	984464	X	ARW	Sustainable Military Compounds – Towards a Zero Footprint Compound (A series of workshops)	Canada	Sweden	30-Sep-13 27-May-13	3-Oct-13 30-May-13	Skopje, the former Yugoslav Republic of Macedonia Amsterdam, Netherlands	EAPC
ENV	1.e.	984631		ARW	Improving Disaster Resilience and Mitigation - New Means and Tools, Trends	Romania	Moldova	6-Nov-13	8-Nov-13	Iasi, Romania	EAPC

(4) Turkey recognises the Republic of Macedonia with its constitutional name.

OPS	2	984582	SILK	ARW	Workshops to Plan, Implement and Review an Afghan Research and Education Network (A series of workshops)	United States	Afghanistan	6-Mar-13 9-Jun-13 22-Oct-13	7-Mar-13 10-Jun-13 23-Oct-13	Kabul, Afghanistan Istanbul, Turkey Dubai, United Arab Emirates	PaG
OPS	2	984592	X	ARW	Telemedicine in Crisis Management : Capability Development with Partners	Romania	Russia	11-Mar-13	12-Mar-13	Moscow, Russia	NRC
UXO	3.c.	984749	X	ATC	Train the Trainers Course on Countering the Threat of Home-Made Explosives	Slovakia	Iraq	18-Nov-13	22-Nov-13	Novaky, Slovak Republic	EAPC
TOTAL		26									

Annex 4: SPS Media Visibility in 2013

Mainstream Media – Video Coverage of SPS activities

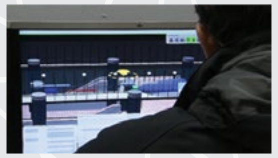
31 Oct. 2013

BBC – Interview with Jamie Shea on the NATO-Russia STANDEX technology

31 Oct. 2013

EURONEWS – Coverage on the NATO-Russia STANDEX project

Mainstream Media – Print Coverage of SPS activities



4 Nov. 2013

STARS AND STRIPES – NATO, Russia advance tech to search crowds for explosives

31 Oct. 2013

RUSSIA TODAY – NATO, Russia say device used to scan crowds for explosives near completion

30 Oct. 2013

AFP – NATO, Russia hail joint test to detect bombers in crowds

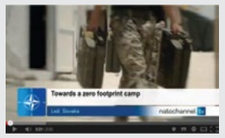
Also picked up by International Herald Tribune, Global Post, Dow Jones, Yahoo!

NATO TV - SPS Videos

13 Dec. 2013

The real Iraqi “Hurt Locker” team: Behind the scenes

On SPS advanced research workshop ‘Train the Trainers Course on Countering the Threat of Home-Made Explosives’ led by Slovakia and Iraq and held in Novaky, Slovak Republic from the 18-22 November 2013.



23 Aug. 2013

Towards a zero footprint camp

Solar panels, fuel cells, rechargeable batteries - efforts at NATO in the field of “Smart Energy” aim to reduce fuel consumption in military camps. A recent exercise showcased the difference these technologies could make in the field. This activity is supported by the SPS Programme.

NATO SPS Website Stories

11 Dec. 2013

NATO and Iraq tackle deadly improvised explosive devices together

For decades now, Iraq has been confronting the scourge of improvised explosive devices (IEDs) which kill and injure civilians. A significant majority of IEDs in Iraq are manufactured from home-made explosives and explosive remnants of war, and used by terrorists as raw materials for improvised bombs and suicide attacks. In the framework of its strategic partnership with Iraq, NATO is supporting the Iraqi Government in its fight against IEDs.

11 Dec. 2013

Exploring cutting-edge technologies for detecting suicide bombers

Experts from the NATO-Russia Council (NRC)-NATO Science for Peace and Security (SPS) Programme examined technologies which could form part of a follow-on project to the successful NRC-SPS-sponsored STANDEX (stand-off detection of explosives) Project. Meeting in Tours, France from 3 to 5 December, participants also looked at ways to advance detection technologies developed in STANDEX and considered technologies to help address potential threats once detected.

15 Nov. 2013

Experts focus on chemical, biological, radiological and nuclear threats

Incidents involving chemical, biological, radiological and nuclear (CBRN) agents remain a real threat to populations across the globe. In an increasingly interconnected world, effective prevention and response depends upon cooperation between international actors to identify best practices and develop the technological capabilities to meet these threats. Experts from NATO and partner countries and the NATO Weapons of Mass Destruction Centre, discussed possible areas for future practical cooperation in this field at a three-day workshop in Brussels, organised by the NATO Science for Peace and Security (SPS) Programme from 22 to 24 October.

24 Oct. 2013

Fostering cooperation on emerging security challenges in Romania and the Balkans

Opportunities for security-related civil science cooperation between experts from Romania and NATO partner countries, particularly in the Balkans region, was the focus of an Information Day on the NATO Science for Peace and Security (SPS) Programme, which took place in the capital Bucharest on 24 September 2013.

26 Aug. 2013

Towards the ‘’Green Soldier”

Photo gallery with captions showing energy saving equipment from various countries.

26 Jul. 2013

‘Smart Energy’ camp opens eyes to promising energy-saving solutions

Energy-efficient equipment and materials were showcased recently at a demonstration camp set up at the military exercise “Capable Logistician 2013” in Slovakia in June. Over 500 visitors had their eyes opened to the security issues surrounding fuel supplies for deployed forces as well as to potential energy efficiency concepts and projects for the military.

24 Jul. 2013

Preparing first responders for chemical, biological, radiological and nuclear incidents

Civilian populations are threatened by potential incidents involving chemical, biological, radiological and nuclear (CBRN) agents, which are the consequence of either terrorist acts or natural and man-made disasters. It is important to ensure that first responders are prepared for such eventualities.

5 Jul. 2013

Armies get smart on energy

Energy costs are a significant drain on defence budgets. This could impact on the resources available for Allies to acquire and maintain defence capabilities as well as limit their capacity to undertake military operations. Reducing the energy footprint of operations is a priority. NATO and individual Allies are working on alternative energy sources and developing multinational ‘smart energy’ projects.

1 Jul. 2013

NATO and Japan explore opportunities to cooperate on emerging security challenges

A delegation from NATO’s Emerging Security Challenges Division met senior government representatives and experts in Tokyo, Japan, from 25 to 29 June to discuss possible practical cooperation on global security challenges, such as cyber defence, counter-terrorism and non-proliferation. Opportunities for collaborating on responses to such challenges through science and innovation were a particular focus of the visit.

13 Jun. 2013

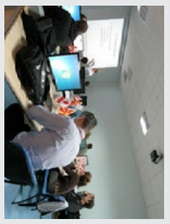
NATO’s science programme responds to emerging security challenges

The increasing range of new risks and emerging security challenges are common concerns for NATO Allies and partners alike. As part of its efforts to foster cooperative activities in direct response to these challenges, the NATO Science for Peace & Security (SPS) Programme hosted an ‘Information Day’ in Skopje on 3 June. The objective was to increase the visibility of the SPS Programme and to reach out to national government officials, scientists and experts in order to identify and develop topics for future cooperation through the SPS programme, particularly in the area of emerging security challenges.

13 Jun. 2013

Expanding scientific cooperation with Moldova

Moldovan scientists shared experiences and discussed opportunities for future cooperation under the NATO Science for Peace and Security Programme 'Information Days' in Chisinau on 5 and 6 June.



17 Apr. 2013

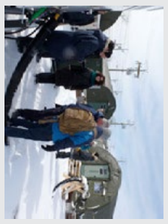
System/Network Administrators from the former Yugoslav Republic of Macedonia' train in cyber defence

System/Network Administrators from the former Yugoslav Republic of Macedonia participated in a cyber defence training course at the Informatics Institute of the Middle East Technical University (METU) in Ankara, Turkey from 8 April to 19 April. The training course was supported by the NATO Science for Peace and Security (SPS) Programme and developed in close cooperation by experts from Turkey, Canada, and Georgia.

4 Apr. 2013

NATO Science for Peace and Security Programme: Building Partnership in Montenegro

On 29 January 2013, the NATO Science for Peace and Security (SPS) Programme, in cooperation with the Ministry of Foreign Affairs and European Integration of Montenegro (MFA), hosted an 'Information Day' in Podgorica. The event was held at the University of Montenegro and was attended by over 70 scientists, experts, and students.



18 Mar. 2013

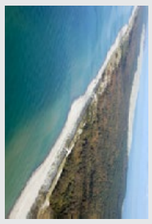
SENT explores energy efficiency for the military in cold climates

NATO's Smart Energy Team (SENT) was launched at the end of 2012 to advance energy efficiency in the military. As part of its first field-trip, the team of experts from 8 nations visited an energy camp set up by Defence Research & Development Canada near Montréal from February 19-21.

12 Mar. 2013

Launch of Two SPS Projects in Mongolia

The first two civilian cooperation projects between NATO and Mongolia within the framework of the Science for Peace and Security (SPS) Programme were launched on February 28 in Ulaanbaatar.



4 Feb. 2013

NRC scientists cooperating to detect Baltic oil spills

Ensuring environmental security is a present-day challenge all NATO-Russia Council (NRC) nations are faced with. One NRC Science for Peace and Security (SPS) project in particular, is already tackling a significant environmental threat in the Baltic Sea, and in the process, taking on the ambitious task of becoming a leading region for environmental safety and security. The project aims to improve the detection of oil spills in the Baltic Sea, initially by researching and comparing existing technology for oil spill detection, and then in later phases of the project, by testing the best methods in the South-Eastern region of the Baltic.

Annex 5: NATO Science Series Publications in 2013

	Ref.	Grant Mech.	Title	Editors	Sub-Series	Date	Publisher
1	983898	ARW	Contemporary Suicide Terrorism: Origins, Trends and Ways of Tackling It	Tatyana Dronzina, Rachid El Houdaigui	Human and Societal Dynamics	22/1/2013	IOS PRESS, AMSTERDAM
2	984202	ASI	Handbook for Pandemic and Mass-Casualty Planning and Response	Elin Gursky, Boris Hreckovski	Human and Societal Dynamics	22/1/2013	IOS PRESS, AMSTERDAM
3	984021	NRC-ARW	Comparative Analysis of Technological and Intelligent Terrorism Impacts on Complex Technical Systems	Nikolay A. Makhutov, Gregor B. Baecher	Human and Societal Dynamics	29/1/2013	IOS PRESS, AMSTERDAM
4	983995	ARW	Security and Cross-Border Cooperation in the EU, the Black Sea Region and Southern Caucasus	Ayca Ergun, Hamlet Isaxanli	Human and Societal Dynamics	1/5/2013	IOS PRESS, AMSTERDAM
5	984009	ARW	Internet-Based Intelligence in Public Health Emergencies	Emilio Mordini, Manfred Green	Human and Societal Dynamics	1/5/2013	IOS PRESS, AMSTERDAM
6	984230	ARW	Afghanistan and Central Asia: NATO's Role in Regional Security since 9/11	Oktay F. Tanrisever	Human and Societal Dynamics	1/5/2013	IOS PRESS, AMSTERDAM
7	984332	ATC	Analyzing Different Dimensions and New Threats in Defence Against Terrorism	Adil Duyan	Human and Societal Dynamics	1/5/2013	IOS PRESS, AMSTERDAM
8	984291	ARW	Energy Security in the Wider Black Sea Area - National and Allied Approaches	Emil Lyutskanov, Leila Alieva, Mila Serafimova	Human and Societal Dynamics	1/9/2013	IOS PRESS, AMSTERDAM
9	984314	ATC	Future Trends and New Approaches in Defeating the Terrorism Threat	Ugur Gurbuz	Human and Societal Dynamics	1/9/2013	IOS PRESS, AMSTERDAM
10	984395	ASI	Engineering Dependable Software Systems	Manfred Broy, Doron Peled, Georg Kalus	Information and Communications Security	1/10/2013	IOS PRESS, AMSTERDAM
11	984226	ATC	Economic Sustainability and Environmental Protection in Mediterranean Countries through Clean Manufacturing Methods	Coca Prados Jose, Gutierrez-Cervello Gemma	Energy Security	1/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
12	983732	NRC-ARW	Environmental Security in the Arctic Ocean	Paul Arthur Berkman, Alexander N. Vylegzhanin	Energy Security	15/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
13	984103	ARW	Biopreparedness and Public Health	Iris Hunger, Vladan Radosavljevic, Goran Belojevic, Lisa D. Rotz	Chemistry and Biology	15/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
14	984177	ARW	New Materials for Thermoelectric Applications: Theory and Experiment	Veljko Zlatic, Alex Hewson	Physics and Biophysics	15/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
15	984268	ASI	Nano-Optics for Enhancing Light-Matter Interactions on a Molecular Scale	Baldassare Di Bartolo, Johnn Collins, Asst Editor Luciano Silvestri	Physics and Biophysics	15/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA

16	983599	ASI	Biophysics and Structure to Counter Threats and Challenges	Joseph D Puglisi, Manolia V. Margaris	Physics and Biophysics	22/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
17	984304	ARW	Recent Advances in Broadband Dielectric Spectroscopy	Yuri Kalmykov	Physics and Biophysics	22/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
18	982759	ARW	Complexity in Chemistry and Beyond: Interplay Theory and Experiment	Craig Hill, Djamaladdin G. Musaev	Physics	29/1/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
19	984393	ASI	Advancing Methods for Biomolecular Crystallography	Randy Read, Alexandre B. Urzhumtsev, Vladimir Y. Lunin	Chemistry and Biology	26/4/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
20	984302	ARW	Black Sea Energy Resource Development and Hydrogen Energy Problems	Ayfer Veziroglu, Marat Tsitskishvili	Energy Security	16/5/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
21	984419	ASI	Environmental Security Assessment and Management of Obsolete Pesticides in Southeast Europe	Lubomir I. Simeonov, Fliur Z. Macaev, Biana G. Simeonova	Energy Security	30/5/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
22	984406	ARW	Advanced Bioactive Compounds Countering the Effects of Radiological, Chemical and Biological Agents	Grant N. Pierce, Volodymyr I. Mizin, Alexander Omelchenko	Chemistry and Biology	11/6/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
23	984434	ARW	Low-Dimensional Functional Materials	Reinhold Egger, Davron Matrasulov, Khamdam Rakhimov	Physics	15/7/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
24	984375	ARW	Magnetic Resonance Detection of Explosives and Illicit Materials	Tomas Apih, Bulat Rameev, Georgy Mozzhukhin, Jamie Barras	Physics and Biophysics	22/10/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
;25	984162	ARW	Transport and Reactivity of Solutions in Confined Hydrosystems	Lionel Mercury, Niels Tas, Michael Zilberbrand	Energy Security	16/12/2013	SPRINGER SCIENCE AND BUSINESS MEDIA
26	984420	ARW	Sustainable Cities and Military Installations	Igor Linkov	Energy Security	16/12/2013	SPRINGER SCIENCE AND BUSINESS MEDIA

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