

4 May 2015

**IBAN SPECIAL REPORT TO COUNCIL ON THE SCIENCE FOR PEACE AND
SECURITY PROGRAMME**

ACTION SHEET

On 30 April 2015, under the silence procedure, the Council noted the IBAN report IBA-AR(2014)36 and agreed the recommendations contained in the RPPB report.

NOTE: This Action Sheet is part of, and shall be attached to C-M(2015)0030.

28 April 2015

IBAN SPECIAL REPORT TO COUNCIL ON THE SCIENCE FOR PEACE AND SECURITY PROGRAMME

Note by the Deputy Secretary General

1. I attach the International Board of Auditors for NATO (IBAN) Special report to Council on the Science for Peace and Security Programme.
2. The aim of the IBAN performance audit was to provide assurance to Nations that the Science for Peace and Security's programme of work supports NATO's strategic goals and objectives and that the programme is achieving its intended outcomes. The IBAN concludes that the Science for Peace and Security Programme objectives reflect NATO's overall goals and objectives and that the programme is effectively managed. The IBAN makes three recommendations to further enhance the management of the programme.
3. The IBAN report has been reviewed by the Resource Policy and Planning Board (RPPB), which has provided its own report with conclusions and recommendations to Council.
4. I consider that no further discussion regarding this report is required. Consequently, unless I hear to the contrary **by 18:00 hours on Thursday, 30 April 2015**, I shall assume that the Council has noted the IBAN report IBA-AR(2014)36 and agreed the recommendations contained in the RPPB report.

IBAN SPECIAL REPORT TO COUNCIL ON THE SCIENCE FOR PEACE AND SECURITY PROGRAMME

Draft report by the Resource Policy and Planning Board (RPPB)

References: (a) IBA-A(2015)20 & IBA-AR(2014)36

Background

1. The present report by the Resource Policy and Planning Board (RPPB) contains the RPPB's observations and recommendations concerning the International Board of Auditors for NATO (IBAN) Special Report to Council on the Science for Peace and Security Programme (SPS) (reference (a)).

IBAN report summary and recommendations

2. The aim of the audit was to provide assurance to Nations that the Science for Peace and Security's programme of work supports NATO's strategic goals and objectives and that the programme is achieving its intended outcomes. The audit had two objectives to determine the following:

- if the Science for Peace and Security Programme is meeting its objectives and is in line with NATO's objectives, and
- if overall programme management is effective.

3. The SPS programme aims to foster non-military co-operation among the civilian communities of the Alliance with all partners, including on security related civil science, technology and innovation. SPS promotes collaboration and cooperative security based on three core dimensions of science, partnership, and security. SPS Key Priorities are based on NATO's 2010 Strategic Concept and the 2011 Strategic Objectives of NATO's Partner Relations. In October 2013, Nations approved the new SPS Overarching Guidelines to clarify the scope, policy objectives and working procedures of the programme. Nations also approved a new SPS programme of work for 2014 with more focus on hard security issues. SPS has three main grant mechanisms: projects, workshops and training. The programme's approved budget for 2014 was EUR 12.1 million.

Main findings

4. *Science for Peace and Security Programme Objectives Reflect NATO's overall Goals and Objectives*

4.1. The IBAN found the mandate of the SPS Programme to be consistent with the Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation adopted in Lisbon in November 2010. In addition, the IBAN found that

SPS is meeting its objectives and several NATO objectives are also found in specific SPS deliverables.

4.2. The IBAN noted that there is evidence of extensive collaboration between NATO bodies involved in Partnerships, Public Diplomacy and the science community. There is detailed involvement by the various experts in the SPS. For example, all divisions that are involved in particular projects are represented at the SPS working group.

5. *The Science for Peace and Security Programme is Effectively Managed*

5.1. The IBAN found that the SPS Programme has a documented procedure for screening applications. The SPS Programme office follows this process and has a well documented audit trail from receipt of an application through review, recommendation, approval and project implementation and assessment. The SPS programme of work is effectively screened and the project management process is rigorous and includes effective control mechanisms. However, these control mechanisms impact both the efficiency of project delivery and the effectiveness of the overall programme as they have tended to slow down the programme delivery and project lifecycle timelines. The IBAN notes that the extensive nature of the controls imposed on even the lowest value projects are the same as those placed upon the largest projects.

5.2. As the Nations no longer have a science committee, the only level of national input is the Partnerships and Co-operative Security Committee. This level of political oversight can be difficult to balance with the highly complex and technical nature of the programme, for which the Nations rely on the expertise of the Independent Scientific Evaluation Group (ISEG). As this experts group provides the main control point for recommendations to Nations, their expertise is a key element of governance. In the IBAN view there was scope to make the 26 person ISEG membership more widely based and more balanced. Some 14 Allied nations are not represented on the panel and nine of the 14 Nations represented have more than one member.

5.3. The IBAN found the post-project evaluations useful to gauge the success of individual projects and that there is a well developed culture of capturing feedback and evaluations from all SPS projects reviewed. However, these evaluations are largely based on the key success criteria for individual projects. The SPS Programme does not currently have the capacity to conduct further analysis of trends, potential for future project planning and lessons learned. The IBAN noted instances where the SPS project evaluations could benefit from more extensive analysis.

IBAN recommendations

6. The IBAN made three recommendations:

6.1. That Nations consider balancing risk and materiality by reducing the level of scrutiny afforded to even the smallest SPS projects in the interest of efficiency and effectiveness.

6.2. That Nations consider adequate, proportional and fair representation of Allied experts and scientific disciplines on the ISEG in accordance with New SPS Structure and ISEG nomination documents.

7. That the SPS Programme formalise a process for systematically analysing the results of SPS project evaluations against SPS Programme and Partnership objectives to use this feedback as the basis for planning future projects.

RPPB Conclusions

8. The RPPB is pleased to note the IBAN's conclusions that the Science for Peace and Security Programme (SPS) is effectively managed and that its objectives reflect NATO's overall goals and objectives.

9. Some nations expressed reservations concerning the IBAN recommendation to consider reducing the level of scrutiny afforded to the smallest SPS projects in the interest of efficiency and effectiveness; and that to the contrary, due the political importance of the SPS programme, all projects, even the smaller ones, warrant the same high level of scrutiny.

10. The RPPB notes that the Assistant Secretary General, Emerging Security Challenges Division (ESC) concurs with all the IBAN recommendations, and further encourages all relevant stakeholders to ensure that the recommendations are implemented.

11. The RPPB concludes that the subject IBAN Special Report to Council does not contain information which, according to the NATO Policy on Public Disclosure of NATO Information, shall be withheld from public disclosure, and therefore, in line with the agreed policy in PO(2015)0052, the subject IBAN report shall be publicly disclosed.

RPPB Recommendations

12. The Resource Policy and Planning Board (RPPB) recommends that Council:

- (a) note the IBAN report IBA-AR(2014)36 along with the present report;
- (b) endorse the conclusions of the RPPB as outlined in paragraphs 8 through 11;
- (c) note that the IBAN report IBA-AR(2014)36, in line with the agreed policy in PO(2015)0052, shall be publicly disclosed.

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INTERNATIONAL BOARD OF AUDITORS FOR NATO
SPECIAL REPORT TO COUNCIL
ON THE SCIENCE FOR PEACE AND SECURITY PROGRAMME

Note by the Secretary General

The International Board of Auditors for NATO (IBAN) summarises in this special report its audit of the Science for Peace and Security Programme. The Report makes three recommendations which are summarised on pages 1-1 to 1-3. The Audit report (Annex 2) was issued to the Assistant Secretary General, Emerging Security Challenges for comments. These comments have been included in the report. The IBAN has prepared a Summary Note to Council (Annex 1).

Attachments:
Annex 1: Summary Note to Council
Annex 2: IBAN Audit report
2 Annexes
1 Appendix

Original: English

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**Summary Note for the Council
by the International Board of Auditors for NATO
on the Science for Peace and Security Programme**

Introduction

In accordance with Article 17 of its Charter, the International Board of Auditors for NATO (IBAN) conducted this audit as a result of interest expressed by the Resource Planning and Policy Board as well as a request from the Assistant Secretary General, Emerging Security Challenges. This audit is intended to provide Nations assurance that the Science for Peace and Security's (SPS) programme of work supports NATO's strategic goals and objectives and that the programme is achieving its intended outcomes. The audit had two objectives to determine the following:

- 1) if the Science for Peace and Security Programme is meeting its objectives and is in line with NATO's objectives, and
- 2) if overall programme management is effective.

The SPS programme aims to foster non-military co-operation among the civilian communities of the Alliance with all partners, including on security related civil science, technology and innovation. SPS promotes collaboration and cooperative security based on three core dimensions of science, partnership, and security. SPS Key Priorities are based on NATO's 2010 Strategic Concept and the 2011 Strategic Objectives of NATO's Partner Relations. In October 2013 Nations approved the new SPS Overarching Guidelines to clarify the scope, policy objectives and working procedures of the programme. Nations also approved a new SPS programme of work for 2014 with more focus on hard security issues. SPS has three main grant mechanisms: projects, workshops and training. The programme's approved budget for 2014 was EUR 12.1 million.

Audit Highlights

Science for Peace and Security Programme Objectives Reflect NATO's overall Goals and Objectives

The IBAN found the mandate of the SPS Programme to be consistent with the Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation adopted in Lisbon in November 2010. In addition, the IBAN found that SPS is meeting its objectives and several NATO objectives are also found in specific SPS deliverables.

The IBAN noted that there is evidence of extensive collaboration between NATO bodies involved in Partnerships, Public Diplomacy and the science community. There is detailed involvement by the various experts in the SPS. For example, all divisions that are involved in particular projects are represented at the SPS working group.

The Science for Peace and Security Programme is Effectively Managed

The IBAN found that the SPS Programme has a documented procedure for screening applications. The IBAN found that the SPS Programme office follows this process and has a well documented audit trail from receipt of an application through review, recommendation, approval and project implementation and assessment.

The IBAN found the SPS programme of work is effectively screened and the project management process is rigorous and includes effective control mechanisms. However, these control mechanisms impact both the efficiency of project delivery and the effectiveness of the overall programme as they have tended to slow down the programme delivery and project lifecycle timelines. The IBAN notes the extensive nature of the controls imposed on even the lowest value projects are the same as those placed upon the largest projects.

As the Nations no longer have a science committee, the only level of national input is the Partnerships and Co-operative Security Committee. This level of political oversight can be difficult to balance with the highly complex and technical nature of the programme, for which the Nations rely on the expertise of the Independent Scientific Evaluation Group (ISEG). As this experts group provides the main control point for recommendations to Nations, their expertise is a key element of governance. The IBAN found that there was scope to make the 26 person ISEG membership more widely based and more balanced. Some 14 Allied nations are not represented on the panel and nine of the 14 Nations represented have more than one member.

The IBAN found the post-project evaluations useful to gauge the success of individual projects and that there is a well developed culture of capturing feedback and evaluations from all SPS projects reviewed. However, these evaluations are largely based on the key success criteria for individual projects. The IBAN found that the SPS Programme does not currently have the capacity to conduct further analysis of trends, potential for future project planning and lessons learned. The IBAN noted instances where the SPS project evaluations could benefit from more extensive analysis.

Recommendations

The Board made three recommendations:

- 1) The IBAN recommends the Nations consider balancing risk and materiality by reducing the level of scrutiny afforded to even the smallest SPS projects in the interest of efficiency and effectiveness.
- 2) The IBAN recommends that Nations consider adequate, proportional and fair representation of Allied experts and scientific disciplines on the ISEG in accordance with New SPS Structure and ISEG nomination documents.
- 3) The IBAN recommends the SPS Programme formalize a process for systematically analysing the results of SPS project evaluations against SPS Programme and Partnership objectives to use this feedback as the basis for planning future projects.

19 December 2014

*(Final version – 30 January 2015 – including the comments of the
Assistant Secretary General, Emerging Security Challenges Division (ESC))*

INTERNATIONAL BOARD OF AUDITORS FOR NATO

SPECIAL REPORT TO COUNCIL

ON THE SCIENCE FOR PEACE AND SECURITY PROGRAMME

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1. INTRODUCTION

In accordance with Article 17 of its Charter, the International Board of Auditors for NATO (IBAN) conducted this audit as a result of interest expressed by the Resource Planning and Policy Board as well as a request from the Assistant Secretary General, Emerging Security Challenges.

2. AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

2.1 This audit is intended to provide Nations assurance that the Science for Peace and Security's (SPS) programme of work supports NATO's strategic goals and objectives and that the programme is achieving its intended outcomes.

2.2 The audit team conducted the work with two audit objectives: to determine if the Science for Peace and Security Programme is (1) meeting its objectives and is in line with NATO's objectives, and (2) overall programme management is effective.

2.3 The observations in this audit report are based on analysis of documents and working papers, some in draft form, as well as working level meetings with and written responses from the SPS Programme Office and the Assistant Secretary General, Emerging Security Challenges (ESC). The audit team also used the work of other associated programme or support entities at NATO such as the Science and Technology Organization (STO), Political Affairs and Security Policy Division (PASP) and the Communications Services (COMS) in the Public Diplomacy Division (PDD). The audit team carried out testing on a sample SPS projects to determine if the programme office was compliant with its procedures. This was a judgemental sample of 12 (26%) of the 47 projects closed in 2013 and 2014. The sample was selected to ensure coverage of all the different grant mechanisms. The IBAN has not sought to fully audit the data provided by NATO bodies or the statements they have made. The audit work covered the period between 11 September and 26 November 2014.

3. BACKGROUND INFORMATION AND DESCRIPTION

3.1 The Science for Peace and Security Programme

3.1.1 The NATO SPS Programme was established in 2006 as a successor of the Science Programme founded in 1958 with the aim to foster non-military cooperation among the civilian communities of the Alliance. As a part of NATO's partnership policy, the SPS Programme is targeted to reach both governmental and civil audiences to enhance cooperation and dialogue between NATO countries and Partner countries based on security-related civil science, technology and innovation. The programme attempts to provide the Alliance with an important partnership tool, a well-recognised 'brand' to attract interest among partners and from other partnership frameworks (such as the Euro-Atlantic Partnership Council, NATO-Russia Council, NATO-Ukraine Commission, NATO-Georgia Commission, Mediterranean Dialogue (MD), Istanbul

Cooperation Initiative, and Partners across the Globe). This dialogue also includes coordination and/or joint activities with other international organizations.

3.1.2 Figure 1 below depicts how SPS aims to promote collaboration and cooperative security based on three core dimensions:

Figure 1: Three Core Dimensions of the Science for Peace and Security Programme

Science	Partnership	Security
Foster research, innovation and knowledge exchange in an effort to address mutual security challenges. SPS has a vast network reaching out to hundreds of universities and institutions across the world.	The collaborative framework of the Programme brings together scientists, experts and policy makers from Allied and over 40 Partner countries to address today's security challenges. The SPS Programme is a partnership tool, available to all partners, for practical cooperation across political barriers through scientific exchange.	All projects developed under SPS must have a fundamental and relevant security dimension. This is also reflected in the SPS Key Priorities developed by Allies. SPS fills 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.

Source: PPC-N(2014)0064: SCIENCE FOR PEACE AND SECURITY (SPS) PROGRAMME.

3.1.3 SPS Key Priorities are based on NATO's Strategic Concept as agreed by Allies in Lisbon in November 2010 and the Strategic Objectives of NATO's Partner Relations as agreed in Berlin in April 2011. All SPS activities funded under the SPS Programme must address the SPS Key Priorities listed below and must have a clear link to security and to NATO's strategic objectives:

- i. Facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet emerging security challenges such as energy and environmental security,
- ii. Enhance support for NATO-led operations and missions,
- iii. Enhance awareness on security developments including through early warning, with a view to preventing crises, and
- iv. Any project related 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.

3.1.4 SPS activities can be initiated two different ways:

- i. Large top-down multi-year projects in response to Partner needs and/or requests endorsed by NATO International Staff, the STO, and Allied and partner delegations. These types of projects target key regional and national partner

priorities and typically focus more on technological/equipment development than scientific research. An example project the audit team reviewed was the Stand-Off Detection of Explosives Programme (STANDEX) which aimed to integrate various techniques and technologies for the real-time detection of explosives in mass transit environments.

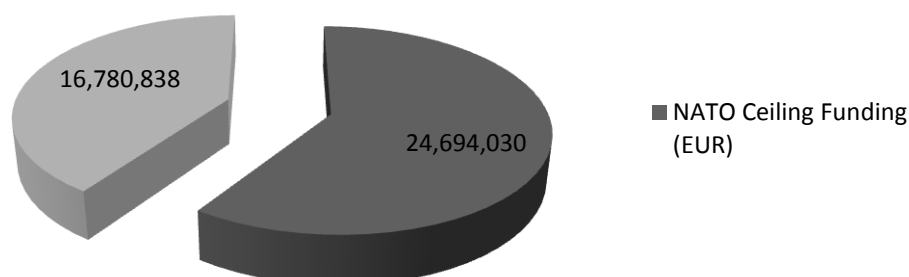
- ii. Bottom-up proposals submitted by individual scientists/security experts in partner countries, in response to the advertised key priorities of the SPS Programme. These types of projects support NATO in developing dialogue and building trust with and among partners and contribute to improving NATO's image among the scientific, academic and political communities with a strong focus on civil security-related scientific research projects.

3.1.5 SPS activities are conducted under three main grant mechanisms: projects, workshops and training. SPS multi-year projects (MYP) have defined objectives, budgets and milestones, and usually last three to four years. Workshops are expert forums that constitute an informal exchange of views on emerging topics with the aim of identifying directions for future action. Training courses to convey the latest developments in a subject to an advanced-level audience and seminars organised to enable specialists in NATO countries to share their expertise with trainees from partner nations.

3.1.6 The SPS Programme allocates funds to joint collaboration activities which are conducted by NATO and Partner experts. The NATO Co-Director is responsible for managing NATO funds. Payments to SPS activities are made only to the NATO Co-Director. In general, no NATO common funding is paid directly to a partner nation. These payments are only made in accordance with predetermined processes which are in line with the NATO Financial Regulations. For multi-year projects, it is only after progress reports have been submitted and approved and project milestones have been achieved. For workshops and training activities payments are made in three instalments, and only after receiving the required documentation and supporting justification.

3.1.7 SPS personnel are International Staff (IS) under the ESC Division. The current establishment is three staff officers and one administrative assistant, but the IBAN notes that number is increased by six, including a number of dual-hat 'expert' posts, from within ESC. SPS is funded from the IS Civil Budget and the allocation for 2014 is EUR 12.1 million. This represents a 50% reduction of the 2000 Science Programme budget, which was EUR 24.3 million. As NATO common funds cannot be used to pay for salaries or overhead costs on individual projects, Allies and Partners also contribute additional national funds to many of these projects. The SPS programme is responsible to Nations for reporting only on the NATO common funds approved for use. While the SPS programme does not currently report this figure, the IBAN estimates that approximately 40% of the total amounts of funds approved for SPS projects in 2013 and to the fourth quarter 2014 were provided by non-NATO funds. The figure below illustrates this estimated breakdown for the 110 projects approved by Nations in 2013 and 2014.

Figure 2: NATO Common funds versus Non-NATO Funds approved for SPS Projects, 2013 and 2014

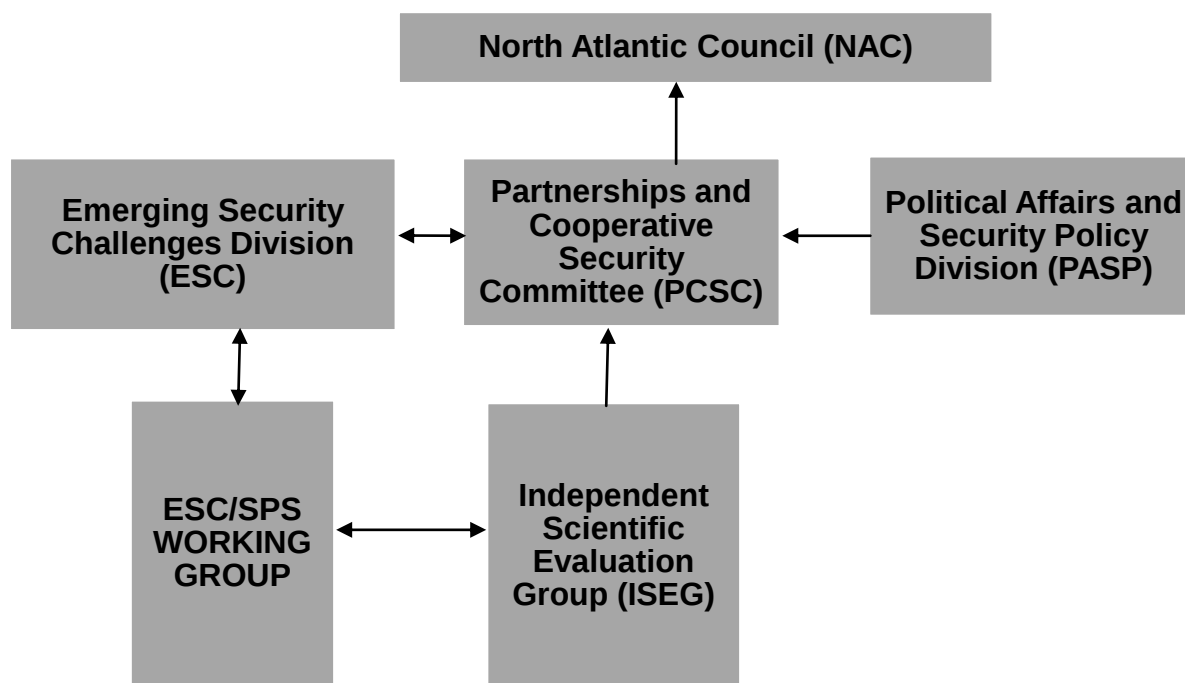


Source: IBAN analysis of data gathered by the SPS programme.

3.2 Science for Peace and Security Programme governance

3.2.1 During the NATO Headquarters Reform exercise, Nations approved that “Strategic and political guidance for the Science for Peace and Security programme should be provided by the Political and Partnerships Committee (PPC)” thereby dissolving the Science for Peace and Security Committee. Furthermore, the SPS Programme and its staff were transferred to the newly created ESC Division. The Assistant Secretary General for ESC is now responsible for the management and implementation of the SPS Programme and reports to the Nations through the Partnerships and Cooperative Security Committee (PCSC), which was formerly known as the PPC. Under the ESC Division, the ESC/SPS Working Group is a cross-cutting inter-divisional working group consisting of expert staff depending on the subject under discussion. The following diagram illustrates the current governance structure of the SPS Programme:

Figure 3: SPS Programme Governance Structure



3.2.2 To make the SPS Programme more efficient and cost-effective, the Nations decided to replace the previous four advisory panels representing various scientific disciplines with one multi-disciplinary body, the Independent Scientific Evaluation Group (ISEG). To ensure the quality of all SPS activities, all proposals are now peer-reviewed by the ISEG which in turn proposes recommendations to Allies for approval for funding.

3.2.3 In addition, in October 2013 Nations approved the new SPS Overarching Guidelines to clarify the scope, policy objectives and working procedures of the programme. Nations also approved a new strategic SPS programme of work for 2014 in line with the 2013 Strategic Assessment which covered the five year period 2008-2012.

3.2.4 This new programme of work has a renewed focus on hard security issues, a move away from 'softer' environmental security. As part of the reform process, it was decided that the majority of the programme of work would focus on 'top-down' projects. A smaller part of the budget (25%-35%) would be earmarked for 'bottom-up' activities, provided that these activities met the criterion of high scientific quality and corresponded to the SPS Key Priorities with a clear link to security. This would allow for a greater portion of the budget to be spent on larger scale and more strategic activities with high political impact, enhanced public diplomacy value and effectiveness, and activities beyond purely scientific cooperation.

3.2.5 The PCSC provides the strategic and political guidance for the SPS Programme. Annually, they provide the basis for the SPS work programme. This includes a set of priorities consistent with the common security challenges identified in NATO's Strategic Concept and in line with the Alliance Partnership Policy. The PCSC give the final approval on the selection of projects recommended after scientific evaluation by the Independent Group of Scientific Experts (ISEG).

3.2.6 The ISEG has seven primary functions:

- Provide scientific and technical advice on applications for bottom-up SPS activities;
- Evaluate (peer-review) and rank bottom-up applications by SPS Key Priorities as set by the PCSC;
- Review bottom-up and top-down Science for Peace (SfP) project plans presented by applicants;
- Review nationally-funded activities;
- Carry out horizon scanning at a multi-disciplinary level;
- Present reports to the PCSC on the progress of the SPS activities; and
- Initiate applications or develop plans for new top-down projects that respond to identified key priorities.

4. SCIENCE FOR PEACE AND SECURITY PROGRAMME OBJECTIVES REFLECT NATO'S OVERALL GOALS AND OBJECTIVES

4.1 The Science for Peace and Security Programme objectives are in line with NATO's Strategic Concept

4.1.1 All SPS Programme activities must contribute to 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. The Strategic Concept: guides NATO's evolution to continue to be effective in a changing world, against new threats, with new capabilities and new partners; offers the partners around the globe more political engagement with the Alliance; and aims to help promote common security with its partners around the globe. The overall objective of the SPS Programme is enhancing cooperation and dialogue with all partners, based on civil science and innovation, to contribute to the Alliance's core goals and to address the priority areas for dialogue and cooperation identified in the new partnership policy. The SPS Programme supports collaboration between scientists and experts from NATO and partner countries that are associated with the Alliance and funds collaborative activities on topics that are relevant to NATO's strategic objectives.

4.1.2 Specifically, the IBAN found the mandate of the SPS Programme to be consistent with the *Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation* adopted in Lisbon in November 2010. In addition, the IBAN found that SPS is meeting its objectives and is in line with NATO's

objectives. For instance, under the umbrella of “The Security Environment”, the Strategic Concept addresses vital communication, transport and transit routes for international trade, energy security and prosperity as areas requiring greater international efforts to ensure their resilience against attack or disruption. This section also includes significant technology-related trends, such as the development of laser weapons, electronic warfare and technologies that impede access to space that could impact on NATO’s military planning and operations and key environmental and resource constraints, including health risks, climate change, and water scarcity and increasing energy needs that will further shape the future security environment. The IBAN also found examples of projects under the umbrella of “Defence and Deterrence”, particularly with respect to developing training, exercises, contingency planning and information exchange for assuring defence against the full range of conventional and emerging security challenges and developing NATO’s capacity to defend against the threat of chemical, biological, radiological weapons.

4.2 The Science for Peace and Security Programme collaborates with the wider NATO security, science and partnership community to achieve synergies

4.2.1 The IBAN sought to assess if the SPS Programme was able to achieve synergies with other NATO bodies involved in partnership, outreach and/or scientific activity. The IBAN’s work focused on the following NATO bodies that interact with SPS:

- i. Allied Command Transformation (ACT): leads initiatives designed to transform NATO’s military structure, forces, capabilities and doctrine. Its main responsibilities include education, training and exercises, as well as conducting experiments to assess new concepts, and promoting interoperability throughout the Alliance.
- ii. The NATO Science and Technology Organization (STO): acts as NATO’s principal organization for science and technology research composed of the Office of the Chief Scientist, the Collaboration Support Office and the Centre for Maritime Research and Experimentation. To maintain and strengthen the existing network of the SPS Programme and the STO, two experts from the STO are members of the ISEG. Their expertise matches the SPS Key Priorities to enable them to actively participate in the peer review process. In addition, as indicated by the NATO Science and Technology Strategy, the NATO Chief Scientist has invited SPS to submit an annual action plan for coordination with the broader NATO Science and Technology Community. The Senior Advisor SPS Programme is an ex-officio in the Science and Technology Board representing the ESC Division.
- iii. The Committee on Public Diplomacy (CPD): acts as an advisory body to the North Atlantic Council (NAC) on communication, media and public engagement issues. It makes recommendations to the NAC on how to encourage public understanding of, and support for, the aims of NATO. The CPD develops

recommendations regarding NATO's public diplomacy strategy and activities, where appropriate, in conjunction with national information experts.

- iv. Political Affairs and Security Policy (PASP): leads the political aspects of NATO's fundamental security tasks, with responsibility for Enlargement Policy, Multilateral Policy, Russia and Ukraine Relations, Partnership for Peace, Regional Affairs and the Mediterranean Dialogue, Conventional Arms Control Policy and Defence and Security Economics among others. The *Active Engagement in Cooperative Security: A More Efficient and Flexible Partnership Policy* endorsed in Berlin in April 2011 declares the objectives of the policy among others are to:
- Enhance Euro-Atlantic and international security, peace and stability;
 - Promote regional security and cooperation;
 - Facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet emerging security challenges;
 - Enhance support for NATO-led operations and missions; and
 - Enhance awareness on security developments including through early warning, with a view to preventing crises.

This partnerships policy highlights the SPS Programme as an institutional tool for partnership: *NATO, in consultation with partners, will continue to make full use of other partnership tools and mechanisms, in particular by (...) Cooperation through the Science for Peace and Security Programme.*

- v. The SPS Programme continues to work closely with various NATO Centres of Excellence, such as those on Defence against Terrorism, Cyber Defence, CBRN and Energy Security. The SPS Programme holds regular meetings with the centres to discuss possibilities for common activities of mutual interest.

4.3 Conclusion

4.3.1 The Strategic Concept underscores that NATO's approach to partnerships will be flexible. SPS can serve as a tool to ensure and enhance this flexibility. Through its renewed focus, and its capacity to achieve synergies both within the NATO and partner community to improve and extend NATO cooperation in non-military fields, the Programme can help NATO attain its security objectives.

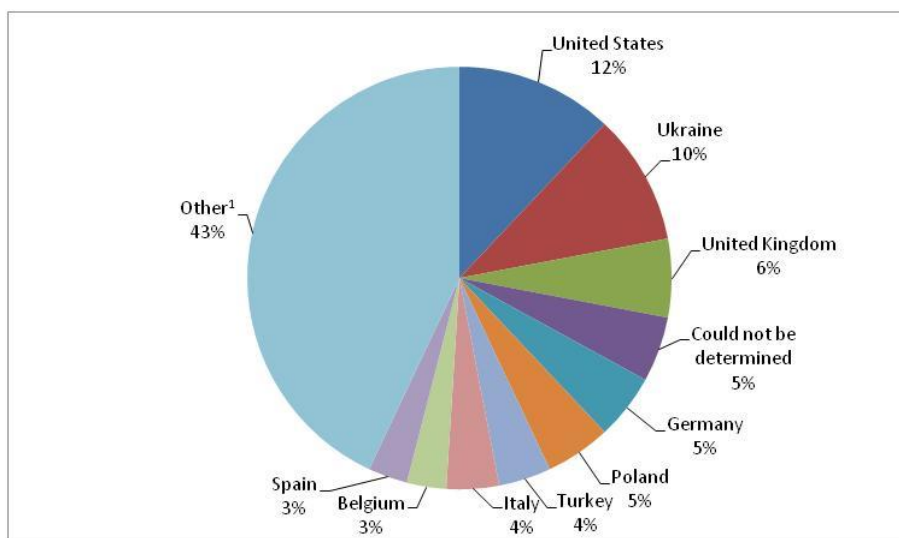
4.3.2 The IBAN noted that there is evidence of extensive collaboration between the NATO bodies involved in Partnerships, Public Diplomacy and the science community. There is detailed involvement by the various experts in the SPS. For example, all divisions that are involved in particular projects are represented at the SPS Working Group. This collaboration begins at the programme of work stage, during the application screening process, through project implementation and evaluation.

5. THE SCIENCE FOR PEACE AND SECURITY PROGRAMME IS EFFECTIVELY MANAGED

5.1 The Science for Peace and Security programme of work is closely screened and monitored

5.1.1 The tools which support the efficiency and effectiveness of the SPS application process are available to potential applicants on the SPS external website. An SPS Questionnaire includes relevant criteria for success and the template for ISEG evaluation is a tool which supports good governance. According to PDD's COMS division, the SPS website (<http://www.nato.int/cps/en/natohq/78209.htm>) ranks in the top 40 most consulted NATO websites with an average 5,200 page views per month in the first 10 months of 2014. The wide range of source nations of SPS page views are summarised in Figure 4 below.

Figure 4: Source nations of SPS internet website page views

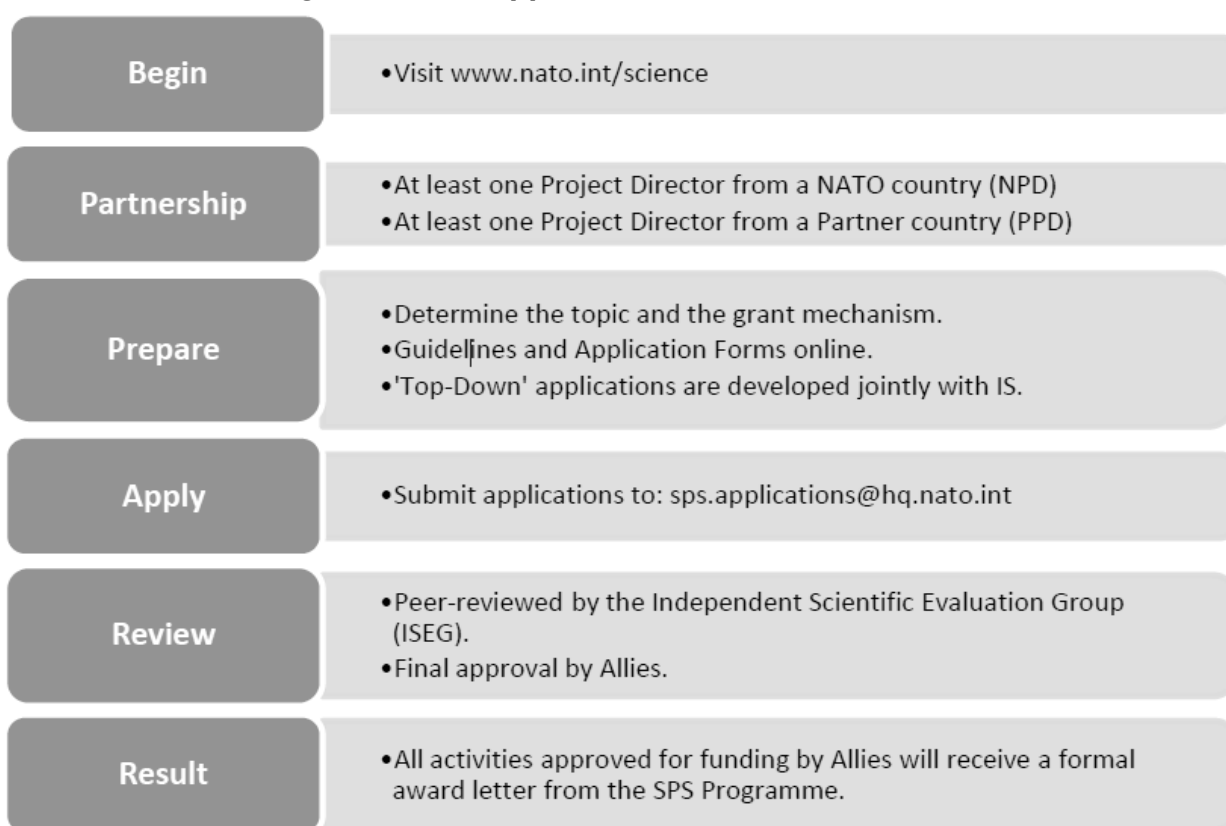


Source: NATO Public Diplomacy Division. Data shown cover the first 10 months of 2014.
Note 1 "Other" covers views made from 68 different nations. Of these the most frequent views came from Romania, Portugal, Canada, France and Serbia.

5.1.2 The IBAN found that the SPS Programme has a documented procedure for screening applications. The IBAN found that the SPS Programme office follows this process and has a well documented audit trail from receipt of an application through review, recommendation, approval, project implementation, and evaluation. The SPS staff receives and pre-screens applications by applying eligibility criteria. Most applications rejected at this level are due to weaknesses or not adequately addressing the SPS Key Priorities. The applications that are deemed eligible are passed on to the multidisciplinary ISEG, who review all SPS applications for scientific and technical merit. The ISEG recommendations are submitted to the Nations for approval. Allies provide the final approval for all SPS Programme activities in the PCSC.

5.1.3 In 2013, the SPS received 191 applications, 16% more than the previous year. These applications were passed on to the ISEG which recommended approximately half to the Nations who finally approved 51 projects for funding. Since 2013, detailed project proposal factsheets are sent to each nation two weeks before PCSC meetings. Presentations to the PCSC accompany the factsheets for large projects. Each project fact sheet includes the recommendation from the ISEG, duration, SPS Key Priority, end user, funding (including non-NATO funding) and impact information. The chart below summarises the SPS application and award process.

Figure 5: SPS Application and Award Process



Source: SPS Annual Report 2013.

5.1.4 The IBAN found that the ISEG does not currently have set Terms of Reference. In lieu, a call for nominations is circulated to Allies per the SPS New Structure. At present, there are 25 members from 14 Allied nations and one from a Partner nation for projects in the NATO-Russia Council.¹ This means that some Allies currently have two or three experts on the ISEG and others have none. The IBAN considers that this poses a risk to the technical aspects of the SPS Programme as ISEG is the sole independent evaluator of sound scientific content. There is currently no way to balance

¹The 14 Allied nations represented on ISEG are: Belgium, Croatia, Czech Republic, Germany, Italy, Lithuania, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Turkey and United States. The Partner nation represented is Russia.

national participation on ISEG (as it is voluntary) against appropriate multi-disciplinary representation.

5.2 Individual Science for Peace and Security projects are subject to rigorous project management

5.2.1 The SPS Project Management Handbook is the primary tool to ensure good governance of the projects and related activities. In addition, the programme relies heavily on a Scientific Affairs System (SAS) database to register applications, generate letters, reports, request funds and monitor progress. The IBAN found the SPS Programme had a well documented and well understood project management process.

5.2.2 The IBAN carried out a detailed review of a sample of 12 individual SPS projects closed in 2013 and 2014, stratified by project type. In every case, the files were complete in every regard and the review revealed no errors. In general, the SPS is tightly controlled. All projects have to include a clear objective, defined success criteria, milestones and result in an end product (e.g. deliverable, training course, seminar or workshop), an evaluation and a financial report. In 2013 and 2014, the IBAN determined that 25 books were published in the SPS series with a total distribution of around 3,600 copies. All of these publications are peer reviewed and available for purchase.

5.2.3 The IBAN found that all projects sampled which were required to, submitted their self-evaluation and independent evaluations. In all cases, the Key Criteria for Success identified in the proposal and factsheet were mostly if not fully met.

5.2.4 However, the IBAN found evidence that instead of making the process more efficient, the additional measures approved by Nations appear to have increased the total life-cycle of most projects in the programme, the vast majority of which are under EUR 1 million. In particular, SPS Programme staff indicated that about half of proposals for PCSC review require the factsheet to be amended and reviewed again. This dramatically slows down the process of project approval. The IBAN also noted the extensive financial management procedures in the handbook, even for small amounts. For example, the handbook states that competitive bidding is required for all purchases above EUR 12,500 while the NATO Financial Regulations only require it at EUR 20,000.

5.2.5 The IBAN noted that, as the IS has planned to migrate to an Enterprise Resource Planning (ERP) solution in January 2015, the SPS Programme has been informed its SAS database will no longer be supported. At the moment, they have been told the IS do not have a project management module on their chosen ERP platform. The SPS Programme staff indicated this would be a labour intensive adaptation of their management of the programme in the future as all projects are integrally managed in this SAS database at the moment.

5.3 The Science for Peace and Security Programme reports the results of projects to its governing body

5.3.1 The SPS Programme monitors its progress through regular meetings and on a bi-lateral basis with Allies and partners. The SPS Programme reports to the NAC through the PCSC. The Programme publishes an annual report to evaluate its performance and activities. The ASG ESC's annual briefing to the NAC has an important role in providing information to the Allies. In 2013, the SPS Programme published a five year self-assessment covering the period 2008-2012.

5.3.2 Access to information on SPS activities is transparent; the primary methods are through the PCSC and ISEG meetings. These are complemented by informal bi-lateral discussions between Allies and partner states as required. Information days are useful to share necessary information for the relevant communities in Allied and partner countries. Publications resulting from each event provide relevant information on the project. Contact Points of Embassies and NATO Liaison Officers are also kept informed. Information provided to the Budget Committee ensures sufficient opportunity for the Allies to evaluate the success of the Programme. The SPS Programme website is another important source of information.

5.4 Conclusion and recommendations

5.4.1 The IBAN found the SPS programme of work is effectively screened and the project management process is rigorous and includes effective control mechanisms. However, these control mechanisms impact both the efficiency of project delivery and the effectiveness of the overall programme as they have tended to slow down the programme delivery and project lifecycle timelines. The IBAN notes the extensive nature of the controls imposed on even the lowest value projects are the same as those placed upon the largest projects. Every SPS project has its own fact sheet, is continuously monitored with milestones and deliverables, for the largest projects detailed interim or progress reports are provided to the programme office and all projects receive a post-project evaluation.

Recommendation 1

5.4.2 The IBAN recommends the Nations consider balancing risk and materiality by reducing the level of scrutiny afforded to the smallest SPS projects in the interest of efficiency and effectiveness.

5.4.3 As the Nations no longer have a science committee, the only level of national input is the PCSC. This level of political oversight can be difficult to balance with the highly complex and technical nature of the programme, for which the Nations rely on the expertise of the ISEG. As this experts group provides the main control point for recommendations to Nations, their expertise is a key element of governance. The IBAN found that there was scope to make the 26 person ISEG membership more widely

based and more balanced. Some 14 Allied nations are not represented on the panel and nine of the 14 Nations represented have more than one member.

Formal Comments of ASG ESC

We fully agree with this recommendation. The intention is to explore with nations in the PCSC ways to simplify the scrutiny of the approval process for SPS activities with funding below a certain threshold in a timely and more efficient manner, in accordance with this recommendation, consider balancing risk and materiality by reducing the level of scrutiny afforded to even the smallest SPS projects in the interest of efficiency and effectiveness.

Recommendation 2

5.4.4 The IBAN recommends that Nations consider adequate, proportional and fair representation of Allied experts and scientific disciplines on the ISEG in accordance with new SPS Structure and ISEG nomination documents.

5.4.5 The IBAN found the post-project evaluations useful to gauge the success of individual projects. The IBAN noted that there is a well developed culture of capturing feedback and evaluations from all SPS projects reviewed. However, these evaluations are largely based on the key success criteria for individual projects. In addition, the IBAN notes many projects have resulted in a publication which has been reproduced in one or more journals, most of which rely on extensive peer review exercises prior to publication. The IBAN found that the SPS Programme does not currently have the capacity to conduct further analysis of trends, potential for future project planning and lessons learned. The IBAN noted instances where the SPS project evaluations could benefit from more extensive analysis. In particular, this analysis could be done against the principles set out in the Partnership Policy:

- II. Strategic objectives;
- III. Priority areas for dialogue, consultation and cooperation;
- X. Prioritising NATO's resources for partnership objectives; and
- Paragraph 15 which states: *Partnership tools and mechanisms, as well as individual activities, will be reviewed regularly through a feedback mechanism, to ensure they meet current needs and are appropriately resourced, and to discard activities which are no longer relevant.*

Formal Comments of ASG ESC

We agree with this recommendation. The selection of ISEG members is made by PCSC based on voluntary nominations of candidates by NATO nations. A balanced representation of nations has always been the aim of the SPS Programme over the years.

In 2014, in line with the approved SPS Governance documents, NATO nations were actively encouraged in the PCSC to put forward new candidates for ISEG membership with the aim to also provide a more proportional and fair representation of Allied nations within this body. The duration of the “call for nominations” addressed to nations has been extended from April until September. This measure proved to be productive as the number of nominations more than doubled from 23 to 55. Now the geographical representation has become relatively better balanced as additional Allies responded to the “call for nominations” process, bringing the number of Allied countries representation in ISEG from 14 to 18.

The ISEG is a multi-disciplinary panel covering as many SPS Key Priorities as possible; however it is challenging to cover all the SPS Key Priorities. In practice, in those few situations where the priorities are not covered, former ISEG members are invited to evaluate these applications.

Given the fact that the ISEG membership is based on voluntary participation, the way to address a more balanced distribution within this group of experts is to continue every year to advertise the importance of presenting nominations from all Allies. Currently, some Allies have two or three experts in ISEG and others have none. In order to rectify this situation we could also propose to establish a rule that should emphasize the participation to ISEG with no more than two experts per country, based on a prior agreement by PCSC. However, this rule can only be applied if significant number of nominations is presented by nations.

Recommendation 3

5.4.6 The IBAN recommends the SPS Programme formalize a process for systematically analysing the results of project evaluations against SPS Programme and Partnership objectives to use this feedback as the basis for planning future projects.

Formal Comments of ASG ESC

In principle, we agree with IBAN recommendation 3. In the past, with the aim of using the results of the projects as a feedback, several thematic cluster workshops with the participation of the experts and co-directors of the ongoing and completed SPS projects – such as explosive detection, CBRN Defence – have been organized to identify potential future projects in the SPS Key Priority areas and to share best practices. This initiative can be expended and pursued according to the IBAN’s recommendation and adapted to the political context. This will be, however, a labour intensive exercise.

We intend to develop a matrix/evaluation analysis of the completed projects which comprises of a list of partner and NATO nations, the priority topics and the scientific and public diplomacy impact. The analysis of these data will provide

the feedback for the development of the future SPS Work Programme. The results of this analysis will depend on the level of comprehensiveness of the feedback and the analyzed data. In order to respond to all aspects of this recommendation, the SPS Programme will need to benchmark the expected results against human and financial resource constraints.

LIST OF ABBREVIATIONS

ASG	Assistant Secretary General
COMS	Communications Services
CPD	Committee on Public Diplomacy
ERP	Enterprise Resource Planning
ESC	Emerging Security Challenges
EUR	Euro
IBAN	International Board of Auditors for NATO
IS	International Staff
ISEG	Independent Scientific Evaluation Group
MD	Mediterranean Dialogue
PASP	Political Affairs and Security Policy Division
PCSC	Partnerships and Cooperative Security Committee
PDD	Public Diplomacy Division
PPC	Political and Partnerships Committee
RTO	NATO Research and Technology Organization
SAS	Scientific Affairs System
SPS	Science for Peace and Security
STANDEX	Stand-Off Detection of Explosives Programme
STO	NATO Science and Technology Organization
TOR	Terms of Reference