NATO UNCLASSIFIED

11 January 2018

DOCUMENT
C-M(2017)0074-AS1

IBAN PERFORMANCE AUDIT REPORT ON THE ASSESSMENT OF OUTCOMES AND BENEFITS OF NSIP PROJECTS

ACTION SHEET

Ref: C-M(2017)0074-ADD1

On 10 January 2018, under the silence procedure, the Council noted the RPPB report attached to C-M(2017)0074 and agreed its recommendations.

The Council noted the joint letter from the Delegations of Canada, Czech Republic, Denmark, France, Netherlands and United Kingdom, dated 10th January 2018.

(Signed) Jens Stoltenberg
Secretary General

NOTE: This Action Sheet is part of, and shall be attached to C-M(2017)0074.

NHQD88659

H.E. Mr. Jens Stoltenberg
Secretary General of NATO

10 January 2018

Dear Secretary General,

C-M(2017)0074 : IBAN Performance Audit Report on the Assessment of Outcomes and Benefits of NSIP Projects

With reference to the document C-M(2017)0074 entitled IBAN Performance Audit Report on the Assessment of Outcomes and Benefits of NSIP Projects, we the undersigned nations would like to provide you with the following comments which **do not constitute a break of silence.**
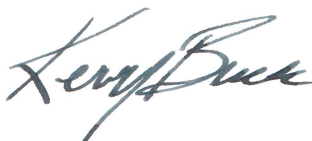
You will recall our letter of 17 August 2017 with respect to PO (2017)0357 where our nations outlined the strategic importance we place on the delivery of common-funded capability and our disappointment at the significant delays and cost overruns being experienced.

The three IBAN performance audits provide a body of evidence on the failings of the current governance and management processes to deliver common-funded capabilities. This third report focusses on outcomes and benefits of NSIP projects and clearly articulates the results of the shortcomings of the current process. The 7 case studies provide a clear illustration of how the significant governance and management gaps result in the delivery of sub-optimal capabilities to our Strategic Commands.
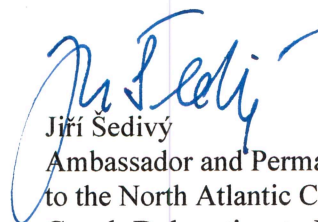
Military procurement is often complex, but it is not acceptable to be delivering inadequate capabilities to our Strategic Commands. Perhaps most disheartening was that the IBAN request to stakeholders to identify any projects that did not experience significant implementation challenges did not identify any with results better than those reported in the case studies.

We are therefore again requesting a NAC discussion on the topic of Capability Delivery. As previously outlined, this discussion should reflect the body of evidence to date and include a presentation by the IBAN on this, their third performance audit on NATO's Security Investment Programme. Such a discussion could constitute inspiration and add stimulus to the important work on NATO modernization in general and for substantial deliverables for the upcoming summit in Brussels.

We ask that you expedite this request given the importance of the subject.

Kerry Buck
Ambassador and Permanent Representative
to the North Atlantic Council
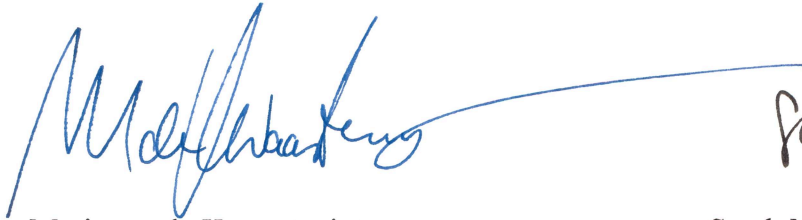Joint Delegation of Canada to NATO

Jiří Šedivý
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Czech Delegation to NATO

Michael Zilmer-Johns
Ambassador and Permanent Representative
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Représentation Permanente de la France
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Joint Delegation of the Netherlands to NATO

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to the North Atlantic Council
United Kingdom Joint Delegation to
NATO

NATO
NORTH ATLANTIC COUNCIL

OTAN
CONSEIL DE L'ATLANTIQUE NORD

18 December 2017

DOCUMENT
C-M(2017)0074
Silence Procedure ends:
3 Jan 2018 17:30

IBAN PERFORMANCE AUDIT REPORT ON THE ASSESSMENT OF OUTCOMES AND BENEFITS OF NSIP PROJECTS

Note by the Secretary General

1.   I attach a report by the Resource Policy and Planning Board (RPPB) addressing the performance audit report by the International Board of Auditors for NATO (IBAN) on the assessment of the outcomes and benefits of NATO Security Investment Programme (NSIP) projects.

2.   The RPPB notes that the audit findings complements earlier performance audits of the NSIP and that it is important to address the matter in a coherent and holistic way. The Board intends, therefore, to deal with the latest observations and recommendations as part of its wider work on improving common funded capability delivery.

3.   I do not consider that this matter requires further discussion at the level of the Council. **Unless I hear to the contrary by 17:30 hours on Wednesday 3 January 2018,** I shall assume that the Council has noted the RPPB report and agreed its recommendations.

(Signed) Jens Stoltenberg

Annex 1:   RPPB Report

1 Annex

Original: English

NHQD87558

IBAN PERFORMANCE AUDIT REPORT ON THE ASSESSMENT OF OUTCOMES AND BENEFITS OF NSIP PROJECTS

Report by the Resource Policy and Planning Board (RPPB)

References:

a) IBA-A(2017)57 & IBA-AR(2017)07 – IBAN performance report on the assessment of outcomes and benefits of NSIP projects
b) C-M(2015)0043 – IBAN Special report on the need to reform governance of the NSIP
c) PO(2015)0313 – Joint RPPB/Military Committee report on improving the delivery of common funded capabilities
d) PO(2016)0606 (INV) – IBAN performance report on the need to improve NATO's Capability Package process

INTRODUCTION

1.   The present report by the Resource Policy and Planning Board contains the Board's observations and recommendations concerning the International Board of Auditors for NATO (IBAN) performance audit report on the assessment of outcomes and benefits of NATO Security Investment Programme (NSIP) projects.

2.   The IBAN has issued a total of three performance audit reports on the NSIP. The present third IBAN report focuses on project outcomes and benefits, and the performance of select NSIP deliverables in operations. The two previous reports addressed the planning and implementation of NSIP projects. The Board has submitted its own reports to Council on the previous IBAN reports with advice and recommendations for developing long- and short-term measures (references (b) and (d).

Aim

3.   The aim of this report is to set out arrangements for the follow up of the IBAN's recommendations, identifying responsible entities and timelines.

Background

4.   Central to the IBAN report is the observation that NATO has not established procedures and defined an accountable party to identify, assess or report on outcomes and benefits of completed NSIP projects. Further that significant challenges limit the use of NSIP deliverables as a military capability. These limitations potentially affect the achievement of project outcomes and benefits. Additionally, the IBAN found that some deliverables produced negative consequences, such as increased cost.

5. The IBAN report contains four overarching recommendations, reproduced below for ease of reference:

5.1. <u>Recommendation 1</u>: In the interim, the Council should take actions to ensure that future Joint Final Inspection and Formal Acceptance reports for currently active NSIP projects, to the extent possible, incorporate outcomes and benefits assessment and reporting.

5.2. <u>Recommendation 2</u>: The Council should take actions to ensure that procedures are included in applicable capability package-related guidance that would:

5.2.1. Require the development, management and execution of outcome and benefit assessment plans, which are consistent with project and programme management methodologies, for all future authorised NSIP projects;

5.2.2. Identify an accountable party to oversee the development, management, and execution of an outcome and benefit assessment plan for each authorised project; and

5.2.3. Ensure that all relevant stakeholders receive comprehensive, objective reporting on project outcomes and benefits against established project plans and defined technical and military capability requirements. Possible negative consequences to users or the Alliance produced by the project should also be assessed and reported upon.

5.3. <u>Recommendation 3</u>: The Council should take actions to ensure that the process of addressing lessons identified from NSIP projects are managed and documented in accordance with the process described in the NATO Lessons Learned Policy by all appropriate stakeholders.

5.4. <u>Recommendation 4</u>: Finally, to improve NSIP project outcomes and benefits, the IBAN continues to encourage the Council to implement their recommendations from the two recent IBAN audits on the capability package process and NSIP governance.

RPPB Conclusions

6. The Board welcomes this third IBAN performance audit on the NSIP as a valuable contribution to the work on improving the delivery of common funded capabilities. In this context, the Board sees this report as complementing the two earlier performance audits and it will be important to address the observations and recommendations in a manner that is coherent with the substantial effort that is being directed towards improving NSIP performance and governance. The assessment of performance and outcomes cannot reasonably be separated from the wider end to end process, and care needs to be taken to avoid dealing with the latest findings in a separate and piecemeal way.

7. Because the audit observations and recommendations in the present audit report address fundamental issues of governance and process they must be seen in the context of other already ongoing work regarding the development and implementation of a package of improvement measures. The comprehensive set of measures agreed by Council at references (b), (c) and (d) covered the complete spectrum of the capability delivery process and represent a substantial and coherent effort to improve the delivery of common funded capabilities.

8.   The findings in the IBAN report also overlaps with the wider issue of the governance of common funded capabilities and in particular the work by the DPRC in response to the independent advice from the Group of Senior Experts. In this context, the Chairman of the Board provided initial informal comments to the Deputies Committee (DPRC)[1] in support of the DPRC's report to the Council, in time for the 2017 June Defence Ministerial, recognising that a full assessment by the Board would not be realistic at this stage. The Board has provided[2] a substantial input to this work, as tasked by Council.

9.   Considering all of the above, the Board intends to cover the findings and recommendations from this third IBAN report in the context of the Council tasking (reference (d)) to address the effect of measures agreed in response to the recommendations from the two previous IBAN reports on the NSIP. The Board will address these elements in the autumn with a view to completing all outstanding actions as expeditiously as possible and without prejudice to its ongoing work on governance, and report to Council as part of the Board's reporting on measures taken to improve the delivery of common funded capabilities.

10.   With regard to public disclosure, the Board concludes that the IBAN report and its own report do not contain information which, according to the NATO Policy on Public Disclosure of NATO Information[3], should be withheld from public disclosure, and therefore, in line with the agreed policy in PO(2015)0052, recommends that the Council agree to the public disclosure of the subject IBAN report.

RPPB RECOMMENDATIONS

11.   The Resource Policy and Planning Board recommends that Council:

(a)   note the IBAN report IBA-AR(2017)07 along with the present report;

(b)   endorse the conclusions of the Resource Policy and Planning Board as outlined in paragraph 6 through 10;

(c)   in line with the agreed policy in PO(2015)0052, agree to the public disclosure of IBA-AR(2017)07.

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[1] OC/RPPB(2017)0046 (INV)
[2] AC/335-N(2017)0080-Rev4
[3] C-M(2008)0116; AC/324-D(2014)0010-REV1

21 December 2017

ADDENDUM
C-M(2017)0074-ADD1

IBAN PERFORMANCE AUDIT REPORT ON THE ASSESSMENT OF OUTCOMES AND BENEFITS OF NSIP PROJECTS

Note by the Secretary General

Please see at enclosure IBAN report (IBA-AR(2017)07) which needs to be added to C-M(2017)0074.

(Signed) Jens Stoltenberg

1 Enclosure

Original: English

NHQD87968

Summary note to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects

Background and context

To meet its political ambitions and bolster collective defence, NATO invests in the development and enhancement of military capabilities through the NATO Security Investment Programme (NSIP), among other funding mechanisms. The NSIP is funded by all member nations and is used to deliver capabilities to the Alliance through investments in fixed infrastructure, communication information systems (CIS), and deployable strategic equipment.

The International Board of Auditors for NATO (IBAN) submitted two reports to the North Atlantic Council (Council) that addressed the planning and implementation of NSIP projects. To ensure a comprehensive review of the NSIP, this report focuses on project outcomes and benefits, and the performance of select NSIP deliverables in operations.

According to project and programme management methodologies, it is crucial for project stakeholders to assess project outcomes and benefits to ensure that their investments yield positive results. In the case of NSIP, it is important to determine whether the investment in these projects have contributed to the development or improvement of military capabilities and the security of the Alliance.

Audit objectives

In accordance with Articles 2 and 14 of the IBAN Charter, we assessed the degree to which NATO effectively achieves outcomes and benefits through NSIP projects. Our specific audit objectives were as follows:

1) To what extent does NATO identify and assess NSIP project outcomes and benefits?

2) To what extent have select NSIP deliverables achieved their stated project objectives and benefited the Alliance?

Audit findings

NATO has not established procedures and defined an accountable party to identify, assess or report on outcomes and benefits of completed NSIP projects. In addition, stakeholders do not consistently identify and address lessons from completed NSIP projects.

Since we found little information on project outcomes and benefits from formalised NSIP-related reporting, we performed in-depth case studies of 7 sets of NSIP deliverables to provide insight into the NSIP's ability to deliver capabilities and highlight challenges affecting benefit realisation. Across these deliverables, we found varying levels of success in achieving project objectives or producing benefits to the Alliance. However,

we found significant challenges that limited the use of NSIP deliverables as a military capability. These limitations potentially affect the achievement of project outcomes and benefits. Additionally, we found that some deliverables produced negative consequences, such as increased costs.

Audit recommendations:

Recommendation 1: In the interim, the Council should take actions to ensure that future Joint Final Inspection and Formal Acceptance reports for currently active NSIP projects, to the extent possible, incorporate outcomes and benefits assessment and reporting.

Recommendation 2: The Council should take actions to ensure that procedures are included in applicable capability package-related guidance that would:

  a. Require the development, management and execution of outcome and benefit assessment plans, which are consistent with project and programme management methodologies, for all future authorised NSIP projects;

  b. Identify an accountable party to oversee the development, management, and execution of an outcome and benefit assessment plan for each authorised project; and

  c. Ensure that all relevant stakeholders receive comprehensive, objective reporting on project outcomes and benefits against established project plans and defined technical and military capability requirements. Possible negative consequences to users or the Alliance produced by the project should also be assessed and reported upon.

Recommendation 3: The Council should take actions to ensure that the process of addressing lessons identified from NSIP projects are managed and documented in accordance with the process described in the NATO Lessons Learned Policy by all appropriate stakeholders.

Recommendation 4: Finally, to improve NSIP project outcomes and benefits, we continue to encourage the Council to implement our recommendations from the two recent IBAN audits on the capability package process and NSIP governance.

23 May 2017

International Board of Auditors for NATO

Performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects

TABLE OF CONTENTS

1.   Background

1.1   Overview

1.1.1   To counter a myriad of security challenges and bolster collective defence, NATO members invest in capabilities—which can be defined as the ability to perform actions that achieve a desired effect—through various types of funding mechanisms, such as the NATO Security Investment Programme (NSIP). Each NATO nation contributes to the NSIP using an agreed cost sharing arrangement. In 2016, the agreed expenditure ceiling for NSIP was EUR 690 million. In previous years, the International Board of Auditors for NATO (IBAN) and other NATO bodies have reported delays, cost overruns, and poor performance of the NSIP process, raising concerns about NATO's ability to deliver common-funded capabilities in an efficient and effective manner.

Capability delivery through NSIP

1.1.2   The NSIP provides common-funded capital investment in capabilities that exceed those expected to be made available from national resources. Specifically, the NSIP can be used to provide, restore or enhance fixed infrastructure (e.g., new buildings or repairing airfields), communication information system (CIS) equipment (e.g., new software and hardware) or deployable strategic equipment (e.g., military transport vehicles).

1.1.3   The majority of NSIP projects stem from capability packages, a tool used by the NATO resource community to plan the delivery of military capabilities. Specifically, a capability package is a combination of national and NATO-funded assets and facilities intended to enable a NATO body to fulfil a specific military function or requirement. A single package could include dozens of projects and sub-projects depending on the complexity of the requirement. NATO bodies identified 422 capability package projects, worth an estimated EUR 4.4 billion, undergoing design or implementation in December 2014.

1.1.4   The capability package process is organised into 5 phases:

1. Identification and prioritisation;
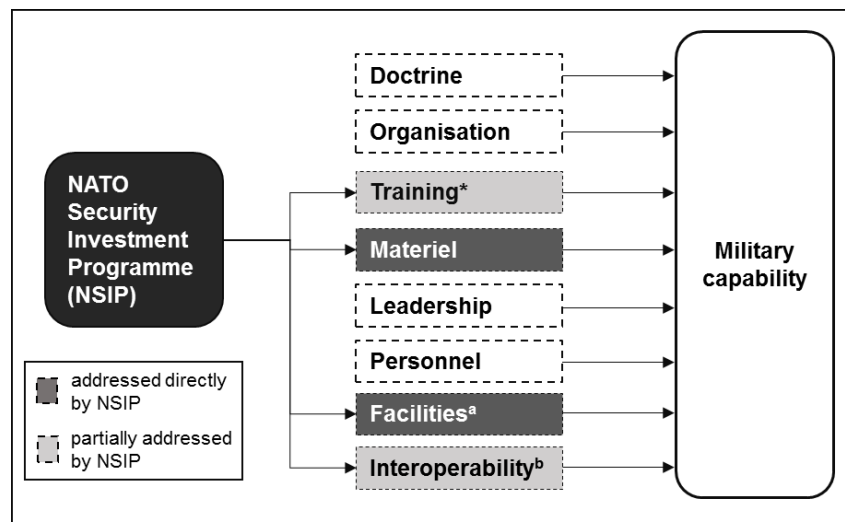2. Development;
3. Approval;
4. Implementation; and
5. Operation.

1.1.5   According to the Bi-Strategic directive on capability packages, Phase 5 begins when the capability is accepted into operational service, and its aim is to ensure that lessons learned during operations, exercises and experimentation are fed back into the Requirements Definition phase of the NATO Defence Planning Process.

1.1.6   Once completed, NSIP deliverables are inspected to determine whether they will be formally accepted by the NATO authorities, which is referred to as the Joint Final Inspection and Formal Acceptance (JFAI). After formal acceptance by the NATO authorities, IBAN will review the NSIP expenditures made by the Host Nations to assess compliance with NATO rules and regulations. Once the review has been completed and all conditions met, the IBAN will issue a Certificate of Final Financial Acceptance, which relieves Host Nations of any further accountability for funds authorised and officially closes the project.

1.1.7   Figure 1 below shows the capability elements—such as materiel, facilities, interoperability and training—that are generally supported directly by the NSIP. For example, NSIP can be used to build and equip a radar station that is interoperable with other national systems (materiel, facilities, and interoperability), and provide some initial training to operators. However, to realise an air defence capability, the command needs to take actions separate from the NSIP, such as provide operators (personnel), regularly train operators (training), develop strategies (doctrine), assign leaders to make operational decisions (leadership), and adopt procedures to ensure interoperability with other systems. A shortfall in any of the elements could limit NSIP deliverables from becoming a military capability.

Figure 1 - Summary of capability elements supported directly by the NSIP

Source: IBAN analysis of NSIP-related guidance.

aNSIP can be used to provide initial training for certain projects.

bNSIP can be used to provide technology to improve interoperability, but not all aspects of interoperability requires a materiel solution.

1.1.8   However, closing a NSIP project does not mean that a capability has been realised. According to the Bi-Strategic directive on capability packages, realising a capability includes more than delivering physical assets. It requires a collection of tangible and non-tangible inputs referred to as Doctrine, Organisation, Training, Materiel, Leadership development, Personnel, Facilities and Interoperability (DOTMLPFI).
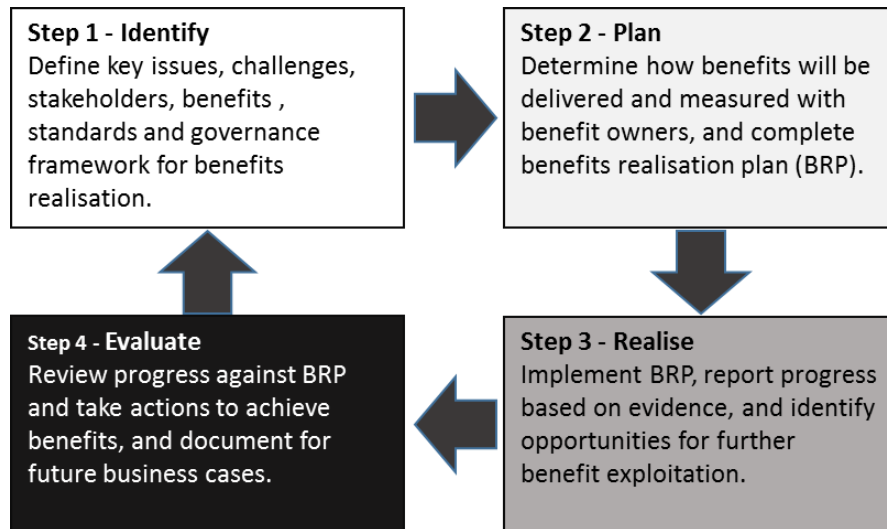
NSIP challenges

1.1.9   According to the 2015 joint report by the Resource Policy and Planning Board and the Military Committee, "delays in the delivery of capability packages (CPs) have clear impacts on NATO's operational capabilities that often require mitigation action that can often be more costly and require complex technical solutions." Further, the joint report identifies a number of issues with NSIP, such as the need for clear responsibility and accountability structures and their enforcement, and the need for transparency. Much of the evidence cited in the joint report stems from previous assessments of the NSIP, including IBAN audits. Specifically, IBAN identified a number of shortfalls in the capability package process (IBA-AR(2016)05) and NSIP governance (IBA-AR(2014)35). Those audits, however, did not focus on phase 5 of the capability package process or project outcomes and benefits.

Project outcomes and benefits

1.1.10 Prince2 and Managing Successful Programmes are structured project and programme management methodologies that several NATO bodies, such as Supreme Allied Command Transformation, Headquarters (HQ SACT) and the NATO Communications and Information Agency (NCIA), use to manage projects and programmes.

1.1.11 According to these methodologies, an organisation uses projects to produce an intended change or outcome, for example the development of a military capability. The project delivers outputs or deliverables (e.g., a radar system) that are operated by the users to achieve the intended outcome. The project benefit is the measurable improvement resulting from an outcome that is perceived as an advantage by one or more stakeholders, and can be described in both financial and non-financial terms. For instance, a new radar system could provide a unit with an air defence capability that provides greater detection range at lower costs than previous systems.

1.1.12 These methodologies emphasise the importance of identifying, measuring, assessing and reporting on the achievement of benefits and possible negative consequences. Further, effective benefit realisation planning will align project outcomes with business strategies. Benefits realisation (or review) plans will describe the specific ways in which benefits owners (officials responsible for managing benefits) will use project deliverables to achieve benefit targets. This planning typically includes clear roles and responsibilities, and milestones for monitoring and management. It also identifies the resources to achieve benefits. Benefits realisation plans apply to both financial benefits, such as savings, and non-financial benefits, such as improved performance. Figure 2 below describes a benefits management model developed by NCIA based on the Managing Successful Programmes methodology.

Figure 2 - NCIA developed benefit management model

Source: NCIA Change Portfolio Benefits Management Framework

1.2   Audit objectives

1.2.1   In accordance with Articles 2 and 14 in the IBAN Charter, we assessed the degree to which NATO effectively achieves outcomes and benefits through NSIP projects. Our specific audit objectives were as follows:

1. To what extent does NATO identify and assess NSIP project outcomes and benefits?

2. To what extent have select NSIP deliverables achieved their stated project objectives and benefited the Alliance?

1.3   Audit Scope and Methodology

1.3.1   The audit scope was focused on the use and performance of NSIP project deliverables in operations or Phase 5 of the capability package process. Previous IBAN performance audits of the NSIP focused on the other 4 phases.

1.3.2   To address our audit objectives, we interviewed officials from the Resource Policy and Planning Board, the Investment Committee, the Budget Committee, the Military Committee, the International Military Staff, the NATO Office of Resources (NOR), NCIA, the NATO Support and Procurement Agency (NSPA), Supreme Headquarters Allied Powers Europe (SHAPE), HQ SACT, Allied Joint Force Command Brunssum, Allied Maritime Command, Allied Air Command, Allied Land Command, and the Joint Warfare Centre.

1.3.3   For objective 1, we focused our review on the capability package process, continuing our work from the previous audits on the NSIP. To address audit objective 1,

we examined Prince 2 and Managing Successful Programmes project and programme methodologies to identify the criteria for our analysis. To develop our findings, we compared the criteria against provisions in capability package-related guidance, such as the NSIP Manual and the Bi-Strategic Command Capability Package Directive 085-001 (Edition 4). We also examined reports, policies, directives and other products from various NSIP-related initiatives (see appendix I), such as the Improving Delivery of Common-Funded Capabilities and Consolidated NATO Military Authorities Impact Statement – Part 2 efforts. Furthermore, we reviewed a number of JFAI reports and Operation & Maintenance (O&M) inspection reports from 2015 and 2016. Our conclusions based on the review of inspection reports cannot be generalised to the greater population since these reports were not randomly selected, but they can be used to provide insight, coupled with interviews and other documentary evidence, on the nature of the content of this type of reporting.

1.3.4   To address audit objective 2, we selected 7 sets of NSIP deliverables currently in use by the NATO military commands for case study. Prior reporting by IBAN and the NOR identified technology-intensive or CIS projects as a high risk area. These projects also constitute roughly 50 percent of NSIP implementation and for the in-service support of many common-funded capabilities. Accordingly, the majority (6) of the deliverables we selected were CIS-specific. We also requested input on our selection from officials from the NOR, NCIA, and NSPA to ensure that we selected deliverables that were representative of the types of NSIP projects recently implemented or currently undergoing implementation. Since the cases were not selected randomly, our conclusions cannot be generalised to the larger population, but our findings can be used to provide insight into some of the main challenges associated with realising common-funded capabilities. For more information on the methods used to assess the deliverables, see appendix II.

1.3.5   Our case study findings should be considered temporary in nature since conditions that could affect performance of deliverables may change in the future. Furthermore, our assessment focused on broad objectives and not individual functional requirements, project implementation milestones, or other performance metrics, which are addressed through established NSIP procedures. We conducted the audit from December 2016 through March 2017 in accordance with international auditing standards.

2.   NATO does not formally identify or assess NSIP project outcomes and benefits

2.1   In this section, we examine the extent to which NATO identifies and assesses NSIP project outcomes and benefits. We examine whether NATO formally reports on project outcomes and benefits and the extent to which the JFAI process produces information on operational performance. We also assess the extent to which other types of inspections and NSIP implementation reporting provide project outcomes and benefits information. Further, we analyse NSIP guidance to determine the extent to which procedures exist to identify and assess project outcomes and benefits, and determine

whether an accountable party is specified to oversee this process. Lastly, we assess the extent to which NATO stakeholders identify and address lessons from NSIP projects.

NATO does not formally report on project outcomes or benefits

2.2   According to project and programme management methodologies, assessments should be performed once a project has been completed to determine whether project outcomes have been achieved and benefits realised. Table 1 describes the 4 inspection and financial reports required at the end of a project as described in the NSIP Manual and the Bi-Strategic directive on capability packages, their purpose, and a summary of our assessment.

Table 1 - Formal inspection and financial reporting performed during final phase of the capability package process

Reports	Purpose	IBAN assessment
Joint Final Inspection and Formal Acceptance (JFAI)	To validate and confirm that all authorised work for the project has been completed and that the deliverables are ready for acceptance into the NATO inventory.	No outcome and benefit reporting requirement, but does require information on operational deficiencies. However, majority of JFAI do not provide detailed information on performance.
Operation and Maintenance (O&M) Inspection	To verify that common-funded capital investments are used as intended and maintained in accordance to standards.	No outcome and benefit reporting requirement, but does require information on operational availability of the site.
Certificate of Final Financial Acceptance	To verify financial records of project. If all conditions are met, IBAN will issue the certificate to officially close out the project.	The certificate is not applicable to operational performance of NSIP deliverables so it was excluded from our review.
Site survey and Field Inspection	To determine whether sites offered for NATO use are safe and capable of supporting NATO military objectives.	The site survey is not applicable to NSIP deliverables so it was excluded from our review.

Source: IBAN analysis of NSIP data.

2.3   As described in table 1, we found no specific requirement to report information on whether the project achieved its intended outcome or realised benefits in the 4 reports required at the end of a NSIP project.

The JFAI process produces inconsistent information on operational performance

2.4   We examined a list of 276 JFAI reports reviewed by the Investment Committee from 2015 through 2016 and found that:

   1) 218 (79%) inspections (worth EUR 1.6 billion) were conducted through a simplified process in which no physical inspection was performed;

2) 55 (20%) inspections (worth EUR 539 million) were performed involving a document review and physical inspection of the project deliverables;

3) 3 (1%) inspections (worth EUR 81 million) involved an accelerated process in which projects in Afghanistan below a certain cost threshold were lumped together and reviewed without physical inspection; and

4) 11 (4%) inspections identified operational deficiencies, though most of these had been addressed prior to Investment Committee review.

2.5   We found that the majority of the JFAI did not involve physical inspections. Accordingly, a review of some of these reports revealed few details provided on the operational performance of the inspected NSIP deliverables. This finding is consistent with previous reporting on some of the shortfalls of the JFAI process. For example, in 2015, the NOR reported that the simplified JFAI procedure, which was intended to be an exception solely applied to works with minor importance, had become common practice, turning the JFAI into a "paper exercise." Furthermore, the NOR recognised a need to further refine the JFAI process in order to capture more information on whether the NSIP deliverables resulted in the intended capability as part of a more robust operational acceptance process.

> *"The Board [Resource Policy and Planning Board] acknowledges that the initial assessment of the IC [Investment Committee] that the current procedures for JFAI are not fit for purpose due to the changing nature of the NSIP and its implementation. The Board and the MC [Military Committee] look forward to further work by the IC to develop proposals to turn the current JFAI into a real project and capability acceptance procedure with the aim of providing the NATO military authorities with confirmation that the complete capability has been delivered, meets the military requirements, is operational and sustainable."*
> – Improving Delivery of Common-Funded Capabilities Progress Report (25 January 2016)

2.6   To address these shortfalls, the NOR began producing JFAI reports that provide more detailed information on the operational performance of NSIP deliverables on an ad-hoc basis. For example, the NOR issued in March 2017 a JFAI report, classified, on a NSIP deliverable that included lessons identified and observations organised by DOTMLPFI categories. However, these JFAI reports, as well as the JFAI procedures, do not specifically include and require information on project outcome achievement or benefits realisation.

Other inspections provide little to no information on operational performance

2.7   We also reviewed the O&M inspection reporting guidance and found no specific requirement to provide information on project outcome achievement and benefit realisation. SHAPE officials responsible for these inspections informed us that they do not assess project outcomes and benefits. Further, a review of some of these reports

found no detailed reporting on whether these deliverables had achieved intended outcomes and benefits. These reports did provide information on the degree to which the inspected facilities met standards, and offered recommendations for remedial actions when applicable.

Other reporting on NSIP implementation provide little to no information on outcomes and benefits

2.8   We also reviewed other reporting processes related to NSIP implementation and found little evidence that information on project outcomes and benefits were produced and disseminated to NSIP stakeholders.

2.9   For example, the host nation provides periodic updates through the Common Funded Integrated Resources Information System and ad-hoc updates if there are project delays. NOR officials reported to us that this system is used to track and monitor NSIP project implementation milestones, and does not track outcomes and benefits information.

2.10   Furthermore, the NOR annually reports to the Investment Committee on the status of the implementation milestones for capability package projects, referred to as the Capability Packages and Projects review. The Military Committee and the Resource Policy and Planning Board also produce an annual Joint Key Capabilities report. However, these reports focus on development and implementation milestones, and do not include information on outcomes and benefits.

2.11   In addition, we reviewed the various activities performed under the auspices of the Consultation, Command and Control (C3) Coordination Group, which has no formal authority but is used as a forum for elevating issues and establish consensus positions before engaging with NATO authorities, such as the NATO Air and Missile Defence Committee. Under this group, NATO HQ personnel work on improving the development and implementation of C3-related capabilities, which also includes NSIP projects. The C3 Integrated Master Plan is an executive tool for C3 stakeholders which creates common situational awareness for C3 capabilities across their lifecycle and facilitates raising issues and risks to the appropriate level. However, these efforts do not provide an overview on whether projects have achieved their intended outcomes or benefits. Recently, the C3 community discussed adding an operational perspective which would present a legacy phase out plan.

NATO capability package guidance does not include procedures for identifying and assessing outcomes and benefits

2.12   In addition to the reporting guidance mentioned previously, we also reviewed NSIP guidance applicable to all 5 phases of the capability package process, since project management methodologies state that benefits realisation planning should occur throughout the lifespan of a project. However, we found that the NSIP Manual, the Bi-Strategic directive on capability packages, and guidance on formal cost estimates for

NSIP projects (referred to as Type B Cost Estimates) do not include any process to identify and assess project benefits realisation. Specifically, these NSIP guidance documents do not incorporate procedures to ensure that outcomes and benefits are:

    1) Clearly defined early in the development stage;

    2) Assessed when the project is completed; and

    3) Reported upon to the appropriate stakeholders.

2.13   We found that the NSIP Manual does not have requirements for a systematic assessment of expected, measurable benefits. Further, the Guidelines from the 2006 Type B Cost Estimate for funding of a CIS project states that the estimate should present a "business case" for authorisation of the project. Functional, performance, management and control requirements are to be included in the estimate. However, this guidance does not provide any instruction to define the current status of each benefit in a project in quantifiable terms so that measurable improvements can be assessed after the project is completed.

2.14   Additionally, the cost estimate guidance contains high-level acceptance criteria in terms of one or a combination of the operational capability milestones, such as Initial Operational Capability and Final Operating Capability. The Strategic Commands are responsible for reporting to the Military Committee on progress towards achieving a required level of operational capability. The milestones, which would help to trace and report against during the operation phase, are not further defined during project planning. For NSIP projects, if outcomes and benefits are not clearly defined at the outset of the project, it is hard to trace back to initial objectives of the projects and assess accordingly.

NATO guidance does not specify an accountable party to ensure project outcome and benefits

2.15   Project and programme management methodologies recommend that an accountable party with overall responsibility for ensuring that the project or programme meets its objectives, is also responsible for ensuring that project outcomes and benefits are identified, tracked, managed and assessed. In contrast, we found that NSIP guidance does not specify an accountable party responsible for the identification, measuring and assessing of benefits. As stated in our previous report, NATO does not have one entity that has complete oversight over the full spectrum of capability delivery across all lines of development throughout the lifecycle, from requirement setting to disposal, which is of concern with respect to the assurance that the NSIP projects have delivered their intended outcomes and benefits.

Lessons identified are not always formally learned

2.16   According to the NATO Lessons Learned Policy, lessons from all activities, in addition to operation and exercises, which are captured and subjected to a procedure of

identification, rectification, and implementation, will lead to increased effectiveness, efficiency and sharing of best practices among NATO allies and with partners. Although stakeholders have made strides in identifying lessons, there is little coordination among stakeholders to rectify and implement lessons from NSIP projects.

2.17   At the time of our review, we found evidence that project stakeholders were generating and sharing lessons identified but employed ad-hoc and incomplete processes that limited organisational learning. For example, the June 2016 JFAI report for the Land Command and Control Information Services (LC2IS) included 9 lessons identified, but it did not describe the remedial actions to be taken to address the underlying problems, which stakeholders were assigned to implement remedial actions, or plans to validate that the remedial action sufficiently addressed the underlying problem. These are procedures described in the NATO Lessons Learned Policy.

2.18   Furthermore, there is no single party overseeing and monitoring these lessons. NOR officials informed us that they were not actively monitoring these lessons and were not responsible for ensuring that these lessons were addressed and reported on the NATO Lessons Learned Portal, the NATO designated repository of lessons learned information for the Alliance. NCIA officials said that they knew of the lessons identified in the LC2IS JFAI report, and had incorporated some of them informally into their current projects, but they were not aware of any monitoring by the agency through a formal lessons learned process as described in the NATO Lessons Learned Policy. The user community, consisting of SHAPE and NATO commands, addressed some of these lessons through the Land User Working Group, but only for lessons specific to them. As of March 2017, we found no single accounting that would inform us the extent to which these lessons have been addressed.

2.19   We also reviewed the new NSIP Lessons Learned Policy that was agreed to by the Investment Committee in December 2016. The aim of the policy is to describe the framework for capturing and sharing lessons on implementing NSIP projects by host nations. Since it only applies to certain projects authorised after 1 August 2016, we did not include its effect on our assessment of projects selected for this audit.

Some actions taken

2.20   NSIP stakeholders have taken some actions to incorporate outcomes and benefits assessment planning into the NSIP planning process, but our audit did not assess them because they were still under development during our audit. For instance, the Strategic Commands were developing a new operational acceptance directive that could include provisions for benefits realisation. We did not assess this directive since it was not approved as of March 2017. Appendix I shows the various initiatives to improve NSIP management and common-funded capability delivery undertaken by different NSIP stakeholders.

Conclusion

2.21   Currently, the reporting on the operational performance of NSIP deliverables after project completion provides little to no information on project outcomes and benefits. The reason for this lack of information is because there are no requirements and processes at NATO that supports a systematic assessment of expected outcomes and benefits of NSIP projects. Accordingly, there is no single party who is accountable for ensuring that project outcomes and benefits are identified, managed, assessed, and reported upon. The ad-hoc and inconsistent approach to lessons by NSIP stakeholders increase the risk that lessons from completed projects are left forgotten or ignored, which could enable the repetition of costly mistakes in the planning and implementation of future NSIP projects. These shortfalls are similar in theme to our findings of a lack of clear guidance and governance from our two recent performance audits of the capability package process and NSIP governance.

3.   Select NSIP deliverables achieved mixed project success

3.1   Since we found little information on project outcomes and benefits from formalised NSIP-related reporting, we performed in-depth case studies of select sets of NSIP deliverables to provide insight into the NSIP's ability to deliver capabilities and highlight challenges affecting benefit realisation. Specifically, we assessed 7 sets of NSIP deliverables and found varying levels of success in achieving project objectives or producing any demonstrable benefit to the Alliance (see appendix II for detailed summaries of the assessments).

Project deliverables had mixed success in achieving intended objectives

3.2   We traced the selected NSIP deliverables to their original formal cost estimate and authorising documents to identify project objectives. Since functional requirements may change over the lifespan of a project, we focused on high-level statements. Specifically, we examined the project purpose described in the cost estimate and language found in authorising documents to identify general project objectives. Table 2 describes the sets of deliverables we reviewed, their project purpose, and our assessment on the degree to which the project objectives have been addressed.

Table 2 - Summary of IBAN assessment of select NSIP deliverables

NSIP deliverables	Purpose of deliverables	IBAN assessment (as of March 2017)
Land Command and Control Information Services (LC2IS)	To provide a system to support the planning, execution and assessment of land-based operations.	Objectives partially addressed
Stabilise and Enhance the Maritime Command and Control Information System (MCCIS)	To enhance MCCIS to improve its capabilities and ensure the successful transfer of management authority from HQ SACT to SHAPE and NCIA.	Objectives addressed
Tool for Operational Planning, Force Activation and Simulation (TOPFAS)	To provide NATO planners with a system to support operational planning activities and the management of data in a distributed and collaborative environment.	Objectives addressed
Visual Meteorological Enclave (VISME)	To provide users with meteorological capability.	Objectives not addressed
NATO Common Operational Picture (NCOP)	To enhance situational awareness and strengthen decision-making by providing NATO forces a common view of the battle-space and other operational and environmental factors.	Objectives addressed
Deployable CIS points of presence (Dragonfly)	To provide deployable CIS for the NATO Response Force.	No overall assessment reported due to classification, see appendix II
Deployable 500-man camps	To provide the working and living environments for the Combined Joint Task Force.	No overall assessment reported due to classification, see appendix II

Source: IBAN analysis of NSIP project and authorising documents.

3.3   For each set of deliverables, we compared the project objectives against our observations of the use and performance of the deliverables in operation. In sum, we found that most of the selected deliverables were declared by the users as operationally capable and had at least partly addressed the original project objectives. However, one set of deliverables failed to meet requirements and was not accepted by the authorised user. Further, some projects failed to deliver to all intended users. For example, LC2IS was delivered to the NATO Command Structure and other NATO bodies, but it was also intended to be delivered to the International Security Assistance Force (ISAF) in Afghanistan. LC2IS was not delivered to ISAF because by the time it was available for use, it was no longer suitable for the command. Although most of the project objectives may have been addressed, at least partially, we found evidence that NSIP deliverables may not be fully realising capabilities as intended, affecting project benefits.

Users face challenges in realising capabilities from NSIP deliverables

3.4   According to the Bi-Strategic directive on capability packages, several elements should be addressed to realise a capability, which is often referred to as DOTMLPFI. Through user interviews and examination of acceptance tests and exercise reports, we found several shortfalls in the DOTMLPFI capability elements that affect the use of select NSIP deliverables as a capability.

3.5   The most significant capability element in regards to the NSIP is "materiel," since it refers directly to the provision of tangible deliverables. We found several materiel challenges that negatively affected the usefulness, and potentially the benefits, of NSIP deliverables. For example, after 9 years of development and EUR 3 million invested, VISME eventually failed to meet requirements because of design flaws and poor functionalities. Below is an excerpt of a 2012 letter that SHAPE sent to the NATO agency responsible for procuring VISME.

> *"The selected software was recently demonstrated at SHAPE where there was found to be a huge capability gap in terms of functionality, the Graphical User Interface (GUI), and administration between the product provided by the contractor…and what would be expected from a modern, agile software solution…The fact is that the software in terms of look, feel and functionality seems to be a step back in time by at least fifteen years, with the stability of the system a particular concern."*

3.6   However, materiel issues are not the only challenges that can limit capability realisation. For instance, one reported issue on LC2IS is the lack of its use among the commands, which is a result of a combination of leadership, training, personnel, interoperability and materiel concerns. In terms of leadership, users told us that commanders are often less interested in using new or experimental systems for either operations or exercises because of the risks. They would rather use more familiar, reliable systems. In Exercise Trident Juncture 2015, the land component commander opted to use a national system even though LC2IS was available.

3.7   Furthermore, users reported to us that since there is little operational need for LC2IS outside of major operations and exercises, they do not use the system on a regular basis. As a result, they forget how to use the system and can no longer operate it effectively. Some commands also do not have any assigned personnel to operate LC2IS, and will need external operators in order to use the system. SHAPE officials, however, also said that LC2IS is needed in the event of a major land operation.

3.8   Additionally, LC2IS is intended to be used as both a visual tool to display land operations data on a digital map and a land operations planning and management tool, but none of the users interviewed has ever used those additional functions, since other applications are available to meet those needs. Further impeding LC2IS's usefulness are interoperability issues. For example, LC2IS is intended to interface with the Tool for Operational Planning, Force Activation and Simulation (TOPFAS), an operational

planning tool, to facilitate planning. However, some users informed us that they were not able to perform this function. More challenging is the connections between LC2IS and national land systems. LC2IS relies on data from NATO and national sources to generate the Recognised Ground Picture. However, LC2IS has had issues exchanging information with other systems. This is an ongoing issue that is being addressed by NCIA and the user community.

> LC2IS, increment 1.1 achieved Full Operational Capability in March 2015. Ten years and EUR 24 million were invested in this system, yet according to users, the system is rarely used within the NATO Command Structure. Currently, the host nation is requesting authorisation to begin increment 2 of LC2IS, which would enhance and sustain the system after 2017 and up to 2021. The estimated cost of this project, after screening from the International Staff, is approximately EUR 2.1 million.

3.9   These issues do not affect LC2IS alone. In all 7 sets of deliverables we examined, we found similar challenges affecting the use of the deliverables in varying degrees. For example, the deployable 500-man camps, which is part of a capability package that is estimated to cost EUR 144 million to fully procure, were considered fit-for-purpose after their deployment during Trident Juncture 2015. However, the exercise also demonstrated significant challenges in NATO's ability to deploy this capability. The original concept for deploying these camps involved national forces providing several battalions to support transportation and construction needs. But these forces were not provided and NATO commands had difficulties arranging transport for the equipment and finding qualified personnel who could construct, operate, maintain, and deconstruct the camps. They were able to successfully deploy this set through an ad-hoc augmentation from national forces, but it highlighted the need for greater planning and capacity building. Some of the challenges have been addressed, such as the signing of contracts to provide life support services (e.g., water, catering and other services needed to sustain personnel living in the camp). However, NATO has not had an opportunity to validate these new measures in an exercise as of March 2017. For more information on capability challenges we found, see appendix III.

3.10   In order to obtain a more comprehensive understanding of some of the challenges facing technology-intensive NSIP projects, we asked stakeholders from NCIA, the NOR, SHAPE and HQ SACT to inform us if they knew of any technology-intensive projects that were considered more successful or did not experience significant implementation challenges. They were not able to identify projects that had not already been identified and included in our case study.

Benefits of NSIP deliverables remain unclear

3.11   During our interviews with users, we found that the NSIP deliverables we reviewed might deliver some benefits to NATO. For example, NCOP users stated that the tool is effective and demonstrated operational benefits in two recent exercises. TOPFAS users also stated that the tool has helped them produce operational plans. According to

MCCIS users, the system is able to meet their operational needs. However, each of these benefits were not based on measured and documented benefits, but relies on testimonial evidence, which can be contradictory depending on the user. For example, TOPFAS is intended to improve operational planning within NATO, but we found no formal assessment that describes how TOPFAS has improved planning in terms of quantifiable measurements (e.g., reduced planning time or improved planning). Further, some users considered TOPFAS to be an effective tool, while other users considered it more of a burden. One user explained to us that TOPFAS might be used during an exercise because it's required, but actual planning might occur using other tools.

> TOPFAS achieved Full Operational Capability in 2012, ten years after it was first authorised at an estimated cost of approximately EUR 10 million. Additional increments have been authorised since 2012 to improve TOPFAS and add new functionalities such as theatre missile defence planning.

3.12   Additionally, we found that users were not using some of the NSIP deliverables as intended, if at all. As a result, any benefits expected from the use of the functions would not be realised. For example, if LC2IS' planning functions are not used, than any expected benefits from using those functions would not be realised.

Some NSIP deliverables have negative consequences

3.13   According to project planning guidance, stakeholders should also be concerned with the potential for projects to produce negative consequences that could adversely affect stakeholders. We found some evidence to suggest that some of the selected NSIP deliverables are imposing costs or adversely affecting the user.

3.14   For example, the systems we reviewed impose O&M costs for NATO, such as the annual O&M cost for LC2IS, which is approximately EUR 1.2 million. Further, some of these systems require modifications or fixes to meet operational needs, which require funding. For instance, NCIA requires funds to improve the LC2IS' interface with NCOP and TOPFAS, as well as to improve interoperability with national land systems. Without funding, technical issues could persist, diminishing the usefulness and benefits of the system, as well as delay the retirement of legacy systems. These delays impose considerable financial burden to NATO bodies and common-funded budgets.

> "*In the present environment of pressure on the Military Budget, the Strategic Commands need to balance O&M costs with value and utility delivered to the user community.*"
>
> - JFAI report of LC2IS, increment 1.1 (29 June 2016)

3.15   Furthermore, these deliverables could also impact command personnel, affecting their performance and productivity and the ability of commands to carry out their

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functions. Due to limited manpower, some users are often required to perform multiple duties, often without the benefit of prior training or experience. Learning a new system could affect their workload and force them to make decisions on priorities that could affect the command.

Users have taken action to address capability issues

3.16   Although we identified several challenges, we also observed NATO users taking actions to correct problems associated with the NSIP deliverables we reviewed. For example, each of these deliverables had user working groups associated with them. These groups meet periodically to discuss lessons identified and plan remedial actions. For example, the Land User Working Group identified issues affecting the use of LC2IS and has taken steps to increase the use and improve the functionality of the system. NCIA and NSPA have also taken steps to improve NSIP deliverables. For example, NCIA participates in working group meetings and collects user feedback to help modify and improve delivered systems. NSPA provided lessons identified to military commands to help them better prepare to deploy the 500-man camps discussed in this report, and established an internal NSIP Governance Board to ensure appropriate senior Agency oversight of their NSIP projects.

Conclusion

3.17   We generally found, with some exceptions, that the projects addressed objectives by providing some service or asset. However, for several of the deliverables, we found significant challenges that limited or prevented them from realising intended capability or achieving the desired change that would benefit the Alliance. Further, some of these deliverables could have negative consequences to the financial sustainability of the NSIP, the capabilities of a command, and the productivity and performance of users. Although some users have taken actions to improve the capabilities that these deliverables support, significant challenges remain that could diminish any returns from the initial project investment and subsequent spending on O&M.

4.   Overall Conclusions and Recommendations

4.1   Overall Conclusions

4.1.1   NATO faces complex and serious security challenges that require significant investment in military capabilities, but it also faces resource constraints. Given these conditions, it is imperative that NATO makes well-informed investment decisions because it cannot afford to waste financial and staff resources on ineffectual and costly projects. However, our audit found that the NSIP process currently doesn't provide the consistent, comprehensive and objective reporting on project outcomes and benefits needed to ensure that NATO investments yield positive returns for the Alliance.

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4.1.2   Specifically, without this information, stakeholders will not be able to determine whether the project:

1. Resulted in the planned enhancement or development of military capabilities;

2. Addressed the military or political requirements justifying the project's authorisation;

3. Achieved the benefits that justified the investment;

4. Created unforeseen negative consequences to the users that diminished or negated project benefits; and

5. Identified lessons that can be used to improve stakeholder performance in future investments.

4.1.3   In conclusion, the NSIP needs a robust benefits management process to ensure that NATO receives the maximum return on investment as possible, promote the continuous improvement in the efficiency and effectiveness of common-funded capability delivery, and increase the accountability and transparency needed to ensure the financial sustainability of common-funded resources. Without a NSIP benefits management process, NATO risks failing to deliver common-funded capabilities needed to ensure the readiness of NATO forces and the security and defence of the Alliance.

4.2   Recommendations

4.2.1   To address the shortfalls in the capability package process we identified and improve transparency, we recommend the following:

1) In the interim, the North Atlantic Council (Council) should take actions to ensure that future Joint Final Inspection and Formal Acceptance reports for currently active NSIP projects, to the extent possible, incorporate outcomes and benefits assessment and reporting.

2) The Council should take actions to ensure that procedures are included in applicable capability package-related guidance that would:

a. Require the development, management and execution of outcome and benefit assessment plans, which are consistent with project and programme management methodologies, for all future authorised NSIP projects;

b. Identify an accountable party to oversee the development, management, and execution of an outcome and benefit assessment plan for each authorised project; and

  c. Ensure that all relevant stakeholders receive comprehensive, objective reporting on project outcomes and benefits against established project plans and defined technical and military capability requirements. Possible negative consequences to users or the Alliance produced by the project should also be assessed and reported upon.

3) The Council should take actions to ensure that the process of addressing lessons identified from NSIP projects are managed and documented in accordance with the process described in the NATO Lessons Learned Policy by all appropriate stakeholders.

4) Finally, to improve NSIP project outcomes and benefits, we continue to encourage the Council to implement our recommendations from the two recent IBAN audits on the capability package process and NSIP governance.

5. Comments received and the IBAN position

5.1 We received formal and factual comments from SHAPE, HQ SACT, NCIA, NSPA, and the NOR. Where appropriate, we amended the report based on the factual comments received. The full text of the formal comments is located in appendix IV.

5.2 In general, the NATO bodies commenting on our report agreed with our findings and recommendations. NCIA provided more detailed comments on their views of the various shortcomings of C3 governance as a number of our select projects are within the C3 area. We appreciate NCIA's comments and note that several of the described issues and themes have already been addressed in our previous performance audits of the NSIP. Further, NSIP stakeholders have taken steps to implement recommendations from these audits and improve capability delivery, including the creation of a Group of Senior Experts to address governance issues. In April 2017, this Group of Senior Experts issued a report with recommendations on improving the governance of common-funded capability.

5.3 Lastly, we appreciate the comments concerning the purpose and application of the JFAI in regards to operational acceptance and its potential use to report project outcomes and benefits. We note the various options on the JFAI subject and recognize the various positions of the stakeholders. We also recognise that some initiatives have been taken to improve the process.

NSIP-related initiatives reviewed for audit

IBAN reviewed the initiatives described in the table below to assess whether NSIP stakeholders were reporting NSIP project outcomes and benefits information.

Initiative	Due date	Description of Initiative
NATO Common Funded Capabilities Operational Acceptance Directive	March 2017	To describe how the Operational Acceptance is collectively and collaboratively conducted and managed by NATO military organisations.
NATO Enterprise C3 Capabilities and Information Communications Technology (ICT) Services Lifecycle Management	January 2017	To describe how C3 and ICT are collectively and collaboratively managed by NATO Enterprise organisations. It identifies primary mechanisms, roles and responsibilities of the NATO C3 Community and the primary lines of reporting for each organisation to foster collaboration, maintain coordination and achieve coherence.
IT Modernisation Programme Mandate	January 2017	The main focus of IT Modernisation is expected to deliver a wide range of outcomes and capabilities all of which are important enablers supporting the expected benefits realisation process.
Capability Packages & Projects Lessons Learned Progress	Ongoing	To provide a list of lessons identified and initial recommendations (with recommended action owners) to facilitate the development of a consolidated baseline on C3 capability development and delivery, to be shared by all NATO stakeholders and reflected in the C3 Integrated Master Plan - Baseline 2016.
New JFAI	December 2015	To provide an initial analysis of identified deficiencies in the current JFAI process; of the key success factors to turn the JFAI into firstly a credible project acceptance process and, in due course, into a real capability acceptance process; and to define a possible way ahead taking into account existing resource constraints.
Programme Management Office (PMO) – C3 PMO	Ongoing	To provide a Bi-SC lifecycle support across DOTMLPFI to specific capability packages with the intent to increase scope through additional resources to cover C3 Capability.
Military Committee role and responsibilities in common-funded capability delivery (MC 0612) update	March 2017	Policy update is to define the role and the responsibilities of the Military Committee with regards to governance, guidance and oversight of common funded capabilities throughout their life cycle.

Bi-Strategic Command Directive 085-001 update	March 2017	To update the capability package directive for a holistic review of resources' sources (fund NSIP requirements through NSIP and Military Budget requirements through the Military Budget).
NCIA Change Portfolio Benefits Management Framework	Ongoing	To set out how benefits are to be managed within the portfolio of NCIA Change Management Programmes and projects.
The NATO Enterprise Vision	February 2017	To provide a NATO Enterprise Vision for C3 Capabilities and ICT Services. The NATO Enterprise Vision is to be used as the basis for the development of a Roadmap for the NATO Enterprise to oversee progress in achieving the Vision by the C3 Board.
ACO Senior Requirement Owner	January 2016	To ensure effective oversight and advocacy of operational requirements, SHAPE Assistant Chief of Staff in the division relevant to the capability project is assigned the role of Senior Requirement Owner. This approach to the Senior Requirement Owner role will be further detailed in the next update to Bi-Strategic Command Directive 085-001.

Case study assessment of select sets of NSIP deliverables

To address our second audit objective, we selected 7 sets of NSIP deliverables currently in use by the NATO military commands for case study. We focused on deliverables due to the complex nature of how capability packages and projects are organised within the NSIP and can change over time. We also requested input on our selection from officials from the NOR, NCIA, and NSPA to ensure that we selected deliverables that were representative of the types of NSIP projects recently implemented or currently undergoing implementation. Due to high staff turnover, only deliverables that were currently in service were selected in order to obtain reliable user feedback.

To develop our findings, we examined project and programme management methodologies and relevant project documents (e.g., formal cost estimates and authorisation documents) to identify the criteria for our case studies. We then assessed against our criteria user feedback collected through interviews with officials from several NATO military commands, and data collected from exercise reports, lessons identified documentation, JFAI reports, Host Nation testing reports, and meeting minutes of user working groups.

Since the cases were not randomly selected, our conclusions cannot be generalised to the larger population, but our findings can be used to provide insight into some of the main challenges associated with realising common-funded capabilities.

Further, our assessments should be considered as a point measurement in time since conditions may change that could affect the performance of the deliverables. Our assessments are also limited to the users selected for the study: 1.) Joint Force Command – Brunssum, 2.) Allied Land Command, 3.) Allied Maritime Command, and 4.) Allied Air Command. Lastly, our assessment focused on broad objectives and not individual functional requirements, project implementation milestones, or other performance metrics, which are addressed through establish NSIP procedures.

The following sets of deliverables were assessed:

1. Land Command and Control Information Services (LC2IS);
2. NATO Common Operational Picture (NCOP);
3. Tool for Operational Planning, Force Activation and Simulation (TOPFAS);
4. Stabilise and Enhance the Maritime Command and Control Information System (MCCIS);
5. Deployable CIS points of presence;
6. Deployable 500-man camps; and
7. Visual Meteorological Enclave (VISME).

The results of our assessment are provided below.

1. Land Command and Control Information Services (LC2IS)

Project overview and purpose	The project purpose is to provide NATO staff with software tools that will provide a secure, high speed, and reliable information flow in both static and deployed environments to support the Land Command and Control Cycle.
Project history (2005-2015)	LC2IS first began as part of Capability Package (CP) 5A0007 - Provide Information System in support of the ACE wide operations mission area. Increment 1.0 of this system was authorised in 2005 and achieved its Final Operation Capability in January 2011. LC2IS Increment 1.1 was authorised in 2011 for deployment to the International Security Assistance Force (ISAF) Mission in Afghanistan. It was also extended to other sites within the NATO Command Structure (NCS). Increment 1.1 achieved Full Operational Capability in March 2015 and a JFAI report was issued in June 2016. The cost estimate for Increment 2 was released for review in July 2016 and is part of CP 9C0107 "Functional Services for Command and Control of Operations". Inc.2 is expected to enhance planning, tasking and battlespace management support, among other things.
Estimated cost to NATO	EUR 24,293,256

1.1 Assessment – Partially addressed

We found that LC2IS, Increment 1.1 partially addressed project objectives (see table below). The system is live and operational, but not all commands were able to use it operationally, as of March 2017. There might be some benefits from the system, as well as continued costs to operate and maintain it.

Project objectives	IBAN assessment results
Is system operationally available for users?	Partially available—LC2IS is live and operational. It's provided as a web application to some sites or as a desktop application with fixed servers in other sites. However, 1 command reported that they had access to the web portal, but could not use the system operationally for an exercise. Another command opted to use a national system instead of LC2IS for a major exercise.
Was situational awareness provided through a consolidated Recognised Ground Picture (RGP)?	Partially—2 NCS commands reported ability to produce RGP through LC2IS. 1 command was not able to use LC2IS for the RGP due to technical challenges. Another command said they had not used the system.

Were the automated tools used for the planning, execution and management of land operations?	No—None of the users we spoke with reported any knowledge of the use of LC2IS's functions for the planning, execution and management of land operations. Other systems were used to address these tasks.
Was the exchange of information both within and beyond headquarters improved?	Previous exercises demonstrated that there were some challenges for LC2IS in exchanging information between NCS commands and national land systems.
Was the system deployed to ISAF?	LC2IS was not considered fit-for-purpose by ISAF commander, according to the June 2016 JFAI report. It was subsequently not deployed to ISAF.
Were there demonstrable benefits or negative consequences?	The adoption of LC2IS by national land forces may improve interoperability. Also, system requires funds for fixes and operation & maintenance, but not used often within most of NCS.
Were lessons identified?	The June 2016 JFAI report included a list of lessons identified. Further, the Land User Workgroup has assessed lessons identified from exercises and user feedback.

2.   NATO Common Operating Picture (NCOP)

Project overview and purpose	The project purpose is to enhance situational awareness and strengthen decision-making by providing NATO forces a common view of the battlespace and other operational and environmental factors. It interfaces with the various functional systems, current and future, to filter, fuse, and apply data intelligence and display overlays or components.
Project history (2008-2016)	NCOP project was initiated to replace the existing NATO Initial Common Operational Picture Capability and Joint Operational Picture in early 2000. Following the redeployment of ISAF, which was initially in the scope of the Initial Operational Capability (IOC), a new IOC scope was agreed by the NCOP Management Team. NCOP functionalities were tested during the several live exercises. SHAPE reviewed and assessed the operational capability in terms of DOTMLPFI and declared IOC in mid-2014. The NCOP was assessed as fit-for-purpose in August 2016 and Full Operational Capability was declared for the final software release. A User Acceptance Test for the maintenance release "NCOP version 1.1.16" was performed in December 2016.
Estimated cost to NATO	EUR 12,377,875

2.1   Assessment – Addressed

We found that NCOP addressed its project objective. NCOP was operationally accepted by ACO for use in missions, training and exercises. However, we found that some users did not see the benefit of NCOP for their specific command, because they did not require a common picture for their mission.

Project objectives	IBAN Observations
Is system operationally available for users?	The system is live and operational. 3 of the 4 NCS commands we spoke with used NCOP often in the operations centre, but it may not be used much by personnel in other divisions. The 4th command did not use it often because it's not needed for their operations.
Does the system provide a common view of the battle-space and other operational and environmental factors?	We observed that NCOP is able to incorporate information from MCCIS, ICC/NIRIS, and LC2IS. The system has also been used in exercises.
Were there demonstrable benefits or negative consequences?	According to SHAPE IOC statement, commands realised some operational benefits of NCOP during exercises.
Were lessons identified?	Lessons identified during exercises.

3.   Tool for Operational Planning, Force Activation and Simulation (TOPFAS) – Operational Planning Tool (OPT)

Project overview and purpose	The project purpose is to provide planners with automated tools for developing and managing operational planning data, especially related to the analysis of mission requirements and operational factors pertaining to time, space and forces.
Project history (2000-2012)	In 2000, the first phase of TOPFAS was authorised and completed in 2006. This phase was intended to capture the requirements based on the in-house developed prototypes and prepare the Type B Cost Estimate for the second phase of the project. The agency submitted a JFAI request for the first phase in 2009. The second phase was authorised in 2004 to industrialise and proliferate the system and achieved Full Operational Capability in Oct. 2012. A JFAI request for this phase was submitted in 2015. A JFAI has not been performed as of March 2017.
Estimated cost to NATO	EUR 10,459,962

3.1 Assessment – Addressed

We found that TOPFAS OPT addressed the project objective in providing a planning tool for planners (see table below). We did not examine the other modules associated with TOPFAS (the Systems Assessment Tool and the Campaign Assessment Tool).

TOPFAS, however, is not consistently used across the various commands. Although all the planners we met with used TOPFAS, not all relevant stakeholders in the planning process use TOPFAS to provide input to those planners. For example, the intelligence division of a command may provide an intelligence assessment to the planners to start the planning process, but not through TOPFAS. Also, some users reported that higher-level command had not provided strategic inputs through TOPFAS for an exercise.

Project objectives	IBAN Observations
Is system operationally available for users?	Addressed —The system is live and operational.
Do NATO operational planners use the system to support operational planning activities and manage data in a collaborative environment?	Addressed —TOPFAS is being used to develop plans, in which planners can use and manage data from other stakeholders through the tool.
Were there demonstrable benefits or negative consequences?	Users expressed support for TOPFAS. It provides them with a common platform for collaborative planning. However, the tool is not being used to its full potential because not all of its modules are being used as intended (SAT/CAT) and not all intended actors use the tool. For example, TOPFAS is not used across all levels of command or within the command. As a result, TOPFAS is often not through the entire planning process. Instead, parts of the planning process are planned using alternative tools/methods and manually entered into TOPFAS. Officers may prefer to use Microsoft Office applications rather than TOPFAS to create plans or planning products.
Were lessons identified?	Lessons have been identified through certain exercises.

4. Maritime Command and Control Information System (MCCIS)

Project overview and purpose	The project purpose is to enhance and stabilise the current MCCIS to achieve an improved system baseline providing capabilities to meet operational, user and support requirements. The project is also intended to facilitate the transfer of management authority of MCCIS from HQ SACT to SHAPE.
Project history (2008-2016)	MCCIS was originally a U.S. software application acquired by Supreme Allied Commander Atlantic (SACLANT) as part of CP 9B3013 (Dec.1993). As part of the restructure of the NATO Strategic Commands, SHAPE agreed to assume responsibility for the MCCIS from ACT. The project (referred to as part 23) was authorised in 2006. Additional scope were requested in 2009, 2011 and finally in 2013. The JFAI for this project was issued in August 2016. MCCIS is due to be replaced by the project TRITON for all implementation activities in support of Maritime Command and Control contained in Capability Package 9C0107 "Functional Services for Command and Control of Operations."
Estimated cost to NATO	EUR 8,541,537

4.1 Assessment – Addressed

We found that MCCIS addressed its project objectives (see table below). MCCIS serves and continues to serve as the standard maritime C2 service for NATO commands, and is interoperable with other national systems.

However, the project itself experienced challenges. According to the Aug. 2016 JFAI, "the Staff concludes that this project has been a poor example of the implementation of a functional service. Works have spanned 20 years and have been allowed to include additional, unforeseen functional modules and enhancements necessary to meet developing requirements. From an operational perspective, the Staff understands that the delivered product fulfils the requirement; however, the associated programming and project management activities leave a lot to be desired."

Project objectives	IBAN Observations
Is system operationally available for users?	The system is live and operational. It provides the Recognised Maritime Picture (RMP) for MARCOM. 28 nations have installed MCCIS kits, allowing them access to MCCIS feeds. 19 of these nations provide MARCOM data feeds.
Does MCCIS meet the operational requirements of its users?	MCCIS provides MARCOM with the RMP and messaging capability, among other functionalities.

Was the management authority of MCCIS transferred from HQ SACT to SHAPE and NCIA?	MCCIS is currently managed by SHAPE J6 and supported by NCIA.
Were there demonstrable benefits or negative consequences?	MCCIS is considered a reliable system by MARCOM that suits their operational needs. However, the system is old and requires significant time and effort for operators to make use of the data.
Were lessons identified?	Lessons in regards to the poor planning of the project were identified.

5. Deployable Communication Information System (DCIS) for the NATO Response Force - Dragonfly

Project overview and purpose	There are many projects under CP 0A0149 "NATO Deployable C2 Assets." The focus of this case study are the 8 Dragonfly systems, delivered under Addendum 1 of this CP. The general purpose of these nodes is to provide deployable CIS to support the NRF. These deliverables are a product of the following 3 projects: Project 1: Provision of NRF DCIS communications and information components Project 2: Provide DCIS Target Architecture and NRF Engineering and Management Services Project 3: Provide for system evolution
Project history (2006-2015)	CP 0A0149 "NATO Deployable C2 Assets" was approved in Aug. 2003, and Addendum 1 was approved in Nov. 2006. Project 1 was completed in Dec. 2015, Project 2 was completed Oct. 2015, and Project 3 was completed in Nov. 2009.
Estimated cost	Project 1 (EUR 66,893,081), Project 2 (EUR 7,525,747), and Project 3 (EUR 4,830,634) Total of 3 projects (EUR 79,249,462).

5.1 Assessment – (no assessment provided)

This case study focuses on 8 deployable CIS points of presence (referred to as Dragonfly) for the NATO Response Force (NRF), which consists of shelters, CIS components, generators and other equipment provided under CP 0A0149, Addendum 1. Much of the reporting documents on this deliverable are classified, and so no assessment score is reported in this document. This summary provides available unclassified project performance information on the Dragonfly system.

Dragonfly was considered fit-for-purpose in a May 2014 operational live test. The test identified a need for further improvements in documentation (such as documenting CIS concepts and documenting activities needed in the event of equipment failure), training,

the provision of spare parts and tools, and Deployable CIS Modules preparation (some teams were better prepared than others).

Although project implementation was outside the scope of this audit, we included a lessons identified concerning cost overruns for the project. The original technical solution for Dragonfly was to supply equipment in a truck mounted shelter. This solution was changed to a "more mobile approach which would entail the equipment being installed in man portable transit cases and deployed in tents rather than shelters," according to an NCIA document. Eventually, this proposed change was implemented after considerable delay and cost overrun, partially as a result of a claim filed by the contractor. According to the NCIA, the Contractor has agreed to a settlement of all outstanding claims in the sum of EUR 12,718,818 and additional funds in the amount of EUR 865,922. One of the issues identified by the NCIA contributing the final claim is that of contradictory instructions from the funding committee and the user community.

6. Deployable HQ Assets for Combined Joint Task Force, 500-man camps

Project overview and purpose	This case study focused on the 500-man camps provided through CP 5A0156, "NATO Deployable HQ Assets for CJTF [Combined Joint Task Force]." The general purpose of these deployable assets is to provide the necessary infrastructure in order to facilitate and accommodate the CJTF HQ when deployed in operations. More precise information on CP purpose can be found in classified documents. Please see the Joint Staff Screening Report, dated March 2003 (SRB-D(2003)1) for further details.
Project history	On 21 May 2003, the Council approved CP 5A0156, "NATO Deployable HQ Assets for CJTF [Combined Joint Task Force]." The non-CIS portion of this CP was supported by 29 sub-projects, according to the NATO Support and Procurement Agency. These projects provided various deliverables to support a deployable command centre, including tents, vehicles, sewage treatment capability, deployable kitchens, and other types of non-CIS equipment. SHAPE and NSPA also adapted this CP to meet new requirements after the CJTF concept was changed into the Joint Task Force concept.
Estimated cost to NATO	The latest cost estimate for the entire CP is EUR 144,361,200 (spread over 18 projects).

6.1 Assessment – (no assessment provided)

This case study focuses on the deployable 500-man camp sets provided under CP 5A0156 (see table 1 for project summary). A full 500-man camp consists of approximately 420 containers and vehicles, according to NSPA. These containers hold a variety of equipment, such as office tents, water treatment and distribution systems, sewage

treatment and collection systems, deployable kitchens, and other deliverables needed to support the camps deployed in operations. Much of the planning and authorising documents for this set of deliverables are classified, and so no assessment score is reported in this document. This assessment provides available unclassified project performance information on this set of NSIP deliverables.

In May 2016, SHAPE declared the IOC of CP 5A0156, based on the performance of the 500-man camps deployed during Exercise Trident Juncture 2015. Two 500-man camps were deployed during the exercise; however, some of the more complex sets of equipment were not deployed, such as the deployable kitchen, incinerator, and medical facility. Deployment activities consist of transporting the assets to and from the deployment site and the construction and deconstruction of the camp.

Although the CP was declared fit-for-purpose, NSPA, SHAPE and Joint Force Command-Brunssum identified shortfalls in the ability to deploy the camps. Specifically, they identified challenges in arranging transport for the assets; organising sufficient number of capable personnel to build, operate and maintain the camps; providing Real Life Support, such as security, catering, water, medical support and other types of capabilities needed to support personnel in the camp; and planning and budgeting the deployment of the assets. NSPA and SHAPE have taken actions to address some of these issues. For example, a contract was signed to provide real life support for the camps in early 2017, and a training seminar has been developed to train personnel in the planning and execution of these assets.

7.   Visual Meteorological Enclave (VISME)

Project overview and purpose	The project purpose is to procure and implement expert meteorological visualisation capability for NATO and national meteorological personnel to support a range of military activities in ISAF and Kosovo theatres.
Project history (2008-2017)	VISME was initiated as an urgent requirement in 2008. From 2013 to 2015, a number of user acceptance tests were performed on the system, each one identifying an unacceptable level of operational deficiencies. The project is now stopped and NCIA is working on a draft JFAI of the project.
Estimated cost to NATO	EUR 3.32 million

7.1   Assessment – Not addressed

Unlike the other NSIP deliverables reviewed for this case study, we found that VISME had not successfully been delivered to users. After VISME failed the final user acceptance test, SHAPE stated in June 2016 that the VISME Full Operational Capability was "not operationally usable and cannot be deployed." As of March 2017, VISME has not been

delivered for operational use to intended users at SHAPE, NATO Kosovo Force (KFOR), or the ISAF in Afghanistan, which ceased as an organisation at the end of 2014.

This project experienced a number of difficulties during the design and implementation stages, which have been documented by the Software-Intensive Projects Task Force in their May 2014 preliminary report. The following are some of their observations:

- Initial requirements were somewhat vague to allow for good competition.
- The original technical solution was changed from a local client to a web-based client, meaning instead of using off-the-shelf software, the project needed software customisation.
- Initial user acceptance test (October 2013) failed.
- Procuring agency did not have meteorological experts on staff to inform the design of the project.
- Continued investment in legacy system led to reduced desire and urgency of users to adopt the new system.

Additionally, we found that SHAPE expressed significant concerns over the proposed technical solution in meeting operational requirements and the affordability of the O&M costs. These concerns led to a delay in contract award. The NOR was invited to perform a review of the reasons for the delay. In March 2011, the NOR released a report that concluded that the contract award for VISME should proceed since the source selection was performed in accordance with procedure and that the offer complied with the requirements for the provision of VISME to ISAF and KFOR. However, in a 2012 letter, SHAPE again expressed its concerns on the reliability and usability of VISME to the NATO agency responsible for procuring the system at that time. The letter stated that the "system is currently unusable" and that they "have little confidence in the contractor being able to provide a satisfactory solution in the future in a timely manner." SHAPE requested that VISME be reviewed with "a view to cancellation and re-competition."

Capability challenges observed during audit

Table 1 - Summary of observations on capability elements for select NSIP deliverables

Capability element	Summary of observations
Doctrine	• Some commands have developed specific guidance to inform users on how to operate NSIP deliverables, while other commands have not. Some users expressed a desire to have such guidance to help them better use the system. • Some users stated that even though guidance exist, not all stakeholders adhere to them.
Organisation	• Single service commands are expected to serve as joint level commands under certain circumstances, so have been provided NSIP deliverables that they presently don't need.
Training	• Users are provided training opportunities to become proficient in most of the systems. However, some users expressed concerns over the availability and costs of training. • Some users stated that it's difficult to maintain proficiency in some systems because they do not use them often and will forget over time.
Materiel	• Some systems suffered significant technical challenges that limited its operational use for some users. • Some of the deliverables were no longer useful to users because either the underlying military requirement had changed since initial project implementation or the technology provided had become obsolete due to long project delays. • The NATO Command Structure reform and changes in the Afghanistan mission also affected the need and delivery of NSIP deliverables. • Some deliverables were designed to be interconnected with deliverables from other projects. Delays in those projects affected the use and effectiveness of some of the deliverables we reviewed.
Leadership development	• Some users said that greater leadership is needed to improve the usage of some systems.
Personnel	• Most commands have assigned offices or specific persons to use and maintain the deliverable, but often these systems are not directly referenced in their formal job descriptions. • Because of a lack of operational need, some commands have not assigned personnel to operate a given system. These commands would require operators from outside the command to use the system.

Facilities	• We observed limits on facilities in terms of size and security that could affect the intended use of NSIP deliverables.
Interoperability	• We found that certain systems faced challenges exchanging information with national systems and other NATO applications, undermining key project objectives.

Source: IBAN analysis of project data.

Formal comments received from
SHAPE, HQ SACT, NCIA, NOR and NSPA

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SUPREME HEADQUARTERS ALLIED POWERS
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		NCN:	254-6607
Date:	16 May 2017	**Fax:**	+32-(0)65-44-3545 (Registry)

TO: See Distribution List

SUBJECT: **DEPUTY CHIEF OF STAFF RESPONSE TO INTERNATIONAL BOARD OF AUDITORS ON THE ASSESMENT OF OUTCOMES AND BENEFITS OF NATO SECURITY INVESTMENT PROGRAMME PROJECTS**

REFERENCE(S):   A.   IBA-A(2017)49 Letter Dated 28 April 2017

1. Thank you for providing SHAPE with your Draft Report at Reference A. As before, we welcome your efforts and agree with the majority of the tenets of the report as a positive and useful document which provides a solid springboard from which to go forward. Nonetheless, we have articulated our detailed factual comments to the draft report at Annex A. We agree that the desired end-state for ACO should be defined by the operational outcomes intended from the projects, through a NSIP benefits management process.

2. SCs with ACO on lead, have already developed an interim Directive on the operational acceptance procedure, in the framework of CNIS part 2 Action Plan, and will continue to work on improving the NSIP management as well as the NSIP deliverables' assessment and benefits realisation.

3. The SHAPE point of contact for this issue is ████████████████.

FOR THE CHIEF OF STAFF:

Ignazio GAMBA
Major General, IT A
Deputy Chief of Staff, Plans

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NORTH ATLANTIC TREATY ORGANIZATION
ORGANISATION DU TRAITÉ DE L'ATLANTIQUE NORD
HEADQUARTERS, SUPREME ALLIED COMMANDER TRANSFORMATION
7857 BLANDY ROAD, SUITE 100
NORFOLK, VIRGINIA, 23551-2490

7000/TSC FXX 0120/TT-170529/Ser:NU

TO: See Distribution

SUBJECT: Formal and Factual Comments on the Draft Performance Audit Report on
the Assessment of Outcomes and Benefits of NATO Security Investment
Programme Projects - IBA-AR(2017)07

DATE: 15 May 2017

REFERENCES: A.   IBA-A(2017)49, 28 April 2017.
B.   IMSM-207-2017(INV), May 2017 (Draft).

1.   ACT appreciates the detailed audit of the assessment of outcomes and benefits of
NATO NSIP projects. We have reviewed the draft performance audit report (Reference A) and
hereby submit our formal comments (Annex A) and factual comments (Annex B).

2.   In general, we agree with the overall tenor of this report and we share the main
observations that NATO does not adequately perform benefits management and that the
mixed outcomes of the selected NSIP deliverables are, in part, a manifestation of this
deficiency.

3.   We are pleased to communicate that most of the recommendations from this report are
already being actively addressed by the Consolidated NMAs Impact Statement (CNIS) 2018-
2022 Action Plan Final Report (Reference B) and its following actions and efforts.

4.   Work strands implemented as a result of this CNIS Action Plan will improve traceability
between requirements and ensure benefits realisation throughout the capability lifecycle. The
through-life cycle management approach will also ensure that the delivered capabilities are fit
for purpose and will facilitate the delivery of NSIP projects within agreed cost, schedule and
performance parameters.

5.   We hope that our additional comments provided in Annex A will support the need for an
overarching NSIP Directive that would include procedures for identifying and assessing
outcomes and benefits of NSIP projects and specify an accountable party to drive this process.

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6.   Should there be any questions, our point of contact is ██████ ██████,
██████████████ ██████████.

FOR THE SUPREME ALLIED COMMANDER TRANSFORMATION:

Sir Graham Stacey KBE CB CCMI
Air Marshal, GBR AF
Chief of Staff

ANNEX(ES):

A. Formal Comments on the Draft Performance Audit Report IBA-AR(2017)07.
B. Factual Comments on the Draft Performance Audit report IBA- AR(2017)07.

DISTRIBUTION:

External –

Action:

Mr. Henrik Berg Rasmussen, International Board of Auditors to NATO (IBAN)

Information:

Director, NATO Office of Resources
Chief, Infrastructure & Finance Branch, Logistics & Resources. IMS
Chief of Staff, Allied Command Operations
General Manager, NATO Communications and Information Agency (NCIA)
General Manager, NATO Support and Procurement Agency (NSPA)

Internal –

Action:

DCOS CD
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DCOS JFT
DCOS SPP

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ANNEX A TO
7000/TSC MFX 0010/TT-170529/Ser:NU
DATED: 15 MAY 17

**FORMAL COMMENTS
ON THE DRAFT PERFORMANCE AUDIT REPORT IBA-AR(2017)07**

1.   ACT wishes to provide formal comments on the following issues tackled in the recommendations paragraph of the report (para 4.2, page 2-19 and 2-20):

   a.   Applicable NSIP guidance: ACT agrees with the recommendation to ensure that procedures are included in applicable NSIP guidance in order to address the shortfalls in the CP process. However, we would like to reiterate, as reflected in the IBAN special report on the need to reform governance of the NATO Security Investment Programme[1], that there is still a strong need for an overarching NSIP Policy and Directive that would include procedures for identifying and assessing outcomes and benefits of NSIP projects and specify an accountable party to oversee this process.

   b.   Governance/Accountable party: ACT shares the view expressed in the report that solid Governance framework is key. We believe that clear roles and responsibilities should be established and/or revised and documented in a Directive. NATO is currently carrying out efforts to address this topic in the wake of the Group of Senior Experts (GSE) report to the DPRC on improving the governance aspects of the common funded capability delivery process. ACT remains ready to overtake any role and responsibility once conclusions and recommendations have been reached at the DPRC level.

   c.   Outcome and benefit assessment plans and reporting mechanisms: ACT support the need to create and maintain outcome and benefit assessment plans at the capability level, across the DOTMLPFI lines of development and in accordance with the PRINCE 2 methodology. This work is already in progress in the C3 community, with a heavy involvement of the Bi-SC Programme Management Office (PMO). Concerning the reporting mechanisms, we believe that the ongoing work conducted by the Strategic Commands to reenergise the roles and responsibilities of the Bi-SC Capability Package Board (CPB) and the Bi-SC Capability Board (CB) is heading in the right direction. It allows the Strategic Commands to better inform the Capability Development Executive Board (CDEB) to which all benefit, but also negative consequences, of common funded projects should be reported to.

   d.   JFAI/Capability Acceptance: Whilst there is currently an opportunity to improve the JFAI process, as mentioned in this report at several occasions, ACT would like nevertheless to insist on the fact that this financial acceptance inspection of a CP project does not and will not represent the assessment of the maturity of the capability for operational acceptance. Accordingly, it is recommended that the JFAI is

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[1] IBA-AR(2014)35, 11 June 2015.

acknowledged as only a component to the Capability Acceptance. This relationship is currently articulated in the Bi-SC Interim Capability Acceptance Directive developed under the CNIS Part II Action Plan, item 8 (cf reference B).

e.   Lessons identified process: ACT agrees with the observations and recommendations made concerning this process and the lack of coordination among stakeholders to rectify and implement lessons from NSIP projects. We would like to stress the point that, in order for such a process to be effective, NATO needs the continuous engagement of all stakeholders combined with a commitment to follow up the Lessons Learned (LL). This is exactly the goal of the NATO LL Policy, which is the overarching policy governing LL Alliance-wide, including all NATO bodies, agencies and staff. It is therefore our belief that the new NSIP LL Policy should be operationalized in a Directive in order to implement it. Of course ACT, with JALLC, stands ready to help operationalize and implement this policy.   Furthermore, a cornerstone in operationalizing a LL process is to make it transparent and accountable by using one single tool for handling, sharing, finding and monitoring the steps in the LL process. The NATO LL Portal, managed by JALLC, is the NATO place to manage these lessons.

f.   Requirement satisfaction: ACT agrees with the observations regarding traceability between requirements and benefits realisation throughout the capability lifecycle. As part of the CNIS Part II Action Plan, item 4 (cf Reference B), recommendations have been identified for improving NATO's current processes for defining the capability and project requirements and ensuring traceability. Implementation of these recommendations will improve the current verification and validation (V&V) process to ensure that the resulting planned enhancement or development of military capabilities are fit for purpose and achieved benefits realization.

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NCIA/IA/2017/10066/TT-3867
15 May 2017

To   :   Mr Henrik Berg Rasmussen, International Board Auditors

Subject   :   **Factual Clearance and formal Comments to the International Board of Auditors for NATO (Board) Draft performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects**

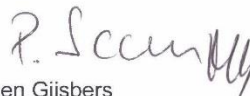References   :   IBA-A(2017)49 dated 28 April 2017

Dear Mr Rasmussen,

As requested, this letter provides the NCI Agency factual clearance and proposed formal comments to the IBAN draft audit report on the audit at Reference.

The Agency notes the IBAN observations. Although the result of a number of contributing factors, at the most basic level the underlying root cause is the shortcomings related to the existing C3 Governance within NATO which is not adequately addressed by the report.

The Agency has some factual comments to offer to the report and provides the proposed formal comments on the content of the audit report in the Enclosure.

The Agency's Point of Contact for this matter is ███████████████████████
███████████████████████████████

Yours sincerely,

P. Scummy

for   Koen Gijsbers

General Manager

Enclosure:

Factual clearance and formal comments on the Draft performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects

NATO Communications
and Information Agency

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Page 1 of 2

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ENCLOSURE to
NCIA/IA/2017/10066/TT-3876

Factual clearance and formal comments on the Draft performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects

1. Proposed formal comments on the Draft performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects

The report does not address the shortcomings related to the C3 Governance within NATO. The Agency believes that these are the root cause of most of the issues identified by the IBAN with the report. In detail:

- **Strategic Alignment**: The development process for the coordinated formulation of the C3 Strategy - derived from the overall NATO strategic concept and political guidance – is not clearly defined and generates fragmented sub-optimised results. The alignment between the Alliance future needs and the plans to identify, develop, procure, maintain and dispose of C3 capabilities is not clearly identifiable;

- **C3 Single Authority**: The lack of a clear single authority for NATO C3 Capability Delivery makes it difficult to align the C3 Domain strategy to the Alliance strategy;

- **Inefficient Synchronization of Efforts**: The many organizations operating under different funding mechanisms within the C3 domain require strong governance to synchronize staff efforts, streamline reporting to nations and avoid duplications. C3 Capabilities are fragmented in a variety of often unrelated projects that develop their own momentum and continue for excessively long periods of time, consuming resources and becoming increasingly distant from the original agreed intent. The C3 Capability delivery process is affected by the existence of several projects implementing parts of the capability, managed as parallel endeavours, without an overarching programme coordination, or consideration of crossover effects;

- **Low Process Maturity and Suboptimal allocation of Resources**: Existing processes might be perceived or executed at a low level of maturity and result poorly aligned with each other, thus causing lower performances and a suboptimal allocation of resources;

- **Ineffective allocation of Roles and Responsibilities**: No one is vested with overall responsibility for C3 Capabilities across the lifecycle, thus the status of these capabilities is not always visible and the required activities are not consistently driven to successful conclusion;

- **Process Misalignment**: The life-cycle of C3 capabilities is characterised by the interaction of mature processes, mostly independent and not completely aligned between each other.
Those processes in the C3 capability delivery phase are not considered holistically and there are "frictions" impacting the cost and utility baseline.

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- **Lack of Risk Management**: There is no coordinated approach to risk management nor are risks managed in a structured way. A number of different approaches to risk management are followed within NATO and in the nations; there is no unique guidance on how to deal with capability life-cycle risks;

- **Lack of Benefits Management**: There is no benefits management process that could ensure the implementation efforts deliver the expected value to the users. A consistent feedback-loop is missing;

- **Inefficient Standardisation Processes**: The need for effective solutions for communication and information sharing is increasing but it is not fully supported by standardisation processes.
  NATO Allies and Industry claim that NATO standards and the process leading to the development and adoption of these standards can be an obstacle to the access to a wider and potentially more convenient market of suppliers;

- **Lack of Agreement on Performance Management**: In NATO there is not a general agreement that could foster the adoption of a consistent set of metrics, audits processes and compliance management tools that could be used to inform nations on the status of capability delivery. The C3 Domain is no particular exception to this situation. Systematic controls are not planned, and enacted into sufficiently mature business processes, to ascertain compliance to guidelines, policies and procedures;

- **Ineffective Taxonomy of concepts and terms**: NATO is lacking a common and well established terminology that addresses the inherent complexity of its business and provides standard definitions in political, military and technical terms. This standard terminology should be supported by an agreed taxonomy of different concepts and terms. Different understandings and interpretations of the same term, plus the language ambiguity due to the nature of the political debate, affect the ability to reach consensus based decisions and hinder the progress of capabilities.

In addition, the following comments reference various sections of the audit report:

- The IBAN report does not address the issue of changes in the environment or changes in strategic objectives (over the lifecycle of the CP and projects, which is a very long time period) and the need to re-evaluate the capabilities under development, implementation or operation and whether the planned outcomes and benefits are still correct or achievable or whether the capability is still required as a result of the changes. This is a necessary process that should be conducted on a periodic basis or on an event driven basis, and the result should be an adjustment of the expected outcomes and benefits (and a traceability from the original defined outcomes and benefits – change management). (Some of the factual comments below illustrate this point);

- The JFAI stage (after the project output has been transitioned into operation) could be the appropriate time to assess outcomes but it is unlikely to be the correct time to assess benefits as these are more likely to be achieved some time after the capabilities are in

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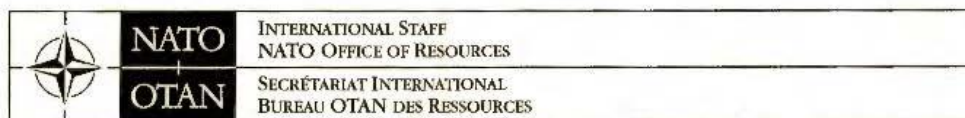ENCLOSURE to
NCIA/IA/2017/10066/TT-3876

operational use. Therefore an inspection for benefits should be at least a "defined period of time – like a year" after the capability is in full operational use;

- The report does not address the need to identify, execute and monitor business change activities that are necessary (in parallel with the capability implementation) to achieve the outcomes and benefits; and how these are formally described and executed for NATO. (so the other lines of development such as DOTLPI);

- The Managing Successful Programmes (MSP) methodology emphasizes that a programme is formed to ensure the delivery of outcomes and benefits (for a group of related projects and activities). The report does not include any reference to any major programmes, managed at NATO's level, to determine if they have identified outcomes and benefits and if they have a benefits realization plan and function. A recommendation for the establishment of more "MSP sized" NSIP programmes should be considered to ensure outcomes and benefits realization, and a recommendation that the existing larger programmes (e.g. BMD, Air C2, AGS) must describe and manage the outcomes and benefits that they are trying to achieve.

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16 May 2017

INFO MEMO
NOR(DIR)(2017)0083

To   :   Henrik Berg Rasmussen, IBAN

From   :   Director, NATO Office of Resources

Subject   :   **DRAFT PERFORMANCE AUDIT ON THE ASSESSMENT OF OUTCOMES AND BENEFITS OF NATO SECURITY INVESTMENT PROGRAMME PROJECTS**

Thank you for your letter of 28 April (ref: IBA-A(2017)49) seeking formal and factual comments on this latest performance audit of the NATO Security Investment Programme (NSIP).

As always, we welcome advice and recommendations from the IBAN as a valuable contribution to our work on improving the delivery of common funded capabilities. In this context I see this report as complementing your earlier performance audits and it will be important that we address your observations and recommendations in a manner that is coherent with the substantial effort that is being directed towards improving NSIP performance and governance. The assessment of performance and outcomes cannot sensibly be separated from the wider end to end process, and we will need to take care to avoid dealing with your latest findings in a piecemeal way.

That, however, is for the future. At this stage I only have a few number of factual comments and suggestions which are set out in the attached Annex for your consideration.

John F. Aguirre

NATO SUPPORT AND PROCUREMENT AGENCY
AGENCE OTAN DE SOUTIEN ET D'ACQUISITION

OFFICE OF THE GENERAL MANAGER
BUREAU DU DIRECTEUR GÉNÉRAL

G/2017/6042

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17 May 2017

Mr Henrik Berg Rasmussen
Board Member
International Board of Auditors for NATO (IBAN)
Boulevard Léopold III
B-1110 Brussels

Dear Mr Rasmussen,

1.   Thank you for your letter[1] inviting us to comment on the validity and completeness of the facts expressed in your '**Draft performance audit report to Council on the assessment of outcomes and benefits of NATO Security Investment Programme projects - IBA-AR(2017)07**' as well as to address any facts pertinent to an observation not noted in the draft.

2.   I have no major comments to make on the facts of the report but have included two relatively minor comments at Annex.

3.   I agree with the main thesis of the report that measurement of outcomes and benefits is not conducted in a systematic way. However, I am confident that the NSIP projects that NSPA is entrusted with delivering - whether capability packages, urgent requirements or minor works - do indeed deliver benefits, albeit not measured, to the users.

4.   My staff remain available to assist you as necessary in the important work of ensuring that common-funded capabilities are delivered while meeting the requirements of the user.

Peter Dohmen
General Manager

Annex: NSPA comments on Draft IBA-AR(2017)07

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[1] IBA-A(2017)49 dated 28 April 2017

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Abbreviations

C3	Consultation, Command and Control
CIS	Communication and Information System
Council	The North Atlantic Council
DOTMLPFI	Doctrine, organisation, training, materiel, leadership development, personnel, facilities and interoperability
IBAN	International Board of Auditors for NATO
ISAF	International Security Assistance Force
IOC	Initial Operational Capability
JFAI	Joint Final Inspection and Formal Acceptance
LC2IS	Land Command and Control Information Services
MCCIS	Maritime Command and Control Information System
NCIA	NATO Communications and Information Agency
NCOP	NATO Common Operational Picture
NOR	NATO Office of Resources
NSIP	NATO Security Investment Programme
NSPA	NATO Support and Procurement Agency
O&M	Operations and Maintenance
HQ SACT	Headquarters, Supreme Allied Command Transformation
SHAPE	Supreme Headquarters Allied Powers Europe
TOPFAS	Tool for Operational Planning, Force Activation and Simulation
VISME	Visual Meteorological Enclave