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12 June 2015

DOCUMENT
C-M(2015)0043-AS1

**SPECIAL REPORT BY THE INTERNATIONAL BOARD OF AUDITORS
ON THE NEED TO REFORM GOVERNANCE OF THE
NATO SECURITY INVESTMENT PROGRAMME**

ACTION SHEET

On 11 June 2015, under the silence procedure, the Council noted the IBAN report IBA-AR(2014)35 and agreed the recommendations contained in the RPPB report.

(Signed) Alexander Vershbow
Deputy Secretary General

NOTE: This Action Sheet is part of, and shall be attached to C-M(2015)0043.

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8 June 2015

DOCUMENT
C-M(2015)0043
Silence Procedure ends:
11 Jun 2015 18:00

**SPECIAL REPORT BY THE INTERNATIONAL BOARD OF AUDITORS
ON THE NEED TO REFORM GOVERNANCE OF THE
NATO SECURITY INVESTMENT PROGRAMME**

Note by the Deputy Secretary General

1. I attach an International Board of Auditors for NATO (IBAN) Special Report to Council on the Need to Reform NATO Security Investment Programme (NSIP) Governance. The report has been reviewed by the Resource Policy and Planning Board (RPPB), which has provided its own report with conclusions and recommendations to the Council.
2. The IBAN report highlights governance shortfalls that hinder effective and timely implementation and completion of NSIP projects. The RPPB confirms the urgent need for improvement and recommends a solid package of measures as an important step towards ensuring delivery of common-funded capabilities within approved cost, scope and schedule.
3. The Council is scheduled to discuss the issue of improving capability delivery at its meeting on 10 June 2015. This report, and a closely related one by the RPPB and the Military Committee addressing the Wales Summit tasking to present initial recommendations to improve the delivery of common-funded capabilities, will serve as a basis for the discussion.
4. I do not intend to seek Council approval of this report during the Council meeting itself. Instead, and unless I hear to the contrary **by 18.00 hours on Thursday, 11 June 2015**, I will assume that Council has noted the IBAN report IBA-AR(2014)35 and agreed the recommendations contained in the RPPB report.

(Signed) Alexander Vershbow

3 Annexes

Original: English

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**IBAN SPECIAL REPORT TO COUNCIL ON THE NEED
TO REFORM NATO SECURITY INVESTMENT PROGRAMME GOVERNANCE
REPORT BY THE RESOURCE POLICY AND PLANNING BOARD**

References: (a) IBA-A(2015)60 & IBA-AR(2014)35
(b) AC/4-D(2015)0003-FINAL
(c) AC/335-N(2015)0016-REV6
(d) AC/335-N(2015)0013-REV6
(e) PO(2015)0052
(f) C-M(2014)0052

INTRODUCTION

1. The present report by the Resource Policy and Planning Board (RPPB) contains the RPPB's assessment and recommendations concerning the International Board of Auditors for NATO (IBAN) Special Report to Council on the Need to Reform NATO Security Investment Programme (NSIP) Governance (reference (a)).
2. The report takes full account of the review of the IBAN report provided by the Investment Committee (IC) (reference (b)).

AIM

3. The aim of this report is to provide the Board's position on the IBAN observations taking into account the ongoing work in the Resource Committees to improve NSIP governance and delivery of common-funded capabilities. The underlying intent of these resource reforms is to ensure effective capability delivery within approved cost, scope and schedule to meet the military requirements of the Alliance.

BACKGROUND

4. Since 1951 the NSIP has delivered Alliance common-funded capabilities through the Cold War, crisis and operations. Over the past 64 years 33 billion Euro in common funds have been spent to support NATO's integrated command structure, NATO operations, deployable capabilities and deploying NATO forces. NSIP remains an important and visible sign of Alliance solidarity and should continue to be used as an effective enabler to deliver Alliance capabilities.
5. Given the tempo of activity and the significant scale of NSIP investments in support of operations over the past 10 years, the more traditional elements of the NSIP have experienced problems in terms of delays with capability delivery. These problems are not unique to NATO and not unusual for a multi-billion investment programme with complex capability programmes, subject to changes in military requirements, and multi-year implementation timelines. Tackling these problems to ensure effective and efficient capability delivery has been the subject of NATO resource reform efforts over many years.

6. The IBAN report comes at a time when NATO is working on different strands of work to improve the management, accountability and transparency of NATO common funding including in response to the Wales Summit tasking on Improving the Delivery of Common-funded Capabilities (reference (c)), development of a final Customer Funding Regulatory Framework for the NATO C&I Agency (reference (d)) and implementation of the recommendations to improve transparency and accountability agreed by Council at reference (e).

7. The common theme in the IBAN report and the Board's parallel work is the lack of accountability and enforcement throughout the capability delivery process which has hindered the delivery of common-funded capabilities within agreed costs, scope and schedule. The overall capability delivery process involves different stakeholders and includes the requirements setting and development process under responsibility of the Strategic Commands; the approval processes under the responsibility of the Council, the RPPB, the Military Committee, and the IC with the support of the NATO Office of Resources (NOR); the implementation process under responsibility of Host Nations (nations and NATO Agencies), monitored and governed by the IC, again with the support of the NOR; and the in-service phase which is under responsibility of the military user. The IBAN report only addresses the NSIP implementation process.

IBAN REPORT SUMMARY

8. The IBAN report assesses how far NSIP governance enables NATO oversight bodies to monitor projects well and in good time, and NATO implementation bodies to complete them within agreed costs, scope and schedule. It addresses projects that are still under implementation and projects that are physically complete but still require technical and/or financial close-out.

9. The IBAN findings and conclusions are supported by the assessment of 156 selected NSIP projects in 2013 and 2014 - out of a total of 3,000 NSIP projects - and a specific IBAN review of 21 NSIP projects. The IBAN observed, inter alia, that in 2014, two-thirds of the 156 projects planned for authorisation did not meet their milestones and 90% of the final authorisations did not happen as planned; that from 2010 to 2014, annual NSIP spending has been about 19% lower than adjusted contribution ceilings and forecasts; and that for the reviewed 21 projects, latest cost estimates show that actual costs will be about one-third higher than initially programmed, primarily driven by additional scope. The IBAN also reviewed NSIP policies and procedures and the work of NATO oversight and implementation bodies in relation to the policies.

10. The IBAN report highlights governance shortfalls that hinder effective and timely implementation and completion of NSIP projects needed to deliver required capabilities within approved cost, scope and schedule. The IBAN recognises policy changes and improvements to remedy shortcomings in NSIP implementation and management oversight, but concludes that progress to date has been insufficient to produce significant improvements in performance. The IBAN report also points out where stakeholders in the NSIP implementation process – the IC, Host Nations, the NOR and the Strategic

Commands – have failed to adhere to existing procedures and need to step up performance to improve overall NSIP accountability and control.

11. The IBAN report makes the following key points:

- NSIP stakeholders struggle to implement or effectively oversee implementation of projects needed to deliver required capabilities within approved cost, scope, and schedule.
- While some improvements from recent policy changes are evident, fundamental challenges in accountability and enforcement remain and show urgent need for further action.
- Existing NSIP governance principles may not be fit for the purpose to ensure effective and efficient capability delivery.
- Given the challenges in other steps of the capability delivery process, improving project implementation alone will not provide capabilities on time.

12. The IBAN makes recommendations to improve NSIP project implementation in the short and longer term. The six short-term recommendations address improvements within the existing NSIP governance structure and essentially focus on improving IC decision-making during the authorisation process to ensure that projects presented for authorisation reflect accurate and realistic assessments on cost, scope and schedule estimates. The five longer-term recommendations aim at a reform of NSIP governance to improve accountability, control and enforcement to ensure the long-term viability of the NSIP, and include commissioning of an examination by external subject-matter experts, drawn from national administrations.

13. The IBAN recommends that these experts provide recommendations to the Council, by addressing, at a minimum, changing NSIP principles as necessary; developing a governance model that enables more effective direction and enforcement; creating effective incentives, with particular emphasis on the NATO Agencies, to encourage Host Nation adherence to agreed timelines and commitments; and making the organisational changes in NATO bodies involved in capability delivery as necessary.

14. The Director, NOR, and the Chiefs of Staff for Allied Command Operations and Allied Command Transformation provided comments which are included in the IBAN report. These comments demonstrate no fundamental differences in opinion regarding many of the main problems and the need to improve.

DISCUSSION AND ASSESSMENT

15. The shortcomings highlighted in the IBAN report are well known within NATO, and the issues raised have been addressed extensively over the past several years through a number of resource reform initiatives. The Board is reassured that the IBAN report has not identified any major new problems but is dissatisfied with the persistent problems and difficulties in both NSIP implementation and NSIP oversight. The Board accepts the IBAN

report, concurs with most of the observations and confirms the urgent need for further improvement measures.

Reforms have not yet led to measurable improvements in capability delivery

16. The IBAN report argues that despite the resource reform efforts the fundamental problems that surround NSIP project delivery remain unchanged. NSIP projects continue to be implemented with substantial delays and at higher costs. The IBAN states that Host Nations struggle to give accurate and feasible estimates of cost, scope and schedule; that the NOR has not screened project schedules to ensure that these are realistic; that the Strategic Commands reporting on the impact of project delays is incomplete, and that the IC has been unable to effectively control project schedules, cost and scope estimates.

17. The Board notes that previous reform initiatives had high expectations to address the recurring problems but failed so far to deliver tangible results. The Board is disappointed that circumstances did not yet allow the IC to undertake a more focused hands-on implementation management to achieve more effective delivery of NSIP projects.

18. The IBAN audit was conducted at a time - March through November 2014 - when the changed NSIP policy framework was largely in place but without the means to fully implement it and the full determination of the different NSIP stakeholders to adhere to it. This was partly due to the then limited functionalities of the former NSIP database and the limited availability of implementation milestone data up to the end of 2014. For the first time, with the introduction of the new Common-funded Integrated Resources Information System (CIRIS), conditions now exist for the IC to exercise implementation management and oversight for all projects.

Concrete additional reform measures initiated

19. The RPPB appreciates the comprehensive report by the IC (reference (b) refers) in response to the IBAN findings and welcomes the NSIP Management Action Plan with its concrete immediate measures to improve implementation management, oversight and control by the IC, both at individual project and Capability Package level. The Board tasks the IC to fully implement the NSIP Management Action Plan and make the Board aware of any difficulties that could hamper its implementation.

20. The Board underscores the need for urgent implementation of all measures to strengthen IC management oversight, increase Host Nation accountability and enforce stronger scope and schedule control. The Board invites the IC to fully exercise its management authority when agreeing to the Capability Package Implementation Plans to establish the baseline implementation schedule for the individual projects; when authorising individual NSIP projects submitted by Host Nations and based on technical, scope, policy, eligibility, risk and lifecycle cost assessments from the NOR; when accepting the technical inspection reports and as part of the effective monitoring and review of on-time Host Nation submissions of advance planning funds and cost estimates,

on time contract awards and project completions by Host Nations, and of timely technical and financial verification and validation of NSIP projects.

21. The Board believes that the NOR needs to systematically review and assess the risk and implementation schedules of all project submissions from Host Nations as part of a cost and risk management framework and to improve assurance to the IC that schedule and scope risks are adequately controlled. The Board also believes that the Strategic Commands need to be actively involved at all process steps to confirm that proposed solutions meet military requirements and that operational impacts from project delays are known and fully made part of IC decision-making.

22. The above project-level measures in the IC need to be complemented by systematic reviews at Capability Package level to improve management of the NSIP, to assess project interdependencies and to identify the impact of changes in individual project schedules on the overall capability. This will be done, inter alia, through the refocusing of the Capability Package Implementation Plans to obtain clear commitments from Host Nations to implement NSIP projects in accordance with agreed targets (scope, cost, timelines and acceptance criteria), and to formalise the responsibility of Host Nations to seek IC authorisation regarding scope, cost and schedule changes and the need for clear impact statements by the Strategic Commands on the operational impact of these changes.

23. The Board also stresses the need for preparation of annual Capability Status Reports for Capability Packages, as a comprehensive management tool for the IC to review and monitor Host Nation¹ implementation timelines and expected completion dates set at the time of the Capability Package approval, to address risks and possible implementation delays and to direct mitigation measures, where required. As a further integral part of NSIP implementation management, the Board also welcomes the IC quarterly review of the project portfolio planning of the two NATO Agencies and the enhanced Performance Measurement Framework, put in place by the IC in early 2015, aiming at measuring progress in key areas over time through a distinct set of key performance indicators, distinguishing performance amongst Agencies and territorial Host Nations, based on intermediate and overall targets.

24. The IC also addressed other shortcomings related to NSIP implementation, not covered in the IBAN report, but which are considered relevant and related to the overall goal of improving the delivery of required capabilities. These include general comments on unrealistic implementation timelines set outside the control of the IC; the role of the NATO Agencies in NSIP implementation and possible alternate hostnationship for implementation of simple communication and information systems projects; possible weaknesses in capability delivery outside the implementation process; and the need for more and more continuity in manpower resources – in particular the need for sufficient support from NOR which is considered critical for implementation of the improvement measures.

¹ With reference (d), the IC has been invited to assess the performance as regards cost, schedule and scope of the NATO C&I Agency in particular.

25. The Board is aware that the NSIP Management Action Plan measures will not undo already incurred project delays and cost increases but expects that the IC monitoring and management efforts will bring these systematically into the open so as to obtain justifications and to bring projects back on track. Where project planning efforts are yet to start and authorisations to be granted, the RPPB calls on all NSIP stakeholders to make full use of the improvement measures to ensure realistic project planning and commitment to agreed milestones, scope and cost. Overall, the Board expects to see credible results from the reform measures by no later than mid-2016.

26. In principle, the actions put in place by the IC should improve accountability, oversight, control and enforcement by the 28 Nations of NSIP projects. However, given the failure of previous NSIP reform efforts, the Board remains to be fully convinced whether these latest measures will produce the tangible improvements in NSIP performance and in overall capability delivery that Heads of States and Government have mandated at the Wales Summit.

27. The Board will keep implementation of the additional reform measures under close supervision and will play an active role in monitoring that these measures lead to the expected results. It tasks the IC to present periodic progress reports for the Board's review at its biannual plenary meetings, starting with the first stock-taking at the Board's December 2015 meeting. The Board also believes that the Council should underscore the need to implement, and closely monitor, all measures to improve efficiency and effectiveness in delivering common-funded capabilities and to better hold NSIP stakeholders accountable to meet their commitments. This is also in line with one of the IBAN short-term recommendations.

IC improvement measures not to be seen in isolation

28. The Board recognises that the IC's efforts cannot be seen in isolation from the recommendations that are currently being developed in response to the Wales Summit taskings. These address, inter alia, the need to define responsibilities and clear accountability structures throughout the entire capability delivery process; the need for risk management plans and clear project implementation milestones as early as of the initial project planning documentation stage; and the need to obtain early Host Nation commitment to implement projects in accordance with agreed targets.

29. Work on the final Customer Funding Regulatory Framework seeks to streamline responsibilities in the governance structure of NATO C&I Agency and to establish specific mechanisms to validate and ensure effective and efficient service provision by the Agency, given its privileged position in delivering communication and information system capabilities to NATO.

30. Given their different nature, the parallel strands of work will result in distinct, yet interrelated, recommendations to Council for improvement measures. They represent mutually reinforcing building blocks to improve accountability and effectiveness in capability delivery. Collectively, they represent a solid package of reform measures and

address the shortcomings and the short-term recommendations identified in the IBAN report. A comprehensive overview of the reform measures from the different initiatives is provided at Appendix 1. The Board will provide progress updates to Council as part of its future reports on implementation of the recommendations to improve delivery of common-funded capabilities.

31. The Board also underlines the need to guard against complacency. NSIP policies and procedures need to be kept under constant review to ensure that they provide an optimum structural framework to support effective and efficient delivery of required capabilities.

Timely close-out of completed projects is a must

32. The continued slow close-out of NSIP projects is unacceptable to the Board. Insufficient progress has been made towards the timely close-out of completed projects with too little emphasis put by Host Nations to submit their requests for technical and financial verification and validation, and the NOR has been unable to fully keep up with the timely processing of the technical inspection requests within available resources.

33. The Board recalls the Council tasking to fully close-out by mid-2016 projects that were physically complete by mid-2014 (reference (f) refers) and reiterates the demand on Host Nations to adhere to agreed milestones for requesting the technical and financial close-out of NSIP projects. The IC will be answerable for the management of the timely close-out of completed NSIP projects in line with existing NSIP procedures and Council decisions and will keep the Board informed of progress.

34. The Board calls on the IC to keep these milestones under close supervision and requests an IC assessment by October 2015 of a range of possible measures to enforce better Host Nation compliance, also by taking into account the proposals at reference (c) and the RPPB's decisions as part of its recent endorsement of a new Capability Package². The Board also welcomes the future preparation of annual reports on completed NSIP projects and looks forward to receiving the results of the assessment work on developing an NSIP asset database as important steps to further improve transparency and accountability on the use of NATO common funds.

Enforcing accountability and governance as overarching themes

35. The IBAN highlights the lack of accountability and the fragmented governance structure as fundamental problems affecting the NSIP. The lack of clear accountability structures and the need to identify the responsible and accountable entities are also seen as the most important issues which are being addressed as part of the work in response to the Wales Summit tasking on Improving Capability Delivery. This is why definition of the

² Capability Package 9A0101 – Wireless Communication Transmission Services (other than SATCOM) (AC/335-N(2015)0005-REV3 refers).

accountability structure throughout the entire capability delivery process is being proposed as one of the urgent areas for improvement.

36. Recognising that the capability-based approach and the principles of clear separation of planning, programming, budgeting and implementation functions are sound, the Board also considers that recommendations from past review and reform efforts still have not been fully implemented and enforced. Greater focus is therefore needed on recommending concrete measures that improve the delivery of common-funded capabilities and that can be implemented rapidly. The Board also considers that nations should put the interests of the Alliance ahead of national or industrial interests when agreeing to NSIP projects to achieve more effective capability delivery.

37. Streamlining the governance and improving accountability of the NATO C&I Agency in particular are also key elements of the Board's considerations in the context of defining a Customer Funding Regulatory Framework for the NATO C&I Agency aiming at achieving effective and efficient provision of communications and information technology capabilities. In this regard, the Agency's performance regarding their responsibilities for capability delivery must be measured, the Agency must be held accountable for individual project-, and its overall capability-, delivery results, and the RPPB must be appraised of the outcome of this improved accountability.

38. Improved performance of the NATO C&I Agency will also have a direct and significant impact on NSIP performance given the number of complex software projects under its implementation. In addition, the Board will consider proposals for an integrated process to merge the provision of information technology capabilities services and asset renewal, and a future review of the Regulatory Framework which could identify further measures to improve accountability and capability delivery by the Agency.

Addressing specific IBAN observations

Monitoring of Key Identified Capabilities

39. The review of the common-funded elements of a selected number of key capability programmes is a key element of the Board's resource management activities to maintain awareness and supervise the implementation of Alliance priority programmes. The Board agrees with IBAN that this work needs to be fully informed by and aligned with the IC's activities in these areas. This is why since 2015 these reports include, in addition to the operational impact statements by the Strategic Commands, an assessment from the IC to highlight particular issues with regard to the implementation of related NSIP projects and the actions put in place to ensure timely delivery of common-funded capabilities.

Enhanced Reporting to and Involvement of Council

40. As part of the efforts to improve financial transparency and accountability (reference (e) refers), it has already been agreed that Council should hold more regular, dedicated discussions on forward looking strategic resource issues. Council has an important role to

play in strengthening accountability and corporate governance within NATO. This includes holding responsible stakeholders to account. While Council is the supreme decision making body, enhanced accountability and clearer lines of responsibility needs to be strengthened at all levels.

Weaknesses in other processes of capability delivery

41. The IBAN report concludes that improvements in just the NSIP implementation process will be not be enough to achieve overall improvement in capability delivery. This has also been recognised as part of the Wales Summit tasking on Improving Capability Delivery which asks for improvements across the whole spectrum of the capability delivery process, and recommendations are being developed to that effect.

42. Similar to the way the present IBAN findings and recommendations on the NSIP implementation process has informed the Board's overall work on improving common-funded capability delivery, the Board considers that an IBAN performance audit on the requirements setting and capability development phase in particular could complement future analysis work in this area.

IBAN longer-term recommendations to reform the NSIP

43. Nations are unanimous in their views that the NSIP has been underperforming for too long and mandate more effective capability delivery within approved cost, scope and schedule. They fully agree with the IBAN that further reform efforts are needed and confirm that the recommended improvement measures from the different strands of work need to demonstrate tangible improvements in NSIP performance to confirm that the programme, with its governance model and principles, is fit for purpose to deliver Alliance capabilities where needed and when needed. The tangible improvements must be credible and measurable, against an agreed baseline and clear performance targets to be presented to the Board by the IC by end of October 2015.

44. Several nations support the IBAN longer-term recommendations, as detailed in paragraph 13, to commission a group of external subject-matter experts – with diverging views whether this expert advice should be called from national administrations, an outside consultancy company or provided by a NATO HQ Tiger Team - to develop proposals to reform NSIP governance and principles as a very useful initiative which could build on and complement the ongoing improvement measures in the Resource Committees to address the shortcomings in the NSIP implementation process and ensure the long-term viability of the programme.

45. Other nations do not see the need to convene a group of external subject-matter experts at this stage, believing that the NSIP governance structures and processes are sound and that the mandated improvement measures will enable improved accountability, control and enforcement in delivering common-funded capabilities. These nations are willing to accept that time is needed for all measures – existing and new - to come into full

effect and stand ready to reconsider decision on whether to call on a group of experts on the basis of a future assessment of the achievements.

RPPB CONCLUSIONS

46. The RPPB welcomes the IBAN Special Report to Council on the Need to Reform NSIP Governance. This report highlights numerous shortcomings in NSIP management and establishes a foundation for further improvement measures.

47. It is important not to look at the IBAN report in isolation. The IBAN report arrives at a defining moment in NATO resource reform, where mounting concerns about capability delivery, accountability and governance have coalesced into concrete initiatives with clear deliverables. These initiatives identify additional improvements in the delivery of common-funded capabilities, as mandated by the Council and endorsed by Heads of States and Governments at the Wales Summit; aim at achieving effective and efficient provision of communications and information technology capabilities; and implement the Council-agreed recommendations to improve overall transparency and accountability within NATO.

48. The specific actions put in place in response to the IBAN observations on the NSIP implementation process represent one set of improvement measures which is fully coherent and integrated with the parallel initiatives in the Board. Collectively, these measures address the shortcomings and short-term recommendations in the IBAN report and put in place a solid package of additional improvement measures to ensure delivery of common-funded capabilities within approved cost, scope and schedule. Credible achievements are expected by no later than mid-2016 and will be measured against clear performance targets.

49. Many of these improvement measures are being implemented with immediate effect; others require some time or further analysis before they will come into full force. The measures seek improvements across the capability delivery process. More specifically, they define implementation milestones as early as of the Capability Package planning stage; seek clear Host Nation commitment to agreed implementation targets, more comprehensive assessments by the NOR as to possible risks for scope and schedule changes, increased military involvement at all stages of the implementation process; and underscore the importance of a comprehensive monitoring, evaluation and control mechanism in the IC to improve NSIP management.

50. The RPPB will play an active monitoring role to ensure that the additional improvement measures produce the expected results. It has tasked the IC to present periodic progress reports for the Board's review at its biannual plenary meetings, starting with the first stock-taking at the Board's December 2015 meeting. The Board also believes that the Council needs to be kept fully abreast of the progress made in this area and will do so as part of its future reports in response to the Wales Summit tasking, starting with a first stock-taking in time for the October 2015 Defence Ministerial meeting.

51. The Board has examined the IBAN longer-term recommendation to convene a group of external subject-matter experts that could make proposals to reform NSIP governance and principles to improve accountability, control and enforcement. The Board saw merit in this recommendation but there was no agreement on convening such a group at this stage. Recognising that specifically the new measures needed time to produce expected results, the Board agreed to come back to this issue and make a recommendation to Council on this matter by no later than the October Defence Ministerial meeting in 2016.

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

RPPB RECOMMENDATIONS

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

53.1 note the IBAN report IBA-AR(2014)35 along with the present report;

53.2 note that the Board's position on the IBAN observations is fully coherent and integrated with parallel work in the Resource Committees to improve NSIP governance and delivery of common-funded capabilities as part of NATO resource reform;

53.3 note that the improvement measures from the parallel works strands address the shortcomings in the NSIP implementation process highlighted in the IBAN report and present a solid package of improvement measures that represent an important step towards ensuring delivery of common-funded capabilities within approved cost, scope and schedule;

53.4 endorse the conclusions of the Board as outlined in paragraphs 46 through 52 and endorse the improvement measures presented at Appendix 1;

53.5 task the Board to keep implementation of the improvement measures under close supervision and to provide periodic progress updates to the Council as part of the future reports on implementation of the recommendations to Improve Delivery of Common-funded Capabilities in response to the Wales Summit tasking, with a first progress report to be presented in time for the October 2015 Defence Ministerial meeting;

53.6 invite the IBAN to consider providing a performance audit report on the process for setting requirements and developing Capability Packages by the end of 2015 to be used by the RPPB to develop further recommendations to improve the delivery of common-funded capabilities in time for the first 2016 Defence Ministerial meeting;

53.7 note that the IBAN report IBA-AR(2014)35 and this report, in line with the agreed policy in PO(2015)0052, should be publicly disclosed.

IMPROVING DELIVERY OF COMMON-FUNDED CAPABILITIES
OVERVIEW OF IMPROVEMENT MEASURES FROM DIFFERENT WORK STRANDS³

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
		General			
1	Weak and fragmented accountability, enforcement structures and processes. NSIP governance hinders the effective and timely completion of projects. Existing governance structure may not be fit for purpose.	Define accountability structure over the entire capability delivery process (covering the identification, definition, development, and submission of capability requirements, Host Nation contracting and implementation; financial management; acceptance; auditing; and operation and maintenance) and across all responsible entities (including accountable positions/individuals).	RPPB/NMA work on Wales Summit tasking.	DNOR, in close coordination with other stakeholders	End of October 2015
2	Weak and fragmented accountability, enforcement structures and processes.	Define governance structure to ensure that policies and procedures contribute to NCIA efficiency and effectiveness and to avoid overlap and duplication. Ensure NCIA accountability for its capability delivery responsibilities.	RPPB work on Customer Funding Regulatory Framework.	RPPB, supported by NOR	End July 2015

³ These are: the work in the RPPB and by the NATO Military Authorities (NMA) on Improving Delivery of Common-funded Capabilities in response to the Wales Summit tasking (AC/335-N(2015)0016-REV6); on defining a final Customer Funding Regulatory Framework for the NATO C&I Agency (NCIA) (AC/335-N(2015)0013-REV6); the IC report and its NSIP Management Action Plan in response to the IBAN report (AC/4-D(2015)0003-FINAL).

⁴ With focus on the key observations as reflected in the Summary Note for the Council and the IBAN conclusions and the short-term recommendations (IBA-AR(2014)35 refers).

⁵ Where actions are derived from the RPPB/NMA work on the Wales Summit tasking, responsible and accountable persons/functions have been identified as part of document (AC/335-N(2015)0016-REV6).

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
3	Resource and military communities to synchronise implementation guidance. IBAN short-term recommendation (paragraph 5.7 (1) refers).	Review of the IC Implementation Management Procedure.	Resource Committees' report on NSIP audit.	IC, supported by NOR	Second half of 2015
4	Results of published NATO studies strongly suggest that NATO stakeholders experience equal, if not greater, challenges during other steps of the capability development process.	Audit of requirements setting and Capability Package development phase proposed.	Resource Committees' report on NSIP audit.	IBAN	Second half of 2015 (to be confirmed)
5		Performance Measurement Framework with Key Performance Indicators distinguishing performance amongst Agencies and territorial Host Nations, and including intermediate and overall targets.	Resource Committees' report on NSIP audit.	IC, supported by NOR	Quarterly; annually; ongoing
6		Nations should put the interests of the Alliance ahead of national or industrial interests when agreeing to NSIP projects to achieve more effective capability delivery.	Resource Committees' report on NSIP audit.	RPPB; IC	Immediate

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
		Capability Planning Phase			
7	Project planning documentation is incomplete.	Improve the Joint Staff Screening Reports for Capability Packages to include, inter alia, a risk management plan, clear implementation milestones, reporting requirements and clearly assigned responsibilities for achieving the military capability.	RPPB/NMA work on Wales Summit tasking.	NOR, in close coordination with ACT and IMS Logistics & Resources Division	End of August 2015
8	NSIP stakeholders struggle to implement or oversee implementation of projects needed to deliver required capabilities within approved cost, scope and schedule. Project planning documentation is incomplete.	Re-focus Capability Package Implementation Plans to achieve realistic planning, timelines, deliverables, cost estimates and risk management as part of a risk management framework; obtain clear commitments from HNs to implement in accordance with agreed targets (scope, cost, timelines, acceptance criteria); formalise the responsibility of HNs to seek IC authorisation regarding scope, cost and schedule changes; need for clear impact statements by the Strategic Commands on the operational impact of these changes; obtain confirmation from SC that the implementation plan meets military requirements; use review process to review and control the requirements baseline at every major milestone.	RPPB/NMA work on Wales Summit tasking. Resource Committees' report on NSIP audit.	NOR	End of August 2015

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
		Capability Implementation Phase			
9	Host Nations struggle to give accurate and feasible estimates of cost, scope and schedule. Resource community still does not give, collect, assess and act on implementation data well enough. SCs have not effectively reported on the impact of project delays.	Produce annual Capability Status Reports of Capability Packages (including Host Nation project implementation status and assessment where latest cost estimates exceed project cost as agreed at the Package Implementation Plan) to monitor implementation timelines and, in particular, project completion dates set at the time of the Capability Package approval, to address risks and possible implementation delays, with recommended mitigation actions as required.	RPPB/NMA work on Wales Summit tasking. Resource Committees' report on NSIP audit.	NOR, in coordination with Strategic Commands and Host Nations	Ongoing
10	NSIP stakeholders struggle to implement or oversee implementation of projects needed to deliver required capabilities within approved cost, scope and schedule. ⁶	Monitoring and evaluation of NSIP project implementation for all NSIP projects (on-time submission of requests, contract award, project completions); where required, with recommended mitigation actions for IC direction. Review of project portfolio planning of the two NATO Agencies.	Resource Committees' report on NSIP audit. Resource Committees' report on NSIP audit.	IC, with support from NOR, in coordination with SCs and HNs. IC, with support from NOR.	Started in 2015 on a monthly and quarterly basis; ongoing Quarterly; ongoing

⁶ In 2014, two thirds of the 156 projects planned for authorisation did not meet their milestones and 90% of final authorisations did not happen as planned. The average completion delay for IBAN sampled Capability Package projects is 5.4 years; data on other projects show delays at all milestones. From 2013-2014, Host Nations did not complete on time an average of 57% of the 156 monitored projects.

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
11	IC authorisation process gives poor assurance and weak timeline control. NOR did not assess risks for scope and schedule changes to ensure that they are realistic. IC did not consider impacts prior to lengthening project schedules. ⁷ IBAN short-term recommendations (paragraphs 5.6 (1), (2) and (3) refer).	Screening reports to the IC to systematically include risk, life cycle, scope and implementation schedule assessments of the Host Nation project submissions to improve assurance to IC during authorisation process and reinforce IC role as implementation management authority.	Resource Committees' report on NSIP audit.	IC; NOR	Immediate
12	NMAs have not yet given expected project implementation advice when projects are delayed; reporting incomplete and not linking project-level delays to capability delivery.	Active involvement of Strategic Commands at all process steps of NSIP implementation process to confirm that the proposed solution meets the military requirement and to assess operational impact of delays, where required.	Resource Committees' report on NSIP audit.	Strategic Commands	Immediate

⁷ For the IBAN-sampled projects, latest estimates show that actual costs will be about one-third higher than initially programmed, driven primarily by additional scope.

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Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
13	Lack of effective approach to encourage Host Nation performance.	Payment against achievement of milestones for projects under implementation by the NCIA.	Resource Committees' report on NSIP audit.	NOR, in coordination with NCIA	Ongoing
		Capability Close-out Phase			
14	The nations will not meet their commitments to eliminate the backlog of physically complete NSIP projects. ⁸	Comprehensive overview and action plan on the exact status of completed projects and outstanding actions in terms of technical verification and validation and audit for projects that were physically by mid-2014.	Resource Committees' report on NSIP audit.	IC, with support from NOR	Ongoing
15	NATO has not effectively closed and recorded completed projects.	Monitoring and evaluation of timely submission by Host Nations of requests for technical inspection and audit.	Resource Committees' report on NSIP audit.	IC, with support from NOR.	Immediate
16	No comprehensive reporting by NATO users to track completed projects; this hinders accountability and visibility over NSIP projects.	Turn the current technical verification and validation process into a real project and capability acceptance procedure with the aim of providing the military community the confirmation that the complete capability has been delivered, is operational and sustainable.	RPPB/NMA work on Wales Summit tasking. Resource Committees' report on NSIP audit.	NOR, in coordination with IMS and Strategic Commands.	End of 2015, proposals to Military Committee and RPPB

⁸ About 65% for the over 3,000 active NSIP projects are complete but not technically inspected and/or submitted for certification.

Item	IBAN observation/ IBAN recommendation ⁴	Recommended/Existing Measure	Presented with	Action Entity ⁵	Timelines
17	NOR to more comprehensively track completed projects. Full extent of completed NSIP projects is unknown. IBAN short-term recommendation (paragraph 5.7 (2) refers).	Annual report on completed NSIP investment projects , in relation to their parent Capability Package, where applicable.	Resource Committees' report on NSIP audit.	NOR	Beginning of 2016 on the basis of tracked project completion through CIRIS in 2015
18	No comprehensive reporting by NATO users to track completed projects; this hinders accountability and visibility over NSIP projects.	Assess the potential of developing an asset data base .	RPPB/NMA work on Wales Summit tasking.	NOR, in close coordination with ACT, ACO and IMS Logistics & Resources Division	End of 2015 to Military Committee and RPPB
19	Lack of effective approach to encourage Host Nation performance.	Examination of a range of possible measures to enforce better Host Nation compliance with existing close-out procedures and assessment to the RPPB.	Resource Committees' report on NSIP audit. RPPB/NMA work on Wales Summit tasking.	IC, supported by NOR	October 2015

SUMMARY NOTE FOR THE COUNCIL ON THE NEED TO REFORM NATO SECURITY INVESTMENT PROGRAMME GOVERNANCE

Introduction

This report meets Article 17 of the International Board of Auditors for NATO (IBAN)'s charter. The IBAN gives this special report to the North Atlantic Council (Council). The report assesses how far NATO Security Investment Programme (Investment Programme) governance enables NATO oversight bodies to monitor projects well and in good time, and NATO implementation bodies to complete them within agreed costs, scope and schedule. The IBAN focused on the project authorisation, implementation, and closure phases. To do this, the IBAN reviewed policies and procedures and the work of NATO oversight and implementation bodies in response to the policies. The IBAN also reviewed 21 projects and talked to officials from the relevant NATO bodies and from National delegations.

Audit highlights

Key observations on Investment Programme project implementation

- In 2014, about two-thirds of the 156 projects planned for authorisation did not meet their milestones and 90% of final authorisations did not happen as planned.
- From 2010-2014, annual Investment Programme spending has been about 19% lower than adjusted contribution ceilings and forecasts.
- For the IBAN-sampled projects, latest estimates show that actual costs will be about one-third higher than initially programmed, driven primarily by additional scope.
- The average completion delay for IBAN-sampled capability package projects is 5.4 years. NATO Office of Resources (NOR) data on other projects show delays at all milestones.
- From 2013-2014, Host Nations did not complete on time an average of 57% of NOR-monitored projects.
- About 65% of the over 3,000 currently active Investment Programme projects are complete but not technically inspected and/or submitted for certification.
- No data are available on the total number of Investment Programme projects completed since the Programme began.

Authorization process gives poor assurance and weak timeline control

Several studies show that Host Nations struggle to give accurate and feasible estimates of cost, scope and schedule, particularly for communication and information systems projects. Also, for projects reviewed by the IBAN the NOR did not fully assess and report in official decision-making documents whether milestone dates were realistic before the Investment Committee agreed them. This reduced assurance to the Nations that the projects could be completed as authorised. The IBAN also found little evidence that the

NOR identified and assessed the risk of scope changes. Such changes occurred frequently and are associated with delays. Further, the military community has not yet given project-level implementation advice expected by the resource community. Without expanded review and provision of advice in these areas, the Investment Committee will lack information to support decisions. Finally, the lack of an effective approach by the implementing committees to encourage Host Nation performance limits control of authorisation timelines.

NATO does not effectively monitor, evaluate and control project implementation

The Investment Programme defines procedures for documenting project planning, identifying problems, finding solutions and reviewing performance. Since 2012, the Nations took steps to better implement these procedures and defined new ones. For example, they monitor an increasing number of missed project milestones. However, Host Nations and the resource community still do not give, collect, assess and act on implementation data well enough. In addition, the Strategic Commands' reporting on the impact of delays is incomplete and tends not to link project-level delays to capability delivery. Further, for projects reviewed by the IBAN the Investment Committee did not consider impacts prior to lengthening project schedules. As a result, the Investment Programme has poor schedule control. Contributing factors include weaknesses in governance and oversight, including accountability and enforcement.

NATO does not effectively close and record completed projects

To close completed projects, Host Nations must give timely requests for inspection and audit. Since 2010, NATO has been unable to reduce the large number of uninspected and unaudited projects. In September 2014 the Nations agreed a plan to close all completed projects by June 2016. Based on the number of projects submitted to the IBAN for audit, the Nations will not meet commitments unless they greatly increase the rate at which they submit projects for inspection and audit. In addition, the IBAN found no comprehensive reporting by NATO users or the NOR to track completed projects. This hinders accountability and visibility over Investment Programme-funded assets.

Governance reform needed

Since 2012, the Nations took steps to improve visibility of the problems. However, the IBAN did not find measurable improvements in performance. Fundamental challenges in accountability and enforcement remain. In the IBAN's opinion, a governance model that makes the 28 Nations directly responsible for day-to-day oversight of project implementation may not be fit for the purpose of delivering capabilities effectively and on time. Thus, governance reform, beginning with an examination by independent external experts, is needed to ensure the long term viability of the Investment Programme. These experts should address, at a minimum:

- ensuring accountability for delivering project results is strengthened and clearly defined,
- developing a governance model that enables effective direction and enforcement,
- encouraging performance, with particular emphasis on the NATO Agencies, and
- making structures and processes for capability delivery more efficient and cohesive.

Until the Nations decide whether to change Investment Programme governance, there are a number of short term actions that can improve the current situation:

- the NOR enhance its advice so the Investment Committee can more frequently approve projects with realistic cost, scope and schedule estimates,
- the resource and military communities synchronise implementation guidance,
- the NOR more comprehensively track completed projects and
- the resource and military communities enhance reporting to and involvement of Council.

Weaknesses in areas outside the current audit scope, and in particular requirements definition for communications and information systems projects, are widely acknowledged. Improving capability delivery will take more than just improving project implementation.

International Board of Auditors for NATO

Special report to Council on the need to reform NATO Security Investment Programme governance

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1. Background and introduction

1.1 Background

1.1.1 The NATO Security Investment Programme (Investment Programme) is a group of capital investments to get military capabilities that exceed the national defence requirements of individual nations.⁹ It was established in 1951 to provide facilities to meet NATO military requirements. The Nations share Investment Programme costs, with an agreed percentage for each participating Nation. Until the end of 1993, the Nations authorised infrastructure funding in annual 'Slices' and individual projects. In 1994, the Nations agreed a new approach to better reflect all elements of a capability¹⁰, referred to as the capability package process.

1.1.2 NATO uses several different funding methods, depending on the needs and the desired level of co-operation or integration of the member Nations.

1.1.3 The 'common funding' method is for projects relating to NATO headquarters, the military command structure, NATO command and control systems and NATO operations. Common resources encompass three different "pillars". The first pillar is capital investment projects designed to enhance and update NATO's assets, funded through the Investment Programme. The second pillar includes the military and civil budgets. These budgets support NATO operations and maintenance costs. In addition, the civil budget supports the international headquarters. The international workforce, which is the third pillar, staffs NATO's military structures.

1.1.4 According to the Investment Programme Manual,¹¹ "the Programme provides the funds for the development, construction, and implementation of facilities that are required by the Strategic Commanders to complete their missions, but that are not provided by the member Nations". Common funding eligibility rules¹² state that, "common funding eligibility will focus on the provision of infrastructure requirements which are over and above those which could reasonably be expected to be made available from national resources".

⁹ A capability is defined within NATO as "the ability to perform action(s) to achieve (a) desired objective(s)/effect(s)". See PO(2011)0210. Capability development is "the process from political guidance through requirement identification and the subsequent planning steps, through acquisition, fielding, in-service management and disposal. All these stages together form the through life-cycle of a capability." See PO(2012)0030.

¹⁰ In NATO, the lines of development of a capability cover the aspects of doctrine (including concepts), organisation, training, materiel (equipment), leadership, personnel, facilities and interoperability.

¹¹ *NSIP Manual*, version 2011.

¹² Updated in document C-M(93)38 (final).

1.1.5 Up to 1989, the Investment Programme included mainly civil works infrastructure in NATO member Nations, implemented by territorial Host Nations with little work assigned to the NATO agencies.¹³ In the past 25 years, the Investment Programme has experienced a fundamental shift. Changes include greater spending for investments supporting Alliance Operations and Missions, particularly in Afghanistan. In addition, since the 1990s, the majority of investment started shifting towards more complex and costly communication and information systems and software development projects which were implemented more and more by the NATO Communications and Information Agency (NCI Agency) and its programmes, which used to be independent NATO entities. Today, in accordance with its charter the NCI Agency is NATO's principal communications and information systems service provider.

1.1.6 As of 30 September 2014 the future expenses forecasted for the approved Investment Programme were EUR 4.4 billion. Funds remaining to be spent for projects implemented by the NATO Support and NCI Agencies account for 62% of this amount. In particular, EUR 2.4 billion, or 56%, is to be implemented by the NCI Agency for communications and information systems projects.¹⁴ The remaining EUR 2 billion includes mainly physical infrastructure projects implemented by the NATO Nations and, to a lesser extent, by the NATO Support Agency. Paragraph 1.2.2 and Figure 1 provide more details about Investment Programme projects.

1.1.7 The Investment Programme financial crisis in 2009 prompted re-prioritisation of requirements and greater focus on getting the balance right between requirements and resources. The crisis began a cycle of Investment Programme policy changes addressing various aspects of implementation management and oversight by the Investment Committee.¹⁵ These changes underpinned the heightened monitoring and evaluation activities the IBAN assesses in section 3.

1.1.8 Unlike activities funded through the military budget, by its nature the Investment Programme is not controlled and overseen as a budgetary system. Rather, the Investment Programme comprises multi-annual project funding from within annual limits, referred to as contribution 'ceilings', as approved by Council. Nations provide funding through quarterly calls for contribution, as approved by the Investment Committee. The NATO Office of Resources (NOR) manages Investment Programme expenditures through a system of multilateral compensation. In this system, the Nations pay into the Investment Programme, receive funds to implement projects, or both. After project completion, the NOR leads a technical verification process and the International Board of Auditors for NATO (IBAN)

¹³ Investment Programme projects are implemented by either 'territorial' Host Nations that are NATO member Nations, or by one of the NATO agencies ('agency' Host Nations).

¹⁴ AC/4(PP)D/27405 Appendix 1.

¹⁵ See AC/4-N(2014)0029.

conducts audits of expenses. Both steps occur upon request by the 'Host Nations' who implement the projects.

1.2 Overview

1.2.1 Since 2009, the Investment Committee authorised at least 2,159 projects amounting to EUR 3.1 billion. In the same time frame, programme expenditures totalled EUR 3.7 billion. In 2014, Investment Programme spending had decreased by nearly one-third since 2009 and authorisations were 22% of the 2009 level.

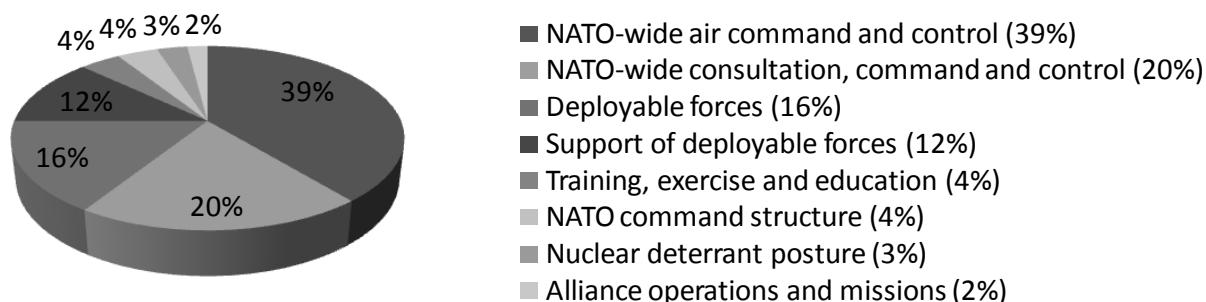
Table 1: Annual Investment Programme authorisations and expenditure (start 2009–mid-December 2014, EUR million)

Year	Investment Programme authorisations (€m)	Investment Programme expenditure (€m)
2009	923.8	777.1
2010	328.3	651.1
2011	626.8	686.3
2012	518.7	555.1
2013	603.1	525.9
2014	207.1	560.3 (estimated)

Source: NOR data, C-M(2014)0058

1.2.2 As of June 2014, the Investment Programme has 3,124 active projects. According to later NOR analysis, 65% of these are complete (i.e. work has finished and the Host Nation has handed over the project to the end user) and remain to be closed, i.e. subject to technical and financial validation. The remaining 35% of projects currently under implementation represent EUR 4.4 billion in funds remaining to be spent according to latest cost estimates. **Figure 1** categorises these projects by requirement area:

Figure 1: Estimated funds remaining to be spent by requirement area



Source: AC/4(PP)D/27405

1.3 Implementation management and governance

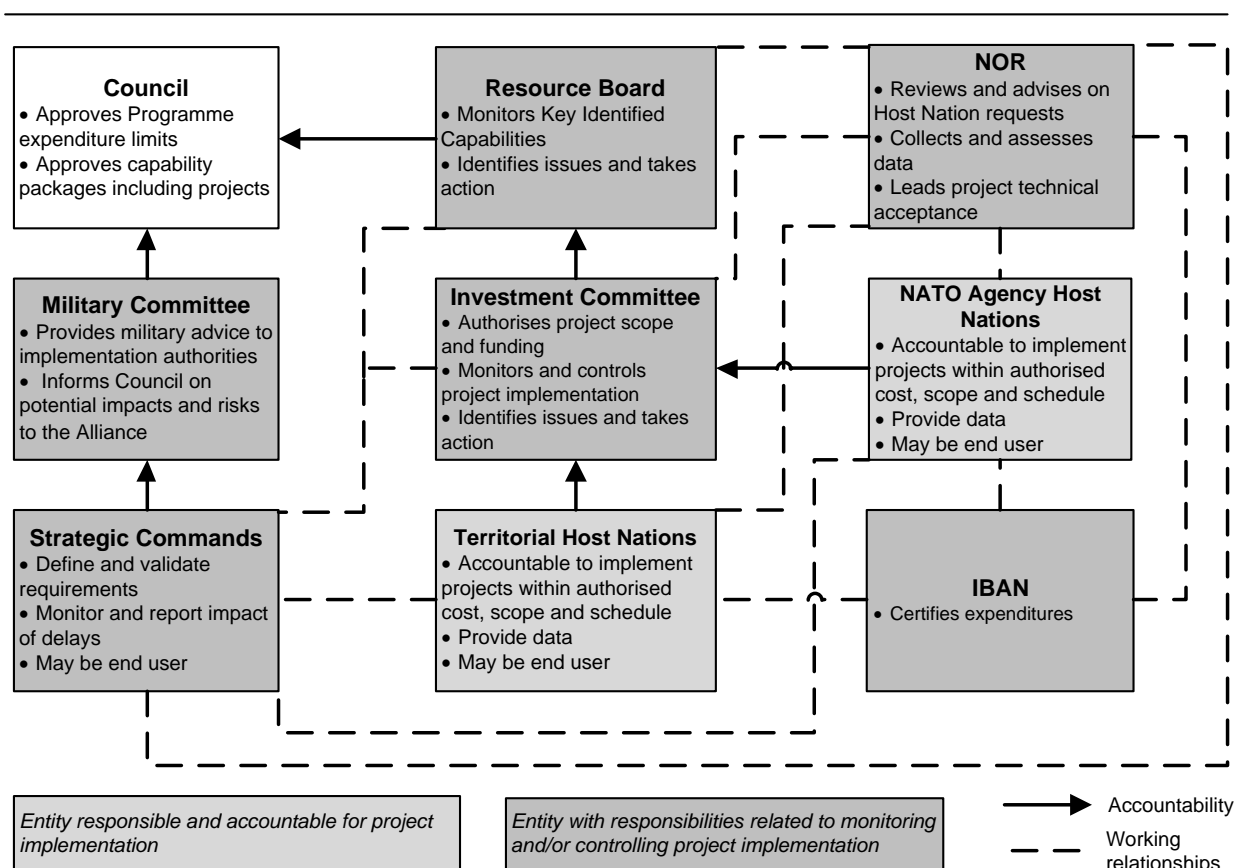
1.3.1 The standard management framework for the Investment Programme is the capability package process. The process is split into five phases: identification and prioritisation, development, approval, implementation and operation. Investment Programme project implementation occurs during the 'implementation' phase of the capability package process. Exceptions to projects identified and programmed through the process include stand-alone projects, minor works and urgent requirement projects. These exceptions shorten the timelines and to make the capability package framework more flexible. **Appendix 3** gives a high-level overview of the process, main stakeholders and products.

1.3.2 Investment Programme stakeholders include the Investment Committee, Resource Policy and Planning Board (the Resource Board), the Military Committee, supported by the International Military Staff, territorial and agency Host Nations, the NOR, the Strategic Commands and the IBAN. **Figure 2** shows the main functions of these entities in implementing or supporting the implementation of Investment Programme projects as well as major accountable and working relationships. The IBAN understands that each of these entities has many roles and responsibilities beyond those indicated. In some cases, these roles may be their primary functions. However, the IBAN's intent is to present, as simply as possible, the functions included within the scope of its audit—which focused on project implementation—and the complex relationships between the various entities.

- The need for Investment Programme projects originates with the **Strategic Commands**, who develop requirements identified through the NATO Defense Planning Process. These requirements are translated into projects, approved within NATO at the appropriate level through various procedures. At the various project approval stages and during implementation, the Strategic Commands ensure that all active projects continue to meet military requirements and report impacts and requiring mitigation actions for delayed projects.
- The **Military Committee**, supported by the International Military Staff, provides military advice for implementation in accordance with established guidance and specific direction from the Nations. This advice should be based on the military requirements and military necessity for capability packages, informed by resource considerations.
- The **Investment Committee** authorises the common-funded resources needed for Investment Programme projects based on implementation, technical and financial information that **Host Nations** provide, and that the **NOR** collects, reviews and assesses. It then monitors, controls and evaluates project implementation to identify issues and take action. The **Resource Board** monitors and controls implementation at the capability level for a selected number of Key Identified Capabilities.

- Host Nations are responsible and accountable to the Investment Committee for managing projects within approved cost, scope and schedule.
- Host Nations, the NOR and the **IBAN** inspect, audit and close completed projects. Project end users include the Nations, Strategic Commands (particularly Allied Command Operations) and, in some cases, the NCI Agency.
- **Council's** explicit responsibilities in the Investment Programme are to approve contribution ceilings and the capability packages of which Investment Programme projects are a part and to agree exceptional eligibility for common funding for specific requests.

Figure 2: Main Investment Programme stakeholders, their roles in implementation management and significant accountable and working relationships



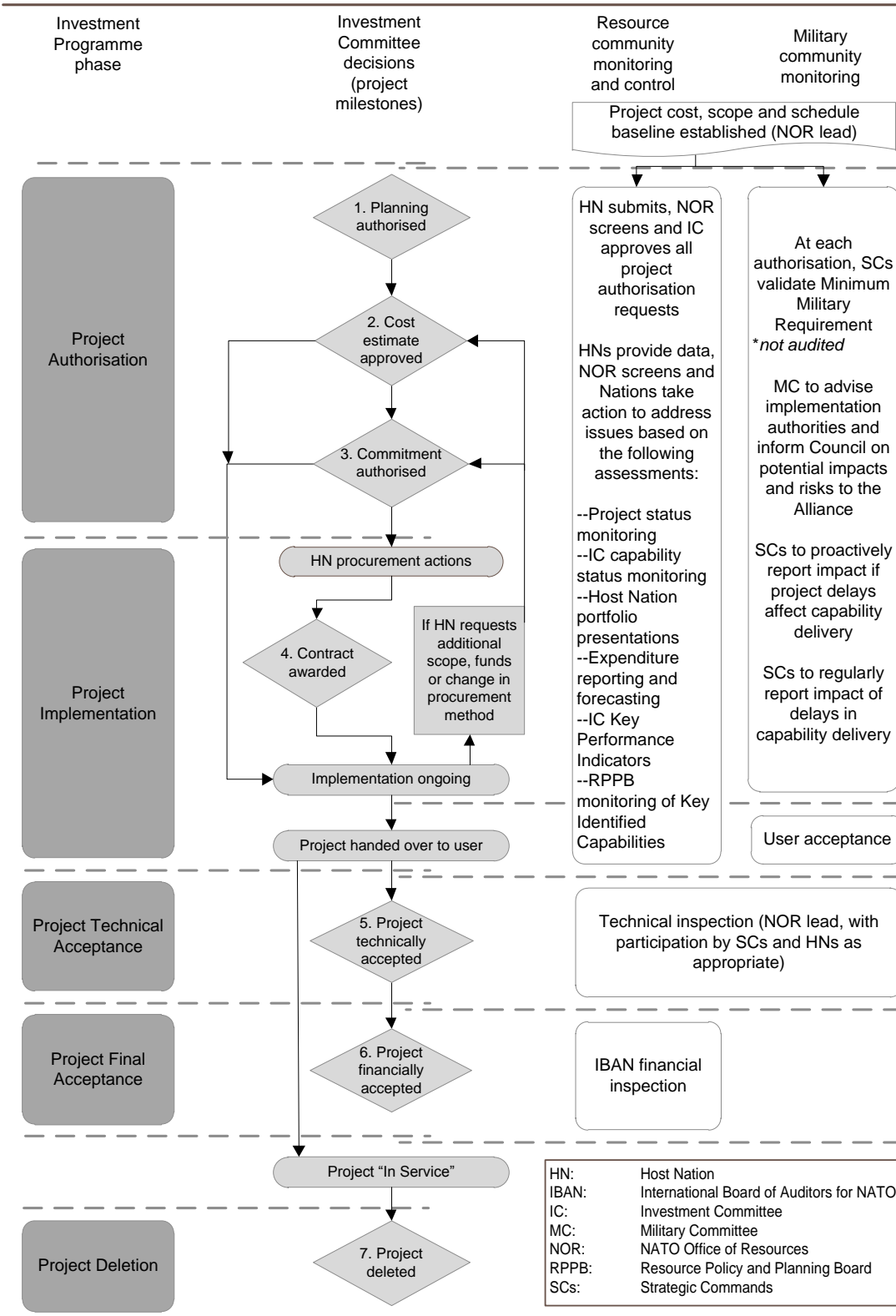
Source: IBAN analysis

1.3.4 As shown in **Figure 3**, the Investment Programme project lifecycle includes seven main milestones. Milestones 1 through 6 include specific work to monitor, evaluate and control project progress, which the IBAN has separated by resource and military community activity for ease of understanding. The NOR, with Host Nation input, first assesses implementation milestones and expenditure profiles as part of the capability package Joint Staff Screening Report (not audited in this review). The subsequent capability package approval document sets the timing of these milestones and profiles. Prior to implementation, the capability package implementation plan (CP Plan) refines the expenditure profiles and milestones, which then become the initial 'baseline'. The NOR should produce this within 3 months of capability package approval.

1.3.5 NATO has an accepted definition of governance for project delivery in support of capability development. Governance is "the provision of the oversight necessary to ensure agreed direction and guidance and processes and procedures are followed".¹⁶ The IBAN adheres to this and considers the roles and responsibilities, structures, and business processes summarised in Figure 3 to be vital to Investment Programme project implementation governance as a whole. Specific roles and responsibilities, as assessed by the IBAN, are defined at the beginning of each findings section.

¹⁶ PO(2012)0030.

Figure 3: Project authorisation and implementation management framework



Source: IBAN analysis

1.4 Problem statement

1.4.1 The IBAN did an audit survey before doing major audit work. During the survey stakeholders said that delays in project completion, capability delivery and associated issues such as a low financial implementation rate¹⁷ were the main problems with the Investment Programme.

1.4.2 For the specific projects reviewed in accordance with the scope and methodology stated below, the IBAN established that 15 out of 21 projects selected for review by the IBAN were delayed.¹⁸ For the 14 capability package project reviewed, the average delay in estimated completion dates compared to the approved completion dates at programming was 5.4 years, with 1 project completed. For Alliance Operations and Missions projects, the average completion delay was an estimated 8.2 months, with 4 out of 7 complete.

1.4.3 The IBAN could not get definitive figures or determine trends in delays in project completion because global data are unavailable. However, available data assessed by the NOR confirms what the IBAN observed with its sample projects. In 2013, Host Nations did not complete 58% of a selected sample of projects that the NOR monitored.¹⁹ In 2014, Host Nations did not complete 55% of projects from another sample monitored by the NOR.²⁰

1.4.4 Projects also start slowly. As of July 2014, over 300 projects, which is about 30% of the number of projects currently considered 'actively under implementation,' did not show any sign of activity, such as authorisation by the Investment Committee, an expenditure forecast, or recorded expenditures.²¹

¹⁷ The implementation rate is the ratio of the amount actually expended in a time period compared to the amount that was forecasted to be expended in that period.

¹⁸ 5 of the "projects" selected by the IBAN were in fact not discrete Investment Programme projects, but rather internal Host Nation milestones that were not agreed by the Investment Committee. The extent of delays for these activities could not be determined with available information. 2 further projects were delayed by an unknown amount and one project was not yet authorised as of September 2014.

¹⁹ AC/4-WP(2015)0001. Average completion rate based on the scope of 24 projects listed in AC/4-D(2013)0004.

²⁰ These projects included 'leftovers' from 2013 and additional ones.

²¹ As of July 2014, the NOR's resource information system showed 323 projects programmed prior to 2014, with no authorisation, zero expenditure and zero expenditure profiled. These projects also had not been deleted or cancelled.

1.4.5 Figures that the NOR presented to the Nations, based on other projects sampled for assessment,²² confirm that delays occur at all project milestones.²³

- The NOR found projects regularly take as long as 5 years to pass the milestone at which the Host Nation is authorised to issue a contract.
- According to these same data, around a quarter of projects do not meet the agreed contract award date.
- The NOR sample assessment found that the average time to award a contract exceeds 2.5 years.
- Based on a sample of projects, the NOR calculated that the average project takes 6 years to implement.

1.4.6 These implementation delays have consequences for financial management. In particular, Investment Programme spending has been on average 19% lower than the adjusted contribution ceilings since 2010.²⁴ Financial implementation rates have been similarly affected. Specifically, Programme spending also been approximately 19% lower than screened forecasts since 2010. Critical capabilities approved at the 2010 NATO summit in Lisbon, which include many complex communication and information system projects, have particularly low financial implementation rates.²⁵ **Table 2** shows actual spending compared to the contribution ceilings and approved forecasts since 2010.

Table 2: Annual Investment Programme contribution ceilings, approved forecasts and spending, 2010–2014, in EUR million

Year	Adjusted contribution ceilings	Approved forecasts	Spending	Underspending
2010	949.9	870.4	651.1	298.8
2011	775.0	818.7	686.3	88.7
2012	650.0	664.1	555.1	94.9
2013	650.0	663.8	525.9	124.1

²² The NOR was unable to provide further details on the size and composition of this sample.

²³ AC/4-D(2013)0007-FINAL.

²⁴ For ease of understanding, the IBAN defines ‘underspending’ as the difference between actual spending in each year and the adjusted contribution ceilings. Average underspending is close to the average of the ‘amounts carried forward’ for the same time period, although the actual numbers differ. Amounts carried forward in one period are based on the actual contributions provided by the Nations in the previous periods. The NOR regularly reports amounts carried forward to the Nations. Paragraph 3.4.5 discusses the issue of amounts carried forward.

²⁵ In March 2014 the NOR reported to the Investment Committee that projects comprising capabilities agreed at the 2010 NATO Lisbon summit had achieved only a 66% implementation rate for the second half of 2013 compared to the approved forecast. See AC/4(PP)D/27322.

2014	700.0	671.7	560.3*	139.7*
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* 2014 spending is an estimate due to lack of final financial information at the time of this audit.

Sources: C-M(2014)0048, AC/4-N(2015)0002, AC/4(PP)D/27392, AC/4(PP)D/27405.

1.4.7 The Nations want to improve the delivery of common-funded capabilities. At the September 2014 NATO summit in Wales, Heads of State and Government asked the Resource Board and the NATO military authorities to “present initial recommendations to improve the delivery of common funded capabilities in time for the June 2015 Defence Ministers meeting.”²⁶ In 2013, the Deputy Permanent Representatives Committee asked the IBAN to “perform an analysis of Investment Programme-related audits with the aim of providing recommendations to improve Investment Programme audits and tackle delays in a special report to Council in 2014.”²⁷

1.5 Audit objective

1.5.1 In accordance with Article 17 of its Charter, the IBAN gives this special report to Council to assess how far Investment Programme governance enables NATO oversight bodies to monitor projects well and in good time, and NATO implementation bodies to complete them within agreed costs, scope and schedule.

1.6 Scope and methodology

1.6.1 To meet the audit objective, the IBAN focused on capability package project implementation. In particular, the IBAN examined the roles and responsibilities of the following entities in providing advice, authorising, monitoring, evaluating, controlling and closing projects:

- The Military Committee
- The Resource Board
- The Investment Committee
- The NOR
- Strategic Commands
- Host Nations

1.6.2 The IBAN reviewed urgent requirement projects and processes, but to a more limited extent. IBAN did not review requirement setting, solution selection, programming, procurement and the use of projects after completion.

²⁶ PO(2014)0564.

²⁷ PO(2013)0253.

1.6.3 To determine criteria the team reviewed Investment Programme governing documents and policies agreed by Council, the Military Committee, Resource Board and the Investment Committee. To measure performance against these criteria, the team reviewed Investment Programme financial and implementation reporting. The audit team:

- attended four Investment Committee management meetings (April 2014, July 2014, October 2014 and December 2014) and evaluated relevant documents presented and discussed at these meetings to assess how the Nations acted on the results of reporting,
- attended several relevant Resource Board meetings and
- had discussions during the audit survey and fieldwork phases with officials from selected national delegations,²⁸ Allied Command Operations, Allied Command Transformation, the NCI Agency, the NOR and the NATO Support Agency.

1.6.4 The IBAN reviewed previous IBAN reports and published NATO studies on Investment Programme project management and capability delivery. Finally, the IBAN reviewed authorisation, project management and other documentation for a sample of 21 projects and associated capability packages representing the various types of Investment Programme projects, e.g. communications and information systems projects, to assess delays, explanations provided, and actions taken. The IBAN used data collected and assessed by the NOR, but did not independently assess their reliability.

1.6.5 Using these documents, the IBAN assessed information from the Host Nations and screening that the NOR conducted. The IBAN could not get complete milestone data for five of the sample projects. See **Appendix 2** for a description of the IBAN's sample selection criteria and list of projects. The IBAN conducted the audit between March and November 2014.

²⁸ Time constraints prevented discussions with all Nations.

2. Authorisation process gives poor assurance and weak timeline control

2.1 Roles and responsibilities

Resource community

2.1.1 According to Investment Programme procedures, prior to implementing projects Host Nations must give a series of timely and increasingly accurate cost, scope and schedule estimates. The Nations agree these estimates on a broad level at capability package approval and then at a more detailed, refined level with the capability package implementation plan (CP Plan). Host Nations further refine these estimates during the planning stage ('advanced planning fund' approval milestone). The estimate refinement process culminates in the Authority to Issue the Invitation for Bids, (the 'commitment' milestone). From then onwards, a binding obligation exists between the Host Nation and the Investment Committee to implement the project within agreed costs, scope and schedule.

2.1.2 The NOR reviews all Host Nation project authorisation and funding requests from technical, financial and economical aspects and makes recommendations for Investment Committee authorisation in a process referred to as "screening".²⁹ NOR screening reports are vital to the Investment Committee's decision-making when authorising a project. Through its screening reports, the NOR provides independent expert advice on Host Nation estimates. The advice informs the Investment Committee's understanding of risk in the areas assessed by the NOR. It may include recommendations to approve costs and scope adjusted from what the Host Nation requests. The Investment Committee authorises project cost and scope on the basis of these reports. In addition, for cost or scope change during project implementation the Nations rely on the NOR screening prior to approving these changes.

Military community

2.1.3 At every authorisation, the Nations rely on the Strategic Commands to confirm that the project in question remains valid. Before the Investment Committee agrees to a project authorisation request, the Strategic Commands must validate that the solution the Host Nation is providing will meet a valid military requirement. This is known as the minimum military requirement.³⁰ This validation forms part of the Investment Committee's decision sheet.

²⁹ SRB-N(2007)0046-REV1, SG(2007)0227.

³⁰ Minimum military requirement is the most austere (in financial terms) solution to meet a capability shortfall. It is measured against criteria and standards, where they exist. Where there are no criteria it is determined using unfettered military judgement. See Bi-SC 85-1.

2.1.4 NATO's military community has agreed to provide military advice to the Investment Programme implementation authorities. Military advice identifies risk and analyses the possible impact if delays occur to capabilities, capability packages and projects scheduled for implementation or to those already being implemented. Under some conditions, such risk assessment may affect priority of Investment Programme project implementation. For example, the methodology used to categorise projects based on military risk, referred to as stratification,³¹ was used to make recommendations to Council to delay implementation of projects deemed lower risk when requirements exceeded available resources. This occurred after the 2009 Investment Programme financial crisis.

2.1.5 The Nations increasingly seek military advice to better use available information to understand risk and implement capabilities on time. For example, in July 2013 the Nations in the Military Committee committed the Strategic Commands to review annually all projects lacking full authorisation from within approved capability packages, categorised by stratified 'capability levels' and by Host Nation. Using the results of this review, the Military Committee agreed to provide annual implementation advice to the Investment Committee on valid and critical projects due for implementation in the coming year.³²

2.2 Stakeholders have not performed effectively

Host Nations

2.2.1 Host Nations struggle to give accurate and realistic estimates in project funding requests, increasing risk. For example, several studies within NATO, including the IBAN's previous work,³³ show that Investment Programme stakeholders do not fully understand, and effectively manage, software requirements. In addition, the NOR recently found that unlike other large public organisations, NATO lacks policies, guidance and working procedures for complex software acquisition, referred to as 'software intensive projects'.³⁴ The NCI Agency is the Host Nation responsible for implementing communication and information systems projects, which comprise the majority of the Investment Programme's financial volume as shown in paragraph 1.1.6.

³¹ Stratification is a methodology to assess the degree of risk incurred if the allocation of resources to projects in specific capabilities were deferred or withheld. In 2010 the Military Committee agreed the stratification mechanism to better assess and then take account of the imbalance between requirements and resources in line with its remit. See MC 0612.

³² MC 0612 Annex D.

³³ E.g. AC/4-N(2014)0019. In IBA-AR(2013)22, the IBAN found that for one project roughly half of delays experienced during implementation were due to avoidable requirement changes requested by the user (Allied Command Operations) after implementation had begun.

³⁴ AC/4(PP)N(2014)0075.

2.2.2 To address these issues and others the NOR, NCI Agency, Strategic Commands and the NATO Headquarters Consultation, Command and Control Staff established a dedicated software intensive projects task force. In its first report, this task force attributed shortfalls to numerous stakeholders. These included the NCI Agency acting in its role as project implementation authority and the Strategic Commands as responsible for defining requirements and as the end users.³⁵ In its second report, the task force made 20 recommendations addressing six main principles,³⁶ including risk management, which are intended, among other things, to improve the NCI Agency's ability to more clearly present project scope, cost and schedule in its estimates. The recommendations also deal extensively with requirements definition, which is outside the scope of this review. Nevertheless, in the IBAN's opinion the sample projects it reviewed provide sufficient evidence that these issues contribute to increased costs, scope and time to complete projects beyond initial forecasts.

NATO Office of Resources

2.2.3 In the project authorisation and screening documentation the IBAN reviewed for its sample projects, NOR screening of project cost and scope was evident. Costs for the projects reviewed by the IBAN tended to be approximately one-third higher than initially programmed, with changes explained by the NOR. However, the IBAN found that the NOR limits its screening only to the details in the specific requests made by the Host Nation, and thus does not systematically address risk in its reports to the Investment Committee. For example, the IBAN found that over half of the capability package projects for which delays occurred had scope changes. These changes contributed to additional time needed to complete the project.

2.2.4 When assessing Host Nation authorization requests, the NOR does not give the Investment Committee a detailed assessment of project schedule. For projects the IBAN reviewed, in its screening documentation the NOR typically repeated the Host Nation's intention to meet the milestones presented. It did not provide an expert opinion on whether the Host Nation would be able to meet these milestones.

2.2.5 It is widely acknowledged that project milestones in authorisation documentation have been unrealistic. The IBAN has seen examples in which, during screening, the NOR identified risk in schedules it deemed optimistic. However, in such cases the NOR gave the Investment Committee information without making recommendations related to project schedule. This limited the Investment Committee's ability to proactively manage the risk of delays.

³⁵ AC/4-N(2014)0019.

³⁶ These principles are (1) deliver early and often, (2) incremental and iterative development and testing, (3) risk management, (4) rationalised requirements, (5) flexible/tailored processes, and (6) knowledgeable and experienced software project workforce. See AC/4-N(2014)0034.

Investment committee

2.2.6 In its review of sample projects, the IBAN found that the Investment Committee typically authorises projects based on the NOR recommendations on project cost and scope. Thus, in the IBAN's opinion, without expanded NOR screening to more explicitly address the risk of changes in cost, scope or schedule the Investment Committee will not make informed authorisation decisions – before and during project implementation. In particular, unless the NOR broadens its advice to include the schedule aspect of project authorisation requests, the Investment Committee will lack sufficient assurance that schedule risks are adequately controlled prior to authorising projects.

Military community

2.2.7 For the sample projects reviewed, the IBAN found that the Investment Committee's project authorisations included Strategic Commands validating that at authorisation the project still met the minimum military requirement. The IBAN did not review this process in depth because it is about requirements, their definition and their validity, which were out of the audit scope.

2.2.8 The Military Committee provides annual advice at the capability and capability package levels. In particular, it provides Council annual impact statements to identify the risks of delays and inform future resource planning.³⁷ The Military Committee also provides similar input to the Resource Board's Annual Report. Allied Command Operations considers outputs from early steps of the NATO Defense Planning Process to be relevant implementation advice.³⁸

2.2.9 Military Committee project-level advice to the resource community is more limited. In 2013, the Nations' Ministers of Defence directed the Resource Board to expedite projects.³⁹ As a result of this tasking, the Strategic Commands developed a list of 147 priority infrastructure projects to support Military Committee advice. The Military Committee could not agree this list. In one case, the Military Committee reported risk of delays expressed at the project level.⁴⁰ However, it has not yet provided the project-level advice it proposed in 2013 and that the resource community expected.

2.3 Authorisation timelines ineffectively controlled and enforced

³⁷ See e.g. MCM-0056-2014.

³⁸ See e.g. Military Suitability and Risk Assessment, MCM-0064-2014.

³⁹ February 2013 Defence Ministers tasking., see PO(2013)0119-REV3.

⁴⁰ See MCM-0101-2013 and IMSM-0511-2013.

2.3.1 Controlled authorisation time frames entail timely submission of Host Nation fund requests and contract awards. The IBAN's analysis of sample projects showed that the authorisation process takes longer than expected. There was insufficient data to quantify milestone-specific delays. Documents the IBAN reviewed give more detail:

- Host Nations continue to struggle to submit authorisation requests to the Investment Committee on time. As at October 2014, for the 156 projects monitored, 67% of planned initial (cost estimate) authorisations and 90% of final authorisations did not happen as planned in 2014. In addition, 71% of planned contracts were not signed on time.⁴¹ For 2015, Host Nations had yet to obtain Investment Committee authorisation for requests representing more than a quarter of expenditures planned for the year, as at 30 October 2014. For 2016, the proportion of forecasted expenditures not yet authorised was over 60%.⁴²
- Information the NOR presented to the Nations, based on a limited selected number of projects, suggests that in many cases Host Nations have taken over two years to request planning authorisation for capability package projects.
- A quarter of capability package projects that the NOR evaluated took over two years for a detailed cost estimate to be produced.
- Most projects among those the NOR monitored in recent years have taken longer than one year to reach the Invitation for Bid milestone.⁴³

2.3.2 Recognising the need for additional improvements in this area, the Investment Committee agreed proposals for Host Nations to make timely submissions of authorisation requests. However, according to documentation the IBAN reviewed the Investment Committee could only reach consensus for the following measures:

- If delays occur at one of the authorisation milestones, Nations may consider actions, including changing Host Nationship.
- The Nations agreed 'time limited authorisation' procedures to encourage timely submissions by Host Nations and Investment Committee approval.⁴⁴

2.3.3 These measures have not been utilised. None of the documents reviewed by the IBAN for its sample projects indicated that the Investment Committee considered changing

⁴¹ RPPB Meeting in Plenary Session, 20-21 Nov 2014, Update by the Chairman, Investment Committee.

⁴² C-M(2014)0058.

⁴³ Data in this bullet and the two preceding it taken from AC/4-D(2013)0007.

⁴⁴ AC/4-D(2013)0007-Final defines five types of time-limited authorisations. They apply mainly to stand-alone projects, minor works, urgent requirement and Alliance Operations and Missions projects.

Host Nation ship because of delays. In addition, time-limited authorisations do not apply under most scenarios when delays occur. Specifically, the measures apply only to projects in approved capability packages that are 'subject to a confirmation.'⁴⁵ The policy also allows extensions, which the Investment Committee always grants.

2.3.4 The reasons for delays during authorisation and throughout implementation are insufficiently documented in Host Nations' official requests and in the NOR's screening reports. Sample project documentation reviewed indicates that delays in capability package projects were most often associated with increased scope requested by Host Nations and authorised by the Investment Committee. Official documentation stated a clear cause only in case of a political decision or operational necessity, such as having to change an airfield location. For other changes, official documentation did not provide information sufficient for the IBAN to determine a clear cause and responsibility. The IBAN cannot determine any trends within the scope of this audit.⁴⁶

⁴⁵ When a Nation cannot agree an authorisation, the Investment Committee's decision will be 'subject to confirmation'. The Investment Committee reviews confirmations placed on requests for Authority to Issue the Invitation for Bids after 90 days with the possibility to extend the period by when it would again review the project. If the confirmation is not lifted by then, the authorisation will become null and void.

⁴⁶ Additional audit work would be needed, such as the IBAN did for the Financial Services (FinS) system at Allied Command Operations and the International Military Staff (IBA-AR(2013)22).

3. NATO does not effectively monitor, evaluate and control project implementation

3.1 Roles and responsibilities

Resource community

3.1.1 Investment Programme projects move into the implementation phase when the Host Nation awards a contract(s) in accordance with a procurement strategy agreed by the Nations (see Figure 3). After contract award, project implementation and accountability to complete within approved cost, scope and schedule lies exclusively with the Host Nation.⁴⁷ During implementation, the Investment Committee must "monitor, evaluate and control the implementation of investment projects."⁴⁸ The main document governing Investment Committee and NOR monitoring and evaluation activities is the Implementation Management Procedure (IMP). The IMP has been in place since 1996,⁴⁹ and the Investment Committee agreed a revised procedure in 2011.⁵⁰

3.1.2 The IMP also addresses the Investment Committee's role in determining whether problems within a project affect overall capability delivery and taking relevant action. As such, the IMP requires Host Nations to tell the Investment Committee about changes to implementation milestones, as defined in the CP Plan, and give a justification (cause). The IMP also requires careful project monitoring, particularly for those that have missed a key milestone. Milestone reporting should allow the Investment Committee to plan each quarter in advance and prompt Host Nations to make changes to existing milestones when unable to make current dates. Since 1996, if individual projects in a capability package are not implemented on time and are putting capability delivery in jeopardy, the IMP requires the Investment Committee to tell the Resource Board. The IMP includes three specific aspects, which the IBAN reviewed in more detail:

(1) Project planning

This is documented in the CP Plan. The IBAN assesses this activity in section 3.2.

⁴⁷ The Investment Committee's final approval to award a contract, based on a refined estimate of cost, scope and schedule, constitutes Host Nation authorisation to proceed with project implementation. It also constitutes the Host Nation's binding commitment to complete the project within authorised cost, scope and schedule.

⁴⁸ C-M(2007)0010. Monitoring is defined as warning, checking, controlling and keeping continuous record of projects' milestones (schedule) and expenditure (cost). See AC/4(PP)N(2013)0056-REV2.

⁴⁹ AC/4-D(96)007

⁵⁰ AC4-D(2011)0006.

(2) Identifying problems and finding solutions

The IBAN evaluated two relevant elements:

- **Collecting and assessing data.** Host Nations must provide data from all active projects. The NOR collects these data and assesses them to determine the impact of missed milestones on project completion. The IBAN reviews this activity in section 3.3.
- **Taking action in response to identified issues.** The Investment Committee should identify action to bring slow-moving projects back on track and ensure effective financial management. The IBAN reviews this activity in section 3.4.

(3) Reviewing performance

The IMP recognises the need to look at the Investment Programme's overall performance, both in financial and capability delivery terms. The IBAN reviews this activity in section 3.5.

Military community

3.1.3 During project implementation, the NATO military community is most concerned with when a project (and overarching capability) is required.⁵¹ The Strategic Commands must meet four main sets of requirements for impact statement reporting in case of project delays.⁵² These requirements promote the common principle of linking project implementation directly with capability delivery. Guidance emphasises the need for proactive impact statement reporting when delays exceed six months or will affect initial operating or full operating capability.⁵³ Guidance also requires the Strategic Commands to report the impact of such delays for operations, finances (the effect on NATO budgets), NATO transformation and programmatic aspects such as training.

3.2 Project planning documentation is incomplete

3.2.1 Before the first project approval and no later than three months after capability package approval, the NOR must produce a CP Plan with a list of common-funded

⁵¹ MC 0612.

⁵² These requirements are stated in AC/4-D(2013)0012-FINAL, Bi-SC Directive 85-1, MC 0612, AC/335-N(2014)0029-REV1 and AC/335-N(2014)0053-REV1. In addition, in the capability package Commander's Operational Impact statement the Strategic Commands must state the operational impact of non-approval or from delay in approving the capability package. Consolidated NATO military authority impact statements provided as input to the Medium Term Resource Plan also include high-level statements of impact should the required funding not be provided or delays in capability delivery persist.

⁵³ The dates the project needs to be operating, to meet military requirements.

projects and their planned milestones.⁵⁴ One main purpose of the IMP, since first agreed in 1996, has been to review individual project timelines in the context of the related capability package. However, the CP Plans the IBAN reviewed for its sample of projects did not include consistent assessments of project dependencies within the larger capabilities. These are necessary to identify the impact of changes in individual project schedules on capabilities overall.⁵⁵

3.2.2 Investment Programme procedures do not require that CP Plans be kept up to date, which is a project management best practice. In its sample of projects, the IBAN found that the NOR does not update CP Plans to reflect current milestones. For projects changed during implementation, such as all of the projects that the IBAN assessed, actual project schedules differ from the CP Plan. This reduces visibility over actual schedules and limits measurement of the impact of delays in one project on others and on the capability as a whole. In addition, programme procedures do not hold Host Nations accountable to complete their projects to the schedule defined in the CP Plans. Rather, Host Nations are accountable to complete projects against the timeline approved at the commitment stage, or as modified by subsequent authorisations.

3.3 Insufficient project implementation data provided by Host Nations and assessed by NOR

3.3.1 Host Nations providing data, and the NOR assessing it for the Investment Committee to act on is new for the Investment Programme. The Investment Programme has been in place for 64 years and the IMP for 18. Before 2012, NATO did not monitor implementation based on milestones, partly because the financial information system before 2014 had limited capability for tracking milestones. As a result, information on delays in terms of project milestones and providing capabilities is unavailable for most of the Investment Programme's existence. Systematic monitoring began in 2012, following the Investment Programme financial crisis, when the Nations put greater focus on providing capabilities on time. The Nations expressed this interest by agreeing a number of initiatives aimed to improve Investment Programme management, including the aforementioned IMP and numerous supporting policies.⁵⁶ Important elements of these policies are assessed below.

3.3.2 The first step to monitor and control project implementation is for the Host Nations to provide timely and accurate data. The IMP states that the Investment Committee should always have the most recent information from Host Nations on expenditure profiles and implementation milestones. This requirement applies to each authorisation step. The IBAN

⁵⁴ See AC/4-D(2011)0006.

⁵⁵ Each capability defined in the CP Plans has one or more projects.

⁵⁶ AC/4-N(2014)0029 summarises all Investment Programme policy changes.

assessed the enhanced Investment Committee monitoring conducted since 2012 and found that Host Nations did not provide vital information on project status. For example:

- The NOR reported 61 projects as missing their contract award milestone in 2013. Host Nations did not explain the delays, as required, for over 60% of the missed milestones. Explanations Host Nations did provide were insufficiently detailed to determine causes.⁵⁷ Without consistent, informative explanations, the Investment Committee will be less able to determine the specific nature of the issues and who to hold accountable.
- In July 2014 the NOR reported that half of the relevant monitored projects (see paragraph 3.3.6) received an early authorisation (cost estimate) as planned. Of these, documentation did not clearly indicate updated milestones, as required, and the reasons for delays were not clearly explained.⁵⁸ This reduced the opportunity for stakeholders to become aware of significant problems, if any, caused by the delays.

3.3.3 In summer 2014, the NOR implemented a new financial information system.⁵⁹ How effectively the Investment Committee will be able to monitor and control project implementation will depend on Host Nations entering accurate and complete information in this system. It is too early for the IBAN to assess this area, but the IBAN recognises significant risk exists because of experiences so far with Host Nations providing required information. Unless Nations give the required detail on current milestones with regular reporting requirements, the Investment Committee will not have the most accurate milestone information, as the IMP requires.

3.3.4 Closely related to Host Nations providing implementation data is the NOR systematically collecting these data. Since 2012, the NOR and the Investment Committee have intensified work to collect and assess data and to monitor project implementation in accordance with the IMP. The NOR and the Investment Committee have made progress in monitoring project implementation milestones, but their efforts remain incomplete.

⁵⁷ IBAN analysis of five reports the NOR made to the Investment Committee in 2013 (AC/4(PP)N(2013)0045-ADD1-REV1, AC/4(PP)N(2013)0057-ADD2, AC/4(PP)N(2013)0081, AC/4(PP)N(2013)0114 and AC/4(PP)N(2014)0028). These documents do not state the total number of projects that had contract award milestones scheduled in 2013. More recent NOR reporting shows that Host Nations have not improved their ability to award contracts on time. This strongly suggests that this is an area in need of further scrutiny. Specifically, AC/4-N(2014)0032 indicates that Host Nations awarded only 6 out of 21 contracts that were supposed to be awarded between June and August 2014. This represents 29% against a target of 90%.

⁵⁸ AC/4(PP)N(2014)0059-ADD1-COR1.

⁵⁹ Referred to as the Common Funded Integrated Resource Information System, or CIRIS.

3.3.5 Of the milestone information Host Nations provide, the NOR has consistently tracked contract award for all projects since 2012.⁶⁰ The NOR did not track the other four implementation milestones for all projects, as the IMP requires. Rather, the NOR tracked these milestones more selectively by monitoring a growing number of projects.⁶¹ The Investment Committee agreed this limited approach in acknowledgement of the substantial manual effort required and the functional limitations of the previous financial information system.⁶²

3.3.6 Selective project milestone tracking now occurs during a NOR-led annual joint review of capability packages and projects, which forms the basis of the Investment Committee's IMP efforts. The results of the 2014 review improved on previous monitoring efforts because the NOR collected more data on a greater number of projects. Still, the review was incomplete by IMP standards, which require review of all projects under implementation. Specifically, the review covered roughly 30% of projects actively under implementation or 61% of the amount remaining to be spent in the approved Investment Programme.⁶³ In addition, the Investment Committee still has not implemented a process to bring missed milestones its attention prior to when they occur, which is the intent of the IMP.

3.3.7 Ensuring timely project completion is the most critical element to providing capabilities on time.⁶⁴ When assessing implementation data, a vital part of the IMP is to identify the impact of implementation issues on project completion. The IMP is designed to allow the Investment Committee to assess how missed milestones at any stage, or issues experienced during implementation, affect project completion dates. However, until

⁶⁰ The NOR continues to provide monthly reports on contract award milestones expected for the next three months and contract notifications not yet received. From these reports, the NOR compiles a list of missed contract milestones for the past three months at Investment Committee management meetings. See e.g. AC/4(PP)N(2014)0106, AC/4(PP)N(2014)0006-ADD8, and AC/4(PP)N(2014)0005-ADD8.

⁶¹ This work expanded from an initial '55 project list' produced first in 2012 (see AC/4-D(2012)0010-REV1-COR1) to 131 projects. The NOR selected these projects based on expenditure forecast for the following year and projects supporting key capabilities to be provided in the current year. This cross-section represented a small portion of the overall portfolio of active projects, but a significant portion of the portfolio based on anticipated near-term activity. See AC/4(PP)N(2013)0056-REV2.

⁶² AC/4-D(2012)0010-REV1.

⁶³ See NOR(DIR)(2014)0006. The review assessed the status of CPs expected to be submitted in 2014, CPs with no data available, and projects in over 38 (approximately one-third) of all approved CPs. The review separated the projects into five categories, including those scheduled for achieving key milestones and those with high forecasted expenditures in the near-term.

⁶⁴ The Investment Committee defines project completion as the date the project hands over to the user. See AC/4-D(2013)0012-FINAL. The CP Plan defines project completion as 'estimated date of completion'.

recently, project completion has not been tracked. Like the contract award missed milestone tracking discussed in paragraph 3.3.2, the IBAN found that reporting against the annual review of capability packages and projects does not clearly or consistently show the expected impact on project completion, if any, of missed milestones now tracked.⁶⁵ The Investment Committee also lacks a process for Host Nations to raise project completion delays not associated with missed milestones.

3.3.8 For the 24 projects where the NOR monitored completion dates in 2013, only 42% met this milestone. According to NOR officials, these delays did not affect capability delivery of the related overall capability package because the projects were some of the last projects to be implemented in their respective capability packages. This figure remained roughly the same for 2014, with 45% of projects completed on time.⁶⁶ Official documentation did not include how far these delays affected capability delivery or the steps taken to follow up on the specific projects.

3.4 Investment Committee has not responded effectively to project implementation issues

3.4.1 The initiatives to better collect and assess information have the potential to improve Investment Programme project implementation by prompting follow-on action in response to identified problems. These problems would not be visible to the Investment Committee without the measures put in place since 2012. However, follow-up to periodic project monitoring and issue reporting in the Investment Committee does not meet the requirements in the IMP and supplemental guidance about taking action to speed up slow-moving projects. For the Investment Committee, opportunities to take action occur frequently through monitoring missed milestones, reporting individual project, capability and portfolio status and tracking financial implementation rates.

3.4.2 Monitoring documentation includes milestones missed by over 6 months.⁶⁷ The Investment Programme community considers these delays to be significant. However, the IBAN found in monitoring documentation that the Investment Committee applied agreed policy for granting extensions to missed milestones inconsistently.⁶⁸ In addition, this

⁶⁵ Theoretically, delays in earlier milestones, such as commitment, can be absorbed to some extent through prudent planning and thus do not necessarily affect project completion and providing capabilities.

⁶⁶ AC/4-WP(2015)0001.

⁶⁷ For example, AC/4(PP)N(2013)0045-ADD1-REV1. With annual “re-baselining” of milestones now occurring and no clear indications of new milestone dates in missed milestone reports it is difficult to determine how much originally-planned milestones continue to be missed.

⁶⁸ AC/4-D(2013)0012-FINAL states that in principle, a missed milestone should be brought to the attention of the Investment Committee before the date has passed. The policy describes a procedure where the Investment Committee will grant extensions for missed milestones, to be followed up with intensified scrutiny and action, as necessary.

documentation did not show whether delays required re-adjusting resources or whether a 'trimmed-down' requirements would meet the original timeline.⁶⁹ Finally, the Investment Committee did not identify the need for any further action to accelerate specific slow-moving projects, as the IMP requires.

3.4.3 New reporting initiatives have the potential to produce solutions to specific project-level problems causing overall capability delivery delays, which is the main purpose of the IMP. Since 2009, the NOR has not produced implementation status reports, which current policy defines as the NOR's standard project-level reporting tool.⁷⁰ However, in December 2013, the NOR launched the capability status report activity. The NOR designed the capability status reports to give capability-wide assessments, to identify trends and make recommendations for improvement. In addition, since 2014 the Investment Committee has invited Host Nations to present the status of their Investment Programme project portfolios.

3.4.4 The Nations have not taken full advantage of these initiatives. For the five capability status reports produced as at November 2014,⁷¹ the NOR clearly identified several project-specific problems that contribute to systemic issues and presented recommendations. The Nations have so far requested some action in response to these reports, including lessons learned reports, but have taken limited initiative otherwise. In addition, neither Host Nations nor the Investment Committee have yet fully utilised the portfolio presentations made as at November 2014.⁷² These discussions are an opportunity to discuss steps taken by Host Nations to improve implementation and identify where the Investment Committee may be able to help the Host Nation overcome obstacles.

3.4.5 Finally, the IBAN found limited action taken in response to the issue of low financial implementation rates, as introduced in paragraph 1.4.1. This issue is well-known to the Nations because longstanding financial reporting requirements allow tracking of this metric. Due to the low financial implementation rate, a portion of the money provided by the Nations to fund the Investment Programme is carried forward every year. The amount provided by the Nations but not spent averaged approximately EUR 157 million per year

⁶⁹ As required by AC/4-D(2013)0012-FINAL and MC 0612.

⁷⁰ The NOR produced nearly 30 such reports between 2005 and 2009. In 2010, the IBAN found that these reports had several weaknesses, which limited their usefulness as a monitoring tool. See IBA-AR(2009)12.

⁷¹ AC/4(PP)N(2014)0055, AC/4(PP)N(2014)0057, AC/4(PP)N(2014)0075, AC/4(PP)N(2014)0077, AC/4(PP)N(2014)0104.

⁷² Including by the NCI Agency, the NATO Support Agency, Germany and Netherlands.

between 2010 and 2013.⁷³ This is a concern for some Nations because persistent underspending makes funding the Investment Programme more difficult for them.

3.4.6 In 2012, the Investment Committee looked in more detail at issues contributing to the low implementation rate.⁷⁴ The Investment Committee found that delays experienced during project implementation and under-reporting of Host Nation expenditure may influence the overall Investment Programme implementation rate. However, since 2012 the Investment Committee has only once followed up with individual Nations to determine the specific causes for poor implementation rates and the closely associated issue of inaccurate expenditure forecasting.⁷⁵ In one recent case, a Nation took the initiative to explain its own performance.⁷⁶ The lack of Nation-specific performance metrics, as discussed further in section 3.5, hinders visibility.

3.5 Investment Committee and Resource Board reviews of Investment Programme performance are incomplete and inconsistent

3.5.1 The Investment Committee uses key performance indicators to review Investment Programme performance. For example, in one assessment the NOR presented the results of five broad key performance indicators,⁷⁷ measured against targets, for 2013. Key performance indicator monitoring shows significant challenges meeting targets.⁷⁸ However, the Nations do not use the key performance indicators to manage Investment Programme performance. While the agreed key performance indicators help to understand the overall status of the Investment Programme, they do not monitor the specific activities of individual stakeholders. Thus, in the IBAN's opinion the ability for the Investment Committee to act is limited by reporting only these broad metrics.

3.5.2 As a result of its review of NATO common funding,⁷⁹ the Resource Board began to review Investment Programme performance on the basis of a selected number of Key

⁷³ This number differs slightly from the average difference between the annual adjusted contribution ceilings and spending because it is based on Nations' contributions to the programme. The Nations make these contributions on the basis of forecasts, not the adjusted contribution ceilings.

⁷⁴ AC/4-WP(2012)0004-REV2.

⁷⁵ AC/4-DS(2013)0005.

⁷⁶ AC/4-DS(2014)0026.

⁷⁷ On-time project delivery (KPI 1); on-time contract award (KPI 2); contracted amount rate (KPI 5); allocated contributions rate (KPI 6), and the net authorisation rate (KPI 7). See AC/4-N(2014)0032.

⁷⁸ See AC/4-N(2014)0038.

⁷⁹ PO(2013)0071.

Identified Capabilities.⁸⁰ However, its approach does not align with the IMP. The IMP outlines a 'bottom-up' approach in which the Investment Committee identifies project-specific problems and, if these problems affect capability delivery, they escalate them to the Resource Board. By so doing, the IMP clearly defined a tolerance or threshold for Resource Board 'management by exception', which is also a project management best practice. However, rather than consistently following this procedure,⁸¹ beginning in 2013 the Resource Board monitored a list of 'Key Identified Capabilities' selected by the Nations based on inputs such as political priorities established during NATO summit meetings. This represents more of a 'top-down' approach.

3.5.3 The Resource Board approach enhances visibility at the capability level and presents opportunities to take action. In response to a tasking from the Resource Board, the Investment Committee identified 20 actions already taken and 21 measures to be undertaken in 2015. It intends these measures to mitigate issues identified with the 8 capabilities the Resource Board assessed in the two lowest categories.⁸² 11 of the 21 measures scheduled for 2015 are due in the first quarter of 2015. For the most part the Investment Committee identified the entity responsible for taking action. For example, the NCI Agency is responsible for 7 of the actions due in the first quarter of 2015. It is too early to determine how effectively the responsible entities will follow through on these commitments or how well the Resource Board and Investment Committee will ensure that they do so.

3.5.4 The Resource Board will face challenges measuring the impact of the actions taken to mitigate the issues it identified at the capability level. In the Investment Committee the Nations use the most up-to-date approved project implementation timelines as the basis for reviewing performance.⁸³ In the Resource Board, the Nations have agreed to use the CP Plans as a baseline, including originally programmed cost, scope and schedules. As discussed in section 3.2, programmed baselines do not typically align with current project implementation timelines. Even if the Investment Committee's mitigation measures successfully bring slow moving projects up to the best possible speed, the

⁸⁰ The Nations agreed an approach that was used to brief Resource Board representatives in plenary session in June 2014 (AC/335-N(2014)0029-REV1). They subsequently revisited the approach in preparation for the November 2014 plenary session (AC/335-N(2014)0053-REV1).

⁸¹ The IBAN encountered at least one case during its audit work in which the Investment Committee referred a set of projects to the Resource Board.

⁸² These are 'red' and 'amber.' For schedule, 'red' refers to a capability area in which at least one capability package is scheduled to be delivered more than 12 months later than the original CP Plan completion date. Capability packages scheduled to be delivered late but within 12 months are assessed 'amber.' For resources, 'red' refers to a capability in which at least one capability package has experienced a greater than 25% cost increase compared to the CP Plan programmed value and 'amber' refers to capabilities assessed within a 25% cost increase. AC/4-D(2014)0016-FINAL.

⁸³ Most recently defined in AC/4-D(2014)0014.

status of the capability will remain 'red' or 'amber.' The Nations have not defined clear, objective criteria with which to consistently measure trends.

3.6 Investment Programme governance limits effective enforcement and accountability

Enforcing Host Nation commitments

3.6.1 The Investment Committee does not effectively held Host Nations accountable. The Investment Committee takes a key governance role during implementation. It is responsible for giving the oversight necessary to provide direction and guidance and that stakeholders follow processes and procedures. In the context of the Investment Programme, effective governance means holding Host Nations accountable to implement projects as part of the binding commitment to deliver projects within cost, scope and schedule. It also means taking action to ensure that Host Nations and other stakeholders follow established processes and procedures. In the preceding sections of this report, however, the IBAN found that Investment Programme stakeholders, including Host Nations, do not effectively adhere to Investment Programme processes and procedures. In addition, they do not consistently produce results in line with their commitments.

3.6.2 Investment Programme governance lacks the means for effectively enforcing Host Nation commitments. A committee of National representatives is directly responsible for overseeing project implementation. This reflects the level of agreement needed to use a common fund as the basis for a co-operative approach to meeting a shared threat. It also reflects the old NSIP environment, in which the Nations themselves managed most projects. This arrangement made the Nations accountable to each other. However, it limits the Investment Committee's ability to effectively monitor, evaluate and control project implementation, which its Terms of Reference require. The Investment Committee can at most 'invite' Host Nations to take action, with no directive or enforcement authority. Without a governing body able to effectively enforce commitments, stakeholders face little compelling reason to improve their performance.

3.6.3 As paragraph 1.1.5 shows, the Investment Programme has fundamentally changed since the Nations defined its governance principles. The shift towards projects managed by the NATO agencies—and the NCI Agency in particular—represents this trend. The Investment Committee can, in principle, more effectively direct and enforce the activities of the agencies than it can those of territorial Host Nations because the agencies are NATO entities. However, as currently governed, the Investment Programme has limited capacity for effective enforcement regardless of whether the Host Nation is a territorial Nation or a NATO agency. A robust customer funding regulatory framework and enhanced Communications and Information governance could enable better oversight of the NCI Agency, which is the Host Nation managing the largest share of projects under

implementation. Work in this area has been delayed. However, current plans call for completion of work by the relevant NATO committees by mid-2015.⁸⁴

Involving NATO bodies to improve implementation

3.6.4 The Investment Committee provides detailed, day-to-day oversight of many external stakeholders' activities. These activities are often complex and involve a wide range of issues that other NATO bodies also work with. At a minimum, these bodies can inform Investment Committee decision-making when, for example, the NOR identifies systemic issues such as those discussed in recent capability status reports. For example, the NATO Headquarters Consultation, Command and Control Board are well-placed to give advice. However, the Investment Committee's terms of reference⁸⁵ do not give it tasking authority over other NATO bodies to facilitate their involvement in accelerating slow-moving projects.

3.6.5 The Investment Committee faces challenges initiating discussion of urgent issues in the right forums. The NOR has suggested but not yet recommended, and the Investment Committee has not yet directed, specific courses of action to involve NATO bodies in improving project implementation. The need for action has been most acute for traditional Investment Programme stakeholders, primarily Host Nations. Nevertheless, NOR officials told the IBAN that their ability to act is limited unless the Nations take greater initiative to more systematically involve NATO bodies.

Role of Council

3.6.6 Within NATO, Council is the body to which all others are ultimately accountable. It is also the body with the greatest capacity for enforcement. Reporting to Council on the Investment Programme includes an annual high-level statement of challenges included in the Resource Board's Annual Report and the Medium Term Resource Plan.⁸⁶ These documents also include factual information on financial implementation rates, financial status and the impact of delays in capability delivery. However, these documents did not assess the root causes of project implementation delays and how far the Investment Committee or Resource Board can realistically mitigate the relevant issues. In the IBAN's opinion, appropriate reporting to Council would include the Investment Committee's and Resource Board's assessment of their own constraints and challenges. Such an assessment would allow Council to determine whether it should take a more active role at its level in holding stakeholders accountable and enforcing action.

⁸⁴ See AC/335-N(2014)0060, AC/281-N(2014)0080, PO(2014)0836 and PO(2015)0008.

⁸⁵ C-M(2007)0010.

⁸⁶ C-M(2014)0048, C-M(2014)0058.

3.7 Strategic Commands do not effectively report on the impact of project delays, which limits schedule control

3.7.1 In assessing the military community's work to monitor Investment Programme project implementation, the IBAN focused on reporting the impact of delays. The Strategic Commands' reporting in accordance with applicable guidance is incomplete. For IBAN sample projects, only half of those for which the IBAN established a significant delay had an associated operational impact statement.⁸⁷ The Strategic Commands provided them in response to periodic reporting requirements such as those described briefly in paragraph 2.2.7. These statements did not represent proactive responses by the Strategic Commands to identified delays in project implementation as required. The Strategic Commands said this was due to the lack or insufficient flow of implementation data. In addition, they did not attribute delays in capability delivery to specific project delays, which could better prompt targeted action. As a result, it is unclear how much projects experiencing significant delays affected the relevant capabilities.

3.7.2 The IBAN observed that the more clearly defined the operational impacts of delays in project completion, the more likely that action to accelerate slow-moving projects and approve explicit mitigation steps would be taken. In particular, delays in Alliance Operations and Missions projects of all types typically have immediate or existing serious operational impacts. This is because in such situations commanders on the ground face challenges effectively conducting their assigned missions without the required capability. For their part, Nations are less likely to accept operational risk and allow continued degradation of mission effectiveness that unmitigated delays produce.

3.7.3 However, identifying clear operational impacts for projects other than those to support Alliance Operations and Missions is more challenging. In particular, Strategic Command officials said it was difficult to define operational and transformational impacts of delays for longer-term projects designed to contribute towards NATO's high-level goals, as defined in the Alliance's 'Level of Ambition'. Projects in this category include many of the complex software intensive projects experiencing the greatest implementation problems.

3.7.4 For delayed projects without a clear operational impact, reporting on the financial impact to NATO budgets becomes especially important. However, among the documentation reviewed for sample projects, the IBAN found limited evidence of such assessments by any stakeholder. In particular, interim solutions for unmet needs arising from capability package project delays and increased costs of running aging legacy

⁸⁷ The Strategic Commands discussed impact at the level of the capabilities these projects supported. They also did not produce any capability- or project-level operational impact statement for 5 out of 10 projects with completion or estimated completion delayed by over 6 months.

infrastructure is acknowledged within NATO.⁸⁸ No NATO entity separately tracks the use of interim solutions such as prototypes and associated costs. In 2009, the NATO Consultation, Command and Control Board reported on the use of prototype communications and information systems within NATO.⁸⁹ However, this report has not been updated since then, despite the intent to use it as a 'living document.'

3.7.5 Without complete and consistent reporting on the impact of delays, the Investment Programme lacks schedule control as envisioned in NATO policy and guidance. The resource community lacks sufficient detail on whether project schedules enable the timeframes in which the Strategic Commands need capabilities or whether to adjust timeframes. As a result, the IBAN found in its assessment of sample projects that the Investment Committee typically does not consider impact before agreeing to lengthen project schedules. Thus, the Nations approve requests by Host Nations for greater scope and cost regardless of schedule implications. In addition, they make these approvals in the absence of a full business justification that complete financial impact statement reporting would provide, particularly for costly endeavours such as software intensive projects.

3.8 Guidance, resource and structural shortfalls hinder Strategic Commands' work

Guidance

3.8.1 Little has changed since the IBAN's 2010 report⁹⁰ to improve the Strategic Commands' ability to perform their responsibilities during project implementation. Officials from Allied Command Operations and Allied Command Transformation told the IBAN that the Strategic Commands cannot effectively perform the monitoring role defined in their guiding documents for Investment Programme project implementation.

3.8.2 Previous IBAN observations on shortfalls in guidance remain. In particular, the main policy and guidance documents for the Investment Programme process⁹¹ continue to lack NATO-wide authority, are out of date and incomplete. For example, the IMP and its supporting policies do not define the Investment Committee's responsibilities to control project implementation⁹² or how other Investment Programme stakeholders should support this role. In addition, the detailed interactions between Host Nation, resource community

⁸⁸ Expenditure for these solutions typically comes from the Military Budget, which is managed by a different NATO committee (the Budget Committee), separately from the Investment Programme.

⁸⁹ AC/322-N(2009)0115-ADD3.

⁹⁰ IBA-AR(2009)12

⁹¹ MC 0612, Bi-SC 85-1, AC4-D(2011)0006, AC/4-D(2013)0012-FINAL, *NSIP Manual*.

⁹² See C-M(2007)0010.

and Strategic Commands necessary for the Strategic Commands to assess changes in project completion dates have not been specified. Further, the resource and military communities have different guidance for tracking missed milestones and their impact on project estimated dates of completion.

3.8.3 These factors contribute to a gap between what the military community believes it provides the resource community and what the resource community expects to receive. Stakeholders lack consistent guidance for the basis on which to define schedule tolerances and raise and approve exceptions. These are standard project management principles that should apply equally to adjustments in cost, scope and schedule. This limits how far the Strategic Commands, which play a key role in providing the necessary information for decision-making, understand the resource community's expectations of them, as well as Nations' ability to hold the Strategic Commands accountable to provide the information they need.

Resources and structures

3.8.4 In 2010 the IBAN found that workforce limitations within the Strategic Commands contributed to weaknesses in performing their roles and responsibilities. Such limitations included incomplete fill rate, insufficient job descriptions and high turnover. These issues remain. For example, according to Allied Command Transformation officials, only one person within both Strategic Commands has sufficient expertise to deal with NATO-wide air command and control capabilities. As shown in Figure 1, air command and control is the largest Investment Programme spending area, and related projects have experienced implementation delays.

3.8.5 Without experienced personnel, the Strategic Commands are less able to participate in key forums that provide governance of major Investment Programme projects. Important forums lacking full Strategic Command participation include Project Boards for software intensive projects implemented by the NCI Agency. This limits the visibility the Strategic Commands need to meet implementation-monitoring requirements.⁹³ If the Strategic Commands fully participate in project-level governance, which is their responsibility, their reliance on implementation data would diminish and they would be in a better position to proactively respond to delays.

3.8.6 The IBAN previously reported on the long-term difficulties Nations have in filling the military posts they commit to, as well as Nations' challenges in providing personnel with the required skills and expertise.⁹⁴ These challenges occur in an environment of growing demands. In 2011, a joint civil-military team reported that, for capability delivery overall, "the ever increasing workload and complexity of capability development and

⁹³ The IBAN has previously reported on this issue. See IBA-AR(2013)22.

⁹⁴ IBA-A(2014)13, IBA-A(2014)149.

delivery has led to overstretch of staff". The report concluded that "tasks, roles and responsibilities, working methodologies, structures, clustering of activities, governance (including accountability), training and education of new staff will all have to be addressed if the effectiveness, quality and timeliness of the output is to be improved".⁹⁵ Other reports reviewed by the IBAN made similar conclusions.⁹⁶

3.8.7 No stakeholder the IBAN spoke to believed that the limited changes⁹⁷ made in the time since publishing the report by the joint civil-military team had addressed the fundamental problems identified. Addressing these issues in more detail is beyond this report's scope, but, in the IBAN's opinion, more action is needed in the following areas before chronic staffing issues and other issues improve:

- The NATO entities responsible continue to operate in fragmented 'silos.' For example, the IBAN observed only minimal interaction between the Investment Committee and the NATO officials newly designated responsible for 'managing' specific capability areas.
- Despite numerous observations in this area, there is no single individual or body accountable for the full capability development cycle. Different process owners for the different stages of capability delivery are only accountable within their own specific governance structures.

⁹⁵ AC/281-N(2011)0067.

⁹⁶ E.g. JALLC/CG/11/192, *Improving NSIP CUR Process: Expediting CUR Approval*. See also NATO Executive Development Investment Programme Team Acquisition paper, June 2012.

⁹⁷ Initiation of the Capability Development Executive Board, supported by Capability Area Managers.

4. NATO does not effectively close and record completed projects

4.1 Roles and responsibilities

4.1.1 After project completion (defined in the Investment Programme as handover to the user), NATO must assess whether the Host Nation has implemented the project within authorised cost and scope. Investment Programme policy intends this assessment to include timely inspections of all completed Investment Programme projects. The NOR, supported by the Host Nation and Strategic Commands and the IBAN, respectively, must complete technical and financial inspections. The Host Nation must request a technical inspection (Joint Final Inspection and Formal Acceptance) no later than six months after project completion, culminating in NATO's technical acceptance of the project. The Host Nation must also request a certification audit of project expenses by the IBAN. A project is considered closed and accepted into the NATO inventory when the IBAN issues a Certificate of Final Financial Acceptance (a Certificate).

4.2 Host Nations do not meet deadlines for closing completed projects

4.2.1 In 2010 the IBAN found that Host Nations and the NOR had not closed completed Investment Programme projects as required by Investment Programme procedures. Specifically, the IBAN found that 1,553 projects were operationally complete but not closed.⁹⁸ As at June 2014, over 1,700 projects remained in this category.⁹⁹ Thus, the rate at which Host Nations complete projects continues to exceed the rate at which NATO can close them. For most of these projects, the Host Nation had to either request a technical inspection (about 60% of completed open projects) or an audit by the IBAN (about 30% of completed open projects). The NOR had a backlog of about 200 projects to inspect. Altogether, the projects in these three categories represented about EUR 5.1 billion in expenditure that the IBAN had not yet certified.

4.2.2 In 2010, the IBAN sampled audited projects and found that the average period from project completion to audit was over six years.¹⁰⁰ The most significant delays resulted from lack of Host Nation requests for Joint Final Inspection and Formal Acceptance within six months of completion, as required.¹⁰¹ As the IBAN found in 2010, Investment

⁹⁸ These projects lacked a Joint Final Inspection and Formal Acceptance, a Certificate, or both.

⁹⁹ These include about 1,600 CP projects and nearly 150 projects from the old 'Slice' programme.

¹⁰⁰ This finding is influenced by five projects initiated prior to when the capability package process was put in place, which were not closed until 16 years after completion. For projects subject to the 'simplified procedure' the average time between completion and closure was 34.8 months.

¹⁰¹ The IBAN found that such requests took on average two years.

Programme funding mechanisms make all authorised funds available to Host Nations before project inspection and acceptance. This gives no incentive for Host Nations to proceed with technical and financial closure after project completion, except where they incurred a cost overrun. Also, the technical handover between the contractor, the Host Nation and the user is done before a Joint Final Inspection and Formal Acceptance is requested. This implies that the end user satisfaction is achieved at this stage and that the Investment Programme closure process can appear as a low-priority administrative step.

4.2.3 In September 2014 the Nations agreed an action plan to reduce the number of uninspected and unaudited projects to zero by June 2016. Based on the progress so far the Nations will not meet their commitments unless they greatly increase the rate at which they submit projects for inspection and audit. As at November 2014, in the second half of 2014 the IBAN issued 11 Certificates for Slice programme projects¹⁰² and received requests for audit of five more, out of a population of 161 open projects. The deadline for completed capability package projects to be submitted for audit is June 2016. It is therefore too early to forecast this result. The IBAN acknowledges the short time since agreeing the action plan. However, in the IBAN's opinion this is another case where the resource committees struggle to hold Host Nations accountable.

4.3 No comprehensive reporting to track completed projects

4.3.1 Typically, Investment Programme project completion involves user acceptance procedures (see Figure 3). After these procedures, the user controls the asset.¹⁰³ The user is responsible for maintaining, accounting and disposing of the assets under its control.¹⁰⁴ However, in its audits of annual financial statements the IBAN found that NATO users, particularly Allied Command Operations and the NCI Agency, do not properly account for many Investment Programme-funded assets such as those used for military operations.¹⁰⁵ In addition, the IBAN observed a lack of accounting by the NCI Agency for Investment Programme-funded assets, including high-value communication and information systems, considered 'in progress' but not yet completed.¹⁰⁶

¹⁰² See paragraph 1.1.1 above for a brief discussion of the Slice programme.

¹⁰³ The ownership (that is, the legal proprietor) of Investment Programme-funded works remains undefined. See Investment Programme manual.

¹⁰⁴ For NATO users, see C-M(2013)0039 and ACE Directive 60-80, for example.

¹⁰⁵ See, for example, IBA-AR(2014)20. ACO uses the output of its logistics (operational) property tracking database to inform its financial asset accounting so the weakness exists at both levels. IBAN's audit authority does not allow visibility over the extent to which territorial Host Nation end users account for the Investment Programme-funded assets under their control.

¹⁰⁶ See IBA-AR(2014)22.

4.3.2 Beyond these observations, the IBAN found no consolidated reporting on closed Investment Programme projects. The NOR provides regular lists of closed projects to the Investment Committee, which represent the final administrative step in the Investment Programme process. However, the accumulated volume of all projects handed over to the user and technically verified and accepted has not been physically recorded. As a result, no 'NATO inventory' exists. Without a physical record, the tangible results of billions of Euros spent in the Investment Programme since the Nations created it over 60 years ago are not apparent.

5. Conclusion and recommendations

5.1 The IBAN has shown that Investment Programme stakeholders struggle to implement—or effectively oversee implementation of—projects needed to deliver required capabilities within approved cost, scope and schedule. Investment Programme governance hinders the effective and timely completion of projects. The IBAN made the following observations on Investment Programme project implementation:

- **Authorisation process gives poor assurance and weak timeline control.** Host Nations struggle to give accurate and feasible estimates of cost, scope and schedule. The NOR has not screened project schedules to ensure they are realistic. The military community has not yet given the expected project implementation advice when projects are delayed. Nations have been unable to agree effective measures to encourage timely input by Host Nations.
- **NATO does not effectively monitor, evaluate and control project implementation.** Host Nations and the resource community still do not give, collect, assess and act on data well enough. Strategic Command reporting on the impact of delays is incomplete and tends not to link project delays to capability delivery. For projects reviewed by the IBAN, the Investment Committee did not consider impacts prior to lengthening project schedules. Contributing factors include weak and fragmented accountability, enforcement, structures and processes.
- **NATO has not effectively closed and recorded completed projects.** Nearly two-thirds of all active projects are physically complete, but have not been closed. The Nations will not meet their commitments to eliminate this backlog unless they greatly increase the rate at which they submit projects for inspection and audit. Users do not effectively track Investment Programme-funded projects and the full extent of completed Investment Programme projects is unknown.

5.2 Recognising management shortfalls, since 2010 the Nations in the Investment Committee implemented policy changes that enhanced their involvement in the day-to-day oversight of project implementation. Improvements in implementation monitoring and evaluation are evident since 2012. However, the results of these improvements highlight the continuing lack of progress in improving the timely implementation of Investment Programme projects. They also show the urgent need for further action.

5.3 If the Investment Programme goal is effective and efficient capability delivery, existing governance principles may not be fit for purpose. These principles reflect the level of agreement needed to use a common fund as the basis for a co-operative approach to meeting a shared threat. They also reflect the needs of an era in which the same Nations in the Investment Committee were themselves implementing most projects. Today,

however, the Nations are unable to effectively direct and enforce actions that are needed to improve project implementation.

5.4 Nations at the Ministerial and higher levels have increasingly emphasised the desire for better performance. Most recently, at the September 2014 Wales Summit Heads of State and Government tasked the NATO resource and military communities to develop clear recommendations for improving capability delivery. The time is right to reform how Investment Programme project implementation is governed to better reflect how far the Programme has evolved. There are also a number of short term actions that can improve the current situation.

5.5 Aside from these findings, the results of published NATO studies strongly suggest that NATO stakeholders experience equal, if not greater, challenges during other steps in the capability development process. Requirements definition for complex endeavours such as software intensive projects is one notable area receiving significant attention. Improving project implementation alone will not provide capabilities on time because work must be done in these other areas too.

Recommendation 1 (short-term focus):

5.6 To better ensure that authorised projects reflect accurate and realistic cost, scope and schedule estimates the IBAN recommends the resource community work to improve Investment Committee decision-making during authorisation. These steps should include, at a minimum, the following elements:

- (1) More comprehensive consideration in NOR screening reports of the risk of potential scope changes prior to those scope changes occurring,
- (2) broadened screening by the NOR on the feasibility of milestones the Host Nations provide and
- (3) Investment Committee action on NOR screening reports only after it is satisfied that Host Nations have addressed risk and made project milestones realistic.

5.7 The IBAN further recommends:

- (1) The resource and military communities develop synchronised implementing guidance for the new policies in place,
- (2) the NOR conduct regular and comprehensive reporting to track completed projects and provide overall visibility on capability delivery and
- (3) enhanced reporting to and involvement of Council to better hold Investment Programme stakeholders accountable to meet their commitments.

Recommendation 2 (longer-term focus):

5.8 The IBAN recommends the Nations reform Investment Programme governance to improve accountability, control and enforcement. To begin this process, the IBAN recommends that Council convene a group of external subject matter experts, drawn from National administrations, to give Council recommendations to address, at a minimum:

- (1) changing Investment Programme principles as necessary to ensure that accountability for capability delivery is both strengthened and clearly defined,
- (2) developing a governance model that enables more effective direction and enforcement in the day-to-day oversight of the Investment Programme,
- (3) creating effective incentives, with particular emphasis on the NATO Agencies, to encourage Host Nations to make timely submissions and meet commitments and
- (4) make the organisational changes in NATO bodies involved in capability delivery as necessary to rationalise structures and improve stakeholder cohesiveness.

6. Comments received and the IBAN position

6.1 The IBAN requested formal and factual comments from the Director, NOR, the Vice Chief of Staff, Allied Command Operations and Allied Command Transformation. Where appropriate, the IBAN amended the report based on the factual comments received. The IBAN reproduced the full text of the formal comments in **Appendix 4**.

Summary of comments by the Director, NOR

6.2 The Director, NOR confirmed that the report rightly points out in which areas stakeholders should improve ownership and accountability. This goes hand-in-hand with the Investment Committee and the NATO Military Authorities fully exercising and enforcing their roles and responsibilities in terms of implementation monitoring and management as foreseen by existing policies and procedures. The need for clear and realistic capability development and implementation schedules, improved accountability and focussed reporting are also some of the themes in the preparation of the response of the Nations to the Wales Summit Tasking on improving capability delivery. In this respect the report of the IBAN comes at the right moment.

6.3 The Director, NOR underlined that problems also originate from the earlier requirements setting and programming stages – a fact he wrote could have been more highlighted throughout the report. He also underlined IBAN's observations regarding the roles of the agencies and the reversal in implementation roles. According to the Director, well-meaning updates in policy and procedures have not addressed this programme imbalance. This requires specific measures to strengthen implementation oversight and governance over the agencies, an element which he would have liked to see more stressed.

6.4 The Director, NOR found that the report insufficiently reflects the increased efforts by the Investment Committee, with the support of NOR, to improve oversight, monitoring and management of investment projects. Further, he did not share IBAN's conclusion and recommendation regarding the need for a fundamental examination of Investment Programme management and governance. The current governance structure is a true reflection of the complexity of NATO with different stakeholders responsible for the overall delivery process. An underlying issue, according to the Director, NOR is that there is no single body or person accountable for the full implementation cycle. Nevertheless, the Director, NOR is of the opinion that more efforts should be made towards making processes more effective and efficient and holding individual stakeholders accountable to their assigned roles.

6.5 According to the Director, NOR, in order to hold Host Nations accountable, they must be responsible for developing and adhering to the schedule, cost and scope. Otherwise Host Nations would be simply implementing somebody else's planning for

which they cannot be held responsible. The NOR could extend its screening to provide comments and advice but should not establish the milestones.

Summary of comments by the Vice Chief of Staff, Supreme Headquarters Allied Powers Europe (SHAPE), Allied Command Operations

6.6 In SHAPE's view the implementation phase is, in fact, a long protracted approval process caused by poorly developed business cases. The lack of incentives for Host Nations, especially the Agencies, to provide reliable information seems to be a key factor that results in changes and delays. The key to improve delivery is to enhance the approval phase so that the Council, Military Committee and resource committees can make informed decisions. Further, SHAPE underlined that the capability package process should differ between infrastructure and technology projects. According to SHAPE, technology projects require different staffing and procedures.

6.7 SHAPE found that the report did not consistently describe roles and responsibilities, particularly for the Strategic Commands. He stressed that the Commands are responsible for the development of requirements; once a project is approved by NATO Headquarters the Commands provide impact statements on changes to approved plans during the implementation phase.

6.8 SHAPE noted that implementing the recommendation to broaden screening by the NOR on the feasibility of milestones the Host Nations provide could be problematic. NOR screening may be highly dependent on an assessment of Host Nations' past performance for similar projects, which the IBAN assesses to be inadequate. Thus, agreement on "realistic" milestones may be difficult to achieve.

Summary of comments by Allied Command Transformation

6.9 Allied Command Transformation informed the IBAN that it considered the report to be valid and accurate and had no further comments to provide.

IBAN position

6.10 IBAN appreciates the comments received. The IBAN concludes that there are no fundamental differences in opinion regarding many of the main problems and the need to improve. However there is no full agreement of the nature and extent of the necessary changes. Where appropriate the IBAN amended the report based on the comments received. However, the IBAN saw insufficient reason to amend its conclusions and recommendations. This can be explained as follows.

6.11 In his comments, the Director, NOR implies that the Investment Programme governance structure is too complex to change. The IBAN recognises that governance

within the Alliance normally reflects a delicate balance between various stakeholders' interests. Nevertheless, this alone should not prevent an external review of Investment Programme governance with the potential to improve effectiveness and efficiency. The IBAN sees an opportunity to identify lessons learned and best practices from outside the NATO context in managing infrastructure investment. Separating any recommendations themselves from those responsible for taking action may also increase the likelihood of implementation. Of course, final decision-making should fully incorporate all necessary NATO-specific considerations.

6.12 The IBAN interprets the NATO definition of governance, particularly as it relates to capability development, to contain more than just structures. It also includes ways and means to ensure the desired results are achieved, the actors involved and how they work together. In this sense effective governance, accountability and enforcement are strongly linked. The IBAN shares the view of the Director, NOR that accountability and ownership go hand in hand with fully exercising and enforcing roles and responsibilities. However, effectively achieving this state within the Investment Programme may not be possible without also critically examining governance.

6.13 Both SHAPE and the NOR underlined the importance of improving other aspects of capability development and delivery not directly in the scope of the audit. These areas include requirement-setting, business case development and solution selection and NATO agency-specific concerns. An external review could comment on these issues.

6.14 The IBAN fully recognises the increased efforts of the Investment Committee to improve oversight, monitoring and management of Investment Programme projects. As the IBAN states in its report, it is specifically these efforts which were the main subject of its audit work, particularly in chapter three. The IBAN also acknowledged and assessed the performance of other initiatives such as the military community's efforts to enhance involvement in project implementation. Key initiatives the IBAN identified and assessed include:

- Implementation Management Procedure.
- Capability package implementation planning.
- Monthly and quarterly monitoring of contract award milestones.
- Milestone tracking for selected projects.
- Annual review of capability packages and projects.
- Project completion monitoring.
- Policies for dealing with projects that miss milestones.
- Implementation of the new financial information system.
- Implementation status reporting.
- Capability status reporting.
- Host Nation portfolio reporting.
- Software intensive projects task force reporting.
- Financial implementation rate tracking.

- Key performance indicators.
- Review of Key Identified Capabilities and mitigation steps taken.
- Enhanced reporting by the Military Committee and Strategic Commands.

6.15 The IBAN believes its report adequately assessed these initiatives as they had been implemented as at the end of audit fieldwork. Several of these initiatives are quite new, even if the underlying principles have been in place since 1996. So far, as the IBAN concludes in its report, the initiatives have been most successful in more clearly illustrating the extent of the problems NATO faces in delivering projects and capabilities on time. The IBAN acknowledges that additional time may allow some of the initiatives to have greater effect. However, the IBAN also notes that some deeper issues, such as the lack of accountability and enforcement, may limit the potential of the initiatives to achieve their goals. The IBAN modified some report text to more explicitly link its findings to the measures agreed to improve the Investment Programme.

6.16 The IBAN accepts the comments made by SHAPE clarifying roles and responsibilities and military advice provided within NATO. The IBAN notes that the military community believes it provides the resource community extensive implementation advice. The IBAN also notes that the resource community believes this information is still insufficient. Synchronised, NATO-wide implementation guidance such as the IBAN recommends in its report could more effectively align expectations.

6.17 The IBAN notes that in SHAPE's comments, as during the audit, the command distanced itself from controlling Investment Programme projects. However, the IBAN also notes that these projects are typically designed to meet its requirements. Allied Command Operations also typically bears risk in case of delays and is the main user of the delivered capabilities. In the IBAN's opinion, these incentives should prompt Allied Command Operations to actively seek opportunities to exercise control. Fully participating in communication and information systems Project Boards is one example. In the IBAN's opinion, the Nations should hold the Strategic Commands accountable for exercising the maximum level of control allowed for under current arrangements.

6.18 The IBAN concurs with comments made by both SHAPE and the Director, NOR on the challenges in establishing realistic milestones. The IBAN also recognises that political targets can strongly influence project schedules, as it and others have found.¹⁰⁷ These targets may not realistically consider the work needing to be done to accomplish them, which introduces further complications and increases the risk of delays. Nevertheless, Host Nations and the NOR should agree the feasibility of the Host Nations' project schedules and fully assess risk before the Investment Committee agrees them. In addition, Host Nations need to develop the level of understanding necessary to ensure their estimates of schedule improve.

¹⁰⁷ IBA-AR(2013)22, AC/4-N(2014)0042.

Abbreviations

IBAN	International Board of Auditors for NATO
IMP	Implementation Management Procedure
NOR	NATO Office of Resources

Sample projects

Sample #	Capability package	Project	Name	Host nation	Completion delay
1	5A0007	1999-5-HQ-593	Obtain and Integrate Air Ops SubFASS	NCI Agency	12 years
2	5A0013A02	2007 5 AF 5168	Restore/expand crash fire station	Germany	6 years
3	5A0044	22001	Provide Backbone Radar-Sokolnice	Czech Republic	8 years
4		22003	Provide Backbone Radar-Nepolisy	Czech Republic	8 years
5	5A0051A04	2011 3 AF 19983	Upgrade WS3 Security System	US	3 months
6	5A0109 5A0109A02	N/A	ACCS LOC 1 Validation System Test 1-2	NCI Agency	Not specific Investment Programme projects; extent of delays could not be determined.
7		N/A	ACCS LOC 1 Validation System Test 2	NCI Agency	
8		N/A	ACCS LOC 1 Validation System Test 3	NCI Agency	
9		N/A	ACCS LOC 1 Replication Batch 2 Hardware Delivery	NCI Agency	Not specific Investment Programme projects; extent of delays could not be determined.
10		N/A	ACCS LOC 1 Replication Batch 3 Hardware Delivery	NCI Agency	
11	9A0700	2007 2 TI 14857	Provide Air EW training equipment	UK	6 years
12	9C0103	2007 0 IS 3043	Develop Logistic Functional Service (Spiral 1)	NCI Agency	2.5 years
13	9C0107	2011 0 IS 3082	Provide FS for C2 of combined joint operation	NCI Agency	8 months
14		2011 0 IS 3075	Provide Air C2 Information Services Phase 2	NCI Agency	N/A not yet authorised
15	N/A (AOM)	2007 5 VA 30447	RSOI Accommodation	NSPA	2 months
16	N/A (AOM)	2009 5 VA 30555	Provide Persistent ISR	NCI Agency	11 months
17	N/A (AOM)	2010 1 HQ 3002 0	Communication and information systems Phase 3 IJC C2	NCI Agency	Delayed by unknown amount
18	N/A (AOM)	2010 1 VA 27019 0	Phase 3 HQ ISAF Joint Command C2	NSPA	Delayed but on hold in Investment Committee
19	N/A (AOM)	2012 5 VA 30597	AMN 12	NCI Agency	12 months
20	N/A (AOM)	Serial 27002	COMKAF HQ	NCI Agency	2 months
21	N/A (AOM)	Serial 30284	Radio Network for Air Ops	NCI Agency	14 months

Sample selection methodology

1. As shown in the above table, the audit team selected a sample of 21 projects to check delays in completion dates. The results cannot be generalised. The criteria used include:

- projects already selected for NOR and Investment Committee monitoring,
- capability package and Alliance Operations and Missions Crisis Urgent Requirements projects that both agency and territorial Host Nations manage,
- projects comprising part of the capabilities selected for Resource Board monitoring, and
- projects scheduled to be completed in 2013.

Five items (sample numbers 10 to 14) correspond to Host Nation internal milestones instead of projects. They are part of the same capability package, which the Resource Board is also monitoring. The audit team could not learn from the NOR which projects these milestones were attributed and reported to the Nations, so full testing was not possible.

2. The team assessed the CP Plan timeline dates, taken as a baseline, against the latest forecasted dates presented in Investment Committee 'Decision' and 'Decision Sheet' documents. The team compared information in these documents with information disclosed in the Allied Command Operations Project Implementation Tracking Tool system to determine actual milestone achievement for Alliance Operations and Missions projects.

3. The team requested from Allied Command Operations any impact statements for the projects and overarching capability packages tested. The team asked questions about the process that Investment Programme stakeholders use to get or give information necessary for the Investment Committee to make opportune decisions on changes to project cost, scope and schedule. The audit team combined findings from its sample analysis with interview information, or document analysis from these interviews, related to other relevant projects.

Capability package process

Identification and prioritization

What: The capability package starting point. The Strategic Commands agree on a master list of capability packages to be developed, based on direction from the North Atlantic Council on strategic objectives and supporting Military Committee guidance.

Who: Military Committee, Allied Command Transformation, Allied Command Operations.

Development

What: Comprehensive document to include initial estimated costs and milestones for one or more projects. Capability packages identify Host Nations (either territorial or agency) which will be responsible for implementing each project.

Who: Allied Command Transformation lead, Allied Command Operations support.

Approval

What: A joint capability package report submitted to the Military Committee and the Resource Policy and Planning Board for endorsement. The North Atlantic Council gives final capability package approval.

Who: North Atlantic Council, Strategic Commands, Military Committee, Resource Policy and Planning Board, NATO Office of Resources, International Military Staff.

Implementation

What: The Investment Programme project lifecycle has 7 main milestones. Individual project implementation begins with capability package approval and ends with project closure.

Who: Investment Committee, Military Committee, Strategic Commands, NATO Office of Resources, International Military Staff, territorial and agency Host Nations

Operation

What: Completed capability accepted into operational service. Lessons learned incorporated into next cycle.

Who: Strategic Command and/or national users.

NOTE: Regarding approval: After a draft capability package is considered mature by the Strategic Commands, it is screened by the NATO Office of Resources for the technical and eligibility part, and, in parallel, by the International Military Staff for the military requirement part.

Source: IBAN analysis of Strategic Command and NOR documentation.

Formal comments received from Allied Command Operations and the NOR

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Date: 19 February, 2015

TO: See Distribution

SUBJECT: **ACO RESPONSE TO SPECIAL IBAN REPORT TO COUNCIL ON THE
NEED TO REFORM NATO SECURITY INVESTMENT PROGRAMME
GOVERNANCE**

REFERENCES: A. IBA-A(2015)18, Draft Special Report to Council on the need to reform
NATO Security Investment Programme governance – IBA-AR(2014)35, dated
27 January 2015.
B. IBA-AR(2014)35, Draft Special Report to Council on the need to reform
NATO Security Investment Programme governance, dated 27 January 2015.

1. Thank you for providing SHAPE with your Report at Reference A on the need to reform NATO Security Investment Programme governance. These ACO comments are supplemented in-detail at Annex A. The key for ACO remains the delivery of requested and approved capability projects on-time at the agreed quality and quantity.

2. The roles and responsibilities for implementation are not described consistently in the document. However, ACO agrees with the descriptions of the Resource Policy and Planning Board (RPPB) and the Investment Committee (IC) as being responsible for monitoring and controlling implementation, including taking necessary actions. We would stress that the Strategic Commands (SCs) are responsible for the development of requirements; once NATO HQ approves a project, the SCs provide impact statements on any changes to approved plans during the Implementation Phase (IP).

3. In general, ACO agrees with the description of current processes; that these cause significant delays in capability delivery, except for critical urgent operational requirements. However, ACO does not fully concur with the Report's findings and summary.

4. In SHAPE's view, the Report does not fully address the link between authorization and implementation. The description of current procedures underlines that, the IP is, in fact, a long protracted approval process. This is seemingly caused by poorly developed business cases - especially concerning the scope, timelines and costing. This creates an IP that forces the RPPB, IC and SCs to iteratively review already approved projects. For ACO, it results in the continuous need to confirm the Minimum Military Requirements and Impact statements to influence the balancing of financial and operational risk. The lack of incentives for the provider

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or Host Nation (HN), especially the Agencies, to provide reliable information for the approval phase and simply deliver according to the approved business cases, seem to be key factors that result in the changes and delays. From ACO's perspective the key to improve delivery is to enhance the approval phase so that the NAC, MC and resource committees can make informed decisions that are executable commensurate with the Project or Business Case. NATO HQ should continue to balance operational and financial risks and monitor/control the provider's delivery of the contract in-line with normal acquisition procedures and contractual incentives.

5. ACO has repeatedly underlined that the Capability Package (CP) process should differ between infrastructure projects and technology projects. Current procedures mainly support the infrastructure process, which generally has the HN as the provider of its own infrastructure requirements once approved by the other Nations. This system makes the Nations accountable to each other and has in-built incentives for the HN. Conversely, technology CPs are generally fast-paced and delivery is by a company or agency; consequently these require procedures and staffing in-line with normal NATO acquisition procedures and can include contractual incentives.

6. The SHAPE point of contact for this issue is COL Georgios STAMOU, email: georgios.stamou@shape.nato.int or NCN: 254-6604.

FOR THE SUPREME ALLIED COMMANDER, EUROPE:



Michel Yakovleff
Lieutenant General, FRA A
Vice Chief of Staff

ANNEX:

A. Specific Comments to IBA-AR(2014)35 Audit Report by the IBAN on the Need to Reform NATO Security Investment Programme (NSIP) Governance, dated 27 January 2015.

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ANNEX A TO
SH/JCAP/GS/15-308747
DATED 19 FEB 15

SPECIFIC COMMENTS TO IBA-AR(2014)35 AUDIT REPORT BY THE IBAN ON THE NEED TO REFORM NATO SECURITY INVESTMENT PROGRAMME (NSIP) GOVERNANCE, DATED 27 JANUARY 2015.

IBAN Report	ACO Comment/Response on Recommendation
1. Several studies show that Host Nations struggle to give accurate and feasible estimates of cost, scope and schedule, particularly for communication and information systems projects." pg.1-1	<p>ACO partially agree. To complete the picture, par. 2.3.4 observation should be inserted: "Sample project documentation reviewed indicates that delays are most often associated with increased scope requested by Host Nations and authorized by the Investment Committee."</p>
2. "Further, the military community has not yet given project implementation advice required by guidance agreed in 2013." pg. 1-1.	<p>ACO does not agree. As highlighted in the report, the SCs have provided advice. In accordance with footnote 42, the NMAs provide their priorities in the SRA (Suitability & Risk Assessment) and Priority Shortfalls Areas (PSA) reports. When specifically tasked (as in Defence Ministerial tasking resulting in the "147 projects list" proposal), they provided priorities in terms of stratification. See also footnote 40 about Consolidated NMAs Impact Statements (CNIS) as an input to MTRP/CRP.</p>
3. "The need for Investment Programme projects originates with the Strategic Commands , who develop requirements. These requirements are translated into projects, approved within NATO at the appropriate level through various procedures. During implementation, the Strategic Commands also ensure that all active projects continue to meet military requirements." Par. 1.3.2, pg. 2-6.	<p>ACO proposes to amend: The need for Investment Programme projects originates with the Strategic Commands, who develop requirements identified through the NDPP. These requirements are translated into projects, approved within NATO at the NATO HQ level through various procedures. During implementation, the Strategic Commands also ensure that all active projects continue to meet military requirements and report impacts and requiring mitigation actions for delayed projects.</p>
4. Fig.2, pg. 2-7: IC and RPPB responsibility for controlling project implementation is not highlighted.	<p>ACO does not concur with the way responsibilities are presented: SCs are responsible for CP development, while MC, RPPB and NAC are responsible within the approval phases. The figure should be deleted and</p>

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IBAN Report	ACO Comment/Response on Recommendation
5. "Fig. 3, pg. 2-9: Project implementation management and governance framework"	replaced by Fig. 3b from Bi-SC Directive 85-1 or from the current Fig. 3. ACO proposes to change/amend: "Project Authorization and implementation management framework" is proposed as a title to better reflect the structure, since no controls are depicted in the diagram. In addition clearly separate "authorization" and "implementation" activities.
6. "This ineffective implementation management has consequences for financial management." par. 1.4.4, pg.2-10.	ACO notes: Not exclusively. This also affects the validity of the requirement definition of, especially, technology CPs with a fast pace development.
7. "To address these issues and others, NATO recently established a dedicated software intensive projects task force. In its first report, this task force attributed shortfalls to numerous stakeholders.", par. 2.2.2, pg.2-15.	ACO notes: This Task Force report is currently under Bi-SC review in order to provide a coordinated response.
8. "Resource and military communities do not effectively monitor and control projects", par. 3, pg. 2-19.	ACO does not agree: project control is not a role for the SCs.
9. "During project implementation, the NATO military community is most concerned with when a project (and overarching capability) is required. The Strategic Commands must meet four main sets of requirements for impact statement reporting in case of project delays. These requirements promote the common principle of controlling schedules by linking project implementation directly with capability delivery. Guidance emphasizes the need for proactive impact statement reporting when delays exceed six months or will affect initial operating or full operating capability. Guidance also requires the Strategic Commands to report the impact of such delays for operations, finances (the effect on NATO budgets), NATO transformation and programmatic aspects such as training." Par. 3.1.3, pg.2-20.	ACO would concur with the following rephrase: During project implementation, the NATO military community report operational and/or transformational impacts, if a project or CP is delayed and affect capability delivery. Guidance emphasizes the need for proactive impact statement reporting, when delays exceed six months or will affect IOC or FOC. Guidance also requires the SCs to report the impact of such delays for operations, finance (the effect on NATO budgets), NATO transformation and programmatic aspects such as training.

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IBAN Report	ACO Comment/Response on Recommendation
10. "In addition, these statements did not represent proactive responses by the Strategic Commands to identified delays in project implementation as required.", par. 3.7.1, pg. 2-28.	ACO proposes to amend: "In addition, these statements did not represent proactive responses by the Strategic Commands to identified delays in project implementation as required, due to lack of insufficient flow of implementation data."
11. "3.7.2 The IBAN observed a correlation between clearly defined operational impacts of delays in project completion and action to accelerate slow-moving projects, and/or approve explicit mitigation steps. In particular, delays in Alliance Operations and Missions projects of all types typically have immediate or existing serious operational impacts. This is because Commanders on the ground are facing challenges effectively conducting their assigned missions without the required capability. For their part, Nations are less likely to accept operational risk and allow continued degradation of mission effectiveness that unmitigated delays produce."	ACO would concur with the following rephrase: "3.7.2 The IBAN observed a correlation between clearly defined operational impacts of delays in project completion and action to accelerate slow-moving projects, and/or approve explicit mitigation steps. In particular, delays in Alliance Operations and Missions projects of all types typically have immediate or existing serious operational impacts. This is because Commanders on the ground are facing challenges effectively conducting their assigned missions without the required capability. For their part, Nations are less likely to accept operational risk and allow continued degradation of mission effectiveness that unmitigated delays produce."
12. "In particular, Strategic Command officials said it was difficult to define operational impacts of delays for longer term projects designed...", par. 3.7.3, pg. 2-29.	ACO proposes to amend: "In particular, Strategic Command officials said it was difficult to define operational and transformational impacts of delays for longer term projects designed..."
13. "In particular, interim solutions for unmet needs arising from capability package project delays and increased costs of running aging legacy infrastructure is acknowledged within NATO.", par. 3.7.4, pt. 2-29.	ACO notes: The delay in implementing NSIP projects makes the estimate of future O&M expenditures very difficult. The delays also regularly put undue pressure on the Military Budget due to MB funded bridging capabilities.
14. "The Nations consistently lack information on whether project schedules fit the timeframes in which the Strategic Commands need capabilities or whether to adjust timeframes", par. 3.7.5, pg. 2-29.	ACO does not agree: The MTRP/CRP/CNIS provide this information.
15. "The resource and military communities do not effectively monitor and control projects. Stakeholders do not give, collect or assess required implementation	ACO would concur with the following rephrase: "The resource communities do not effectively monitor and control projects. IC/RPPB do not give, collect or assess required implementation data well enough for

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IBAN Report	ACO Comment/Response on Recommendation
<p>data well enough for monitoring. Strategic Command reporting on the impact of delays is incomplete and tends not to link specific project delays to capability delivery. The Investment Committee typically does not consider impacts prior to lengthening project schedules. Contributing factors include weak and fragmented accountability, enforcement, structures and processes.", par. 5.1, pg. 2-34.</p> <p>16. "However, the original principles agreed by the Nations over 60 years ago remain unchanged. These principles reflect the level of agreement needed to use a common fund as the basis for a co-operative approach to meeting a shared threat. They also reflect the needs of an era in which the same Nations in the Investment Committee were themselves implementing most projects." par. 5.2, pg. 2-34.</p> <p>17. Recommendation #1(par. 5.5 (2), pg. 2-35): "...broadened screening by the NOR on the feasibility of milestones the Host Nations provide..."</p>	<p>monitoring and controlling. Strategic Commands reporting on the impact of delays is incomplete. Moreover, the Investment Committee typically does not consider impacts prior to lengthening project schedules. Contributing factors include weak and fragmented accountability, enforcement, structures and processes".</p> <p>ACO recommends: this statement should be part of the summary.</p>
	<p>ACO concurs and notes: Implementation of this recommendation implies the need for increased situational awareness by the NOR of current Host Nation capabilities, capacities and priorities. This could be problematic as HNs themselves may not possess that level of understanding. As a result, the NOR screening will likely be highly dependent on an assessment of past NSIP performance for similar projects -- already assessed in the report to be inadequate. NOR/HN agreement on "realistic" milestones may be difficult to achieve.</p>

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APPENDIX 4
ANNEX 3
C-M(2015)0043
IBA-AR(2014)35

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20 February 2015

NOR(DIR)(2015)0032

To: Marius Winters; Member, International Board of Auditors to NATO

Cc: Gen. W. Freers, Chief of Staff, Allied Command Operations
Lt.Gen. P. Jones, Chief of Staff, Allied Command Transformation

From: Director NATO Office of Resources

Subject: Draft Special Report to Council on the Need to Reform NATO Security Investment Programme Governance – Factual and Formal Comments from the NATO Office of Resources

Reference: IBA-A(2015)18 dated 27 January 2015

1. Thank you for the opportunity to provide comments on the subject report at reference. In summary, I am of the opinion that the findings of the report adequately address the existing difficulties with ensuring effective and efficient capability delivery through the NSIP. At the same time, I consider that your report could have provided additional elements to ensure that your findings and recommendations are put and read in the right context. I have elaborated on these elements below.

2. First, let me confirm that the report rightly points out in which areas NSIP stakeholders should **improve ownership and accountability** to ensure that common funded projects are implemented within set timelines, cost and scope. This goes hand-in-hand with the Investment Committee and the NATO Military Authorities fully exercising and enforcing their roles and responsibilities in terms of implementation monitoring and management as foreseen by the existing policies and procedures.

3. Second, while I can share your views that more work needs to be done in many areas, the report insufficiently reflects the **increased efforts by the Investment Committee**, with the support of the NATO Office of Resources, to improve oversight, monitoring and management of NSIP projects. I take it, however, that this will be clearly highlighted in the response from the Investment Committee once your report will have been published.

4. Third, I do not share your conclusion that the existing NSIP governance model may not be fit for purpose and therefore "a fundamental examination of Investment Programme management and governance, by independent external experts, is required to address the long term viability of the Investment Programme". I think that the **governance structure is a true reflection of the complexity** of this political-military Alliance, with different stakeholders responsible for different parts of the overall capability delivery process.

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5. As you are very well aware, an underlying issue with NSIP capability delivery is that there is **no single body or person accountable for the full implementation cycle** of the NSIP. There are different process owners for the different stages of capability delivery (requirements identification; programming; resourcing and implementation) which are only accountable within their own (specific) governance structures. This does not mean though that there should not be more efforts, as pointed out in your report, towards making those processes more efficient and effective and towards holding individual stakeholders accountable to their assigned roles.

6. The need for clear and realistic capability development and implementation schedules, improved accountability throughout the whole process and focused reporting are also some of the themes that have been presented to nations as part of a food-for-thought paper in preparation of their future response to the **Wales Summit tasking on Improving Common-funded Capability Delivery**. In this respect, your Special Report comes at the right moment and you can expect nations to see both initiatives as mutually supporting.

7. Fourth, I fully agree with the statement in the report that **delays in the implementation process are only part** of the overall difficulties in ensuring timely capability delivery. Problems also originate from the earlier requirements setting and programming stages. In my view, this aspect could have been highlighted more throughout your report.

8. Finally, you state that today, 62% of the NSIP is being implemented by the two NATO Agencies, NATO C&I Agency and NATO Support Agency, with the NATO C&I Agency alone accounting for 56% or 2.4 billion of the NSIP remaining to be implemented. It is correct that, in spite of this complete reversal in implementation roles, the NSIP operates essentially on the original principles of some sixty years ago. Well-meaning updates in policy and procedures have not fundamentally altered the underlying NSIP model and have not addressed this programme imbalance. In our view, the shift in the programme **requires specific measures to strengthen implementation oversight and governance over the NATO Agencies** particularly which is an element which I would have liked to see more stressed in your report.

9. In addition to my general remarks, I have provided some very specific comments, both factual and formal, directly in your draft report (with Track Changes).

10. I am available to discuss this matter further, should this be required.



John F. Aguirre

Encl.

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Detailed comments provided by the Director, NOR

Paragraph 2.2.4, page 2-16:

Formal comment DNOR: In order to hold Host Nations accountable, they must be responsible for developing and adhering to the schedule, cost and scope. Otherwise Host Nations would be simply implementing somebody else's planning for which they cannot be held responsible. The NOR could extend its screening to provide comments and advice but should not establish the milestones.

Paragraph 3.2.2, page 2-21:

DNOR factual comment: According to the IMP, the PIP is the point of departure for implementation management of CP projects and represents a baseline document. As such, the baseline should not be adjusted. Instead milestones are updated in CIRIS and reported and monitored through the IMP. In the past, and since 2014 on a more regular basis, NOR has been reviewing the implementation status of individual CPs.

Paragraph 3.3.1, page 2-21:

DNOR factual comment: Before 2012, the IC conducted regular project reviews based on NOR reports. These reports provided project implementation updates based on which the SCs were invited to confirm the military requirement.

Paragraph 4.3.1, page 2-34:

DNOR factual comment: It is important to distinguish between an asset register (an operational tool informing the strategic commanders which assets they have at their disposal for the performance of their responsibilities) and the IPSAS accounting requirements. Most of the assets that would appear in an asset register would be under the operational control of the end-user and would not be accounted as part of NATO IPSAS. Stewardship of NSIP-provided capabilities, including O&M and inventory control, has traditionally been the responsibility of the end user, a nation or a military entity. This also includes equipment deployed in operations.