



NORTH ATLANTIC COUNCIL

CONSEIL DE L'ATLANTIQUE NORD

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23 January 2023

DOCUMENT

PO(2023)0008-AS1 (INV)

**IBAN PERFORMANCE AUDIT REPORT ON THE NATO OCCUPATIONAL HEALTH
AND SAFETY, ENVIRONMENTAL PROTECTION, AND ENERGY EFFICIENCY
MANAGEMENT POLICIES AND PRACTICES**

ACTION SHEET

On 20 January 2023, under the silence procedure, the Council noted the RPPB report attached to PO(2023)0008 (INV), approved its conclusions, noted the IBAN Performance Audit Report and agreed the public disclosure of this report and the IBAN Performance Audit Report

(Signed) Jens Stoltenberg
Secretary General

NOTE: This Action Sheet is part of, and shall be attached to PO(2023)0008 (INV).

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10 January 2023

DOCUMENT
PO(2023)0008 (INV)
Silence procedure ends:
20 Jan 2023 - 15:30

To : Permanent Representatives (Council)
From : Secretary General

**IBAN PERFORMANCE AUDIT REPORT ON THE NATO OCCUPATIONAL HEALTH
AND SAFETY, ENVIRONMENTAL PROTECTION, AND ENERGY EFFICIENCY
MANAGEMENT POLICIES AND PRACTICES**

1. I attach the Resource Policy and Planning Board (RPPB) report on the International Board of Auditors for NATO (IBAN) Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency management policies and practices.
2. I do not believe this issue requires further discussion in the Council. Therefore, **unless I hear to the contrary by 15:30 hours on Friday, 20 January 2023**, I shall assume the Council noted the RPPB report, approved its conclusions, noted the IBAN Performance Audit Report and agreed the public disclosure of this report and the IBAN Performance Audit Report.

(Signed) Jens Stoltenberg

1 Annex
1 Enclosure

Original: English



**IBAN PERFORMANCE AUDIT REPORT ON THE NATO OCCUPATIONAL HEALTH
AND SAFETY, ENVIRONMENTAL PROTECTION, AND ENERGY EFFICIENCY
MANAGEMENT POLICIES AND PRACTICES**

Report by the Resource Policy and Planning Board (RPPB)

References:

- | | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. IBA-A(2021)0048 | A letter to the Secretary General on the International Board of Auditors (IBAN) Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency management policies and practices |
| B. IBA-AR(2021)0006 | Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency management policies and practices |
| C. PO(2002)0272 | Report on Progress Achieved in the implementation of NATO's Climate Change and Security Action Plan |
| D. PO(2002)0269 | NATO Climate Change and Security Impact Assessment |
| E. EM(2020)0200 | NATO Headquarters Occupational Health and Safety Plan |

INTRODUCTION

1. With reference A, the International Board of Auditors (IBAN) submitted a Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency (EHS)¹ management policies and practices (reference B).
2. The RPPB is requested to provide advice to the Council.

AIM

3. This report highlights key issues in the IBAN Performance Audit Report to enable the Board to reflect on strategic challenges emanating from the performance audit on the NATO EHS policies and practices and to recommend courses of action to the Council as applicable, which have the potential to improve transparency, accountability, governance practices and value for money for follow on activities.

OBJECTIVES AND SCOPE OF THE AUDIT

4. IBAN conducted a performance audit to assess if NATO entities have EHS governance structures, policies and systems in place to efficiently and effectively address

¹ Throughout its report, the IBAN applied definitions and concepts from the International Organization for Standardization (ISO). According to ISO, a management system is a set of interrelated or interacting elements of an organisation to establish policies and objectives and processes to achieve those objectives. IBAN used the term "EHS" to mean a system or activity that includes ISO standards for occupational health and safety management (ISO 45001), environmental management (ISO 14001), and energy management (ISO 50001).

EHS risks and meet international standards and good practices. The audit scope focused on the EHS management policies and practices across 24 NATO civilian and military headquarters, commands, installations, and customer-funded Agencies. Additionally, the IBAN included strategic-level NATO Committees to determine their role in NATO-wide EHS governance and policy issuance. Finally, the IBAN assessed NATO's EHS management practices against those of five international organisations and performed three EHS-related case studies to identify EHS management lessons across NATO.

OBSERVATIONS

5. Though guidance on occupational health and safety (OHS) exists within many NATO entities², during the course of audit the IBAN found a lack of NATO-wide policy and governance structure that applies coherently and universally to all NATO entities. As the NATO-wide environmental protection and energy efficiency management-related documentation primarily focuses on NATO-led military operations³, the IBAN found a lack of NATO-wide policy and governance structure that applies to NATO static headquarters, commands and installations.

5.1. Despite NATO's legal immunity, many NATO entities follow Host Nation EHS laws and regulations, which adhere to international standards and good practices. IBAN found that there is no NATO-wide requirement for NATO entities to fully comply with Host Nation EHS laws and regulations and no NATO-wide policy to ensure that such requirements are applied consistently across all of NATO. Therefore, a significant number of NATO entities interpret and apply NATO's stated immunity differently when it comes to EHS management.

5.2. IBAN highlighted the absence of policy and governance structure at the strategic decision-making level to promulgate and oversee NATO-wide EHS policies and the lack of NATO-wide governance framework, as well as performance reporting, key performance indicators and risk assessment on EHS management from NATO entities. In addition, the IBAN found that no NATO strategic-level committee receives reports on NATO-wide OHS management systems and that the International Staff (IS) is the only NATO entity that reports on the health and safety performance and risks of NATO Headquarters to the Deputy Permanent Representatives Committee.

5.3. Without the common policy and governance structure, the IBAN expects that NATO entities will continue to apply existing guidance in different ways, which could open the Alliance up to additional legal, financial and reputational risk. Given that most EHS policies are developed at the NATO-entity level with varying degrees of comprehensiveness,

² Article 16.1, NATO Civilian Personnel Regulations (CPRs); Supreme Headquarters Allied Powers Europe (SHAPE) memoranda on compliance with European Union (EU) standards on health and safety, 1996 and 2002 and Bi-Strategic Command Directive on NATO Criteria and Standards for Peace Headquarters Facilities, August 2019

³ Allied joint publications; Military Committee Principles and Policies for Environmental Protection (EP) (MC 469/1), October 2011 and NATO Green Defence Framework, February 2014

oversight and direction, the IBAN considers that NATO should take into account the importance and urgency in establishing a clear and cohesive NATO wide EHS policy and management system with defined governance framework for oversight and direction on EHS policy to NATO entities including performance management and reporting. In addition, the IBAN also considers that NATO could improve accessibility to information on EHS governance, policies and oversight.

DISCUSSION

6. The Board welcomes the IBAN report, its findings and recommendations on how to improve the NATO EHS management policies and practices.

7. Furthermore, the Board welcomes the activities undertaken by the NATO IS Executive Management (IS-EM) Division and the NATO IS Emerging Security Challenges (IS-ESC) Division in drafting strategic-level documents at references C, D and E that represent comparable documents that the NATO EHS policies and plans should be built upon especially in the framework of NATO 2030 deliberations.

8. Due to EHS overreaching and lasting impact, the Board agrees that NATO recognise and take into account its associated risks and hazards and sees the importance and urgency in establishing a clear and cohesive NATO-wide EHS policy and governance framework. To enhance the NATO EHS management, the Board recommends that the Council invite the IS, by using the extant structures and resources, to establish a NATO-wide EHS policy and guidance, to develop a cohesive approach to EHS management and to include a governance framework derived from and in line with the NATO policy and compliant with the applicable Host Nation legislations, policies, international standards and good practices. Also, the NATO wide policy should provide guidance to NATO entities to develop own EHS management systems.

9. Furthermore, the Board advises that the policy and guidance are flexible to fit the nature, characteristics and location of different NATO entities, but at the same time provide clear direction within areas critical for continuous achievement of organisational goals.

10. Also, the Board welcomes that some organisations have already hired OHS experts and supports the identification of EHS function NATO wide.

11. The Board recognises that systematic monitoring, evaluation and annual reporting to identify progress and potential obstacles requires resources and agrees that this topic should be addressed in the most effective way, especially taking into consideration resource consequences and the size of the organisation. Either shared or received as a service these activities should be put into context for the benefit of all stakeholders against resources available.

12. The Board suggests that EHS management direction is derived from an overarching NATO policy, build-up on the previous experience of NATO wide policies and, if applicable,

build on ongoing efforts related to the NATO 2030 deliberations. In addition, the EHS policy should take into consideration applicable Host Nation legislation, norms as well as international standards.

13. The Board also agrees that specific meaningful objectives and key performance indicators need to be drawn up and tailored-made for each NATO entity, specific to the context and complexity of their organisation. Furthermore, the Board agrees that in order to measure its implementation and track its progress, NATO-wide EHS policy, practices and management systems encompass clearly defined and monitored common key performance indicators and targets, building-up on the existing EHS experience as well as existing reporting arrangements.

CONCLUSIONS

14. During the audit, IBAN has identified a number of issues related to NATO occupational health and safety, environmental protection, and energy efficiency management policies and practice. The Board welcomes the IBAN report and supports its recommendation to establish a NATO-wide EHS policy, aligned with pre-existing NATO plans and programmes and to prepare and implement a unified NATO-wide EHS governance framework.

15. The Board suggests that NATO implements remedial actions that include establishing a NATO wide governance framework on EHS management and evaluating the funding sources for its future activities.

RECOMMENDATIONS

16. The Resource Policy and Planning Board invites Council to:

16.1. note this report and its conclusions and the IBAN Performance Audit Report at reference A;

16.2. approve the conclusions outlined in paragraphs 14 and 15 and invite the International Staff to:

16.2.1. establish a NATO-wide EHS policy and governance framework taking into consideration existing NATO policies, Host Nation laws and regulations, international standards and good practices by the end of 2023;

16.2.1 prepare and implement a unified NATO-wide EHS governance framework six months after the policy was published, including monitoring the implementation of NATO's EHS policy and governance framework.

16.3 agree to the public disclosure of the IBAN Performance Audit Report in line with PO(2015)0052.



NORTH ATLANTIC TREATY ORGANIZATION
ORGANISATION DU TRAITÉ DE L'ATLANTIQUE NORD
INTERNATIONAL BOARD OF AUDITORS
COLLÈGE INTERNATIONAL DES AUDITEURS EXTERNES DE L'OTAN

Enclosure to PO(2023)0008 (INV)

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IBA-A(2021)0048
5 May 2021

To: Secretary General
Attn: Director of the Private Office

Cc: NATO Permanent Representatives
General Tod. D. Wolters, Supreme Allied Commander Europe
General André Lanata, Supreme Allied Commander Transformation
Mr Stian Jenssen, Director, Private Office, International Staff (IS)
General Hans Werner Wiermann, Director General, International Military Staff (IMS)
Dr Bryan Wells, Chief Scientist, Science and Technology Organisation (STO)
Major General Jörg Lebert, Commander of NATO Airborne Early Warning & Control Force (NAEW&CF)
Brigadier General Charles B. McDaniel, Commander of E-3A Component, NAEW&CF
Brigadier General Houston R. Cantwell, Commander, NATO Alliance Ground Surveillance Force (NAGSF)
Mr Volker Samanns, General Manager, NATO Alliance Ground Surveillance Management Agency (NAGSMA)
Brigadier General M. Gschossmann, General Manager, NATO Airborne Early Warning and Control Programme Management Agency (NAPMA)
Mr Kevin J. Scheid, General Manager, NATO Communications and Information Agency (NCIA)
Mr Peter Dohmen, General Manager, NATO Support and Procurement Agency (NSPA)
Chairman, Resource Policy and Planning Board
Resource Policy and Planning Board representatives, NATO delegations
Private Office Registry

Subject: ***International Board of Auditors for NATO (IBAN) Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency management policies and practices – IBA-AR(2021)0006***

IBAN submits herewith its approved Performance Audit Report (Annex 2) with a Summary Note for distribution to the Council (Annex 1).

In accordance with Article 15 of the NATO Financial Rules and Regulations, I have referred the documents to the Resource Policy and Planning Board (RPPB) for examination, comments and recommendations.

Yours sincerely,

Daniela Morgante
Chair

Attachment: As stated above.

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-1-

**Summary Note for Council
by the International Board of Auditors for NATO (IBAN)
on the Performance Audit on NATO occupational health and safety, environmental
protection, and energy efficiency management policies and practices**

Background

NATO has headquarters, commands and installations from which it conducts activities that could be hazardous to the environment, health and safety of its staff and surrounding communities. NATO's unique mission and legal position may exempt the Alliance from full compliance with host nation laws and regulations on occupational health and safety, environmental protection and energy efficiency (EHS). NATO should strive to have a governance structure and policy for areas like occupational health and safety, environmental and energy management to ensure that its numerous entities follow a common approach to collectively reduce human and environmental safety, reputational, legal and financial risks to the Alliance.

Audit objectives

In accordance with Articles 2 and 14 of the IBAN Charter, our performance audit assessed NATO EHS governance and policies, EHS practices at NATO entities, and whether the EHS policies and practices can be better aligned with international standards and good practices. Our specific audit objectives were as follows:

1. Determine if there are NATO-wide governance structures, direction and policies that efficiently and effectively address occupational health and safety risks to the Alliance and meet international good practices.
2. Assess NATO governance structures and entities' implementation of environmental protection and energy efficiency activities according to the 2014 NATO Green Defence Framework and international good practices.
3. Evaluate if NATO entities have occupational health and safety, environmental and energy management systems that efficiently, effectively and economically address risks to the Alliance and meet international good practices.

Audit findings

According to EHS international standards and good practices most applicable to the NATO context, there are "key success factors" that, when present, demonstrate the comprehensiveness and thus effectiveness of an organisation's EHS management system. These key success factors include, among other things, the presence of a governance structure, policy and performance reporting.

There is no NATO-wide governance structure, policy and performance reporting for EHS management. There is also no strategic-level committee that provides NATO-wide oversight and direction on EHS management to NATO entities. Most EHS policies are developed at the NATO-entity level with varying degrees of comprehensiveness, oversight and direction.

Without a NATO-wide EHS governance structure, policy and performance reporting, NATO Nations do not receive information needed to allocate resources appropriately and cannot ensure NATO staff, surrounding communities and their citizens are adequately protected against workplace accidents and ecological disasters. In addition, NATO cannot take advantage of cost savings from current environmental protection and energy efficiency efforts in NATO entities.

We found some NATO entities implement EHS key success factors at the local level, which provides the Alliance with a roadmap for where it should consider integrating and improving its EHS management. In addition, several international organisations comparable to NATO implement organisation-wide EHS key success factors that, if incorporated across the Alliance, could enhance and strengthen NATO-wide EHS management. The NATO Green Defence Framework also provides a NATO-wide foundation for environmental protection and energy efficiency that could be part of a NATO-wide EHS policy. However, this framework is under-utilised.

Many NATO entities comply with host nation EHS laws and regulations and follow international standards and good practices. Rather than rely on its stated legal immunity, Nations should leverage what is already being done and establish a NATO-wide EHS governance and accountability structure according to host nation laws and regulations, international standards, and good practices. In doing so, the Alliance's EHS management system can become a leading example.

As environmental health and safety issues continue to evolve, NATO must recognise it is not immune to the associated risks and hazards. NATO should see the importance and urgency in establishing a clear and cohesive NATO-wide EHS policy and governance framework. This would provide the starting point for more strategic oversight, guidance, and enhanced EHS decision making arrangements for NATO Nations. Also, it should decrease the uncertainty and pressure currently experienced by individual NATO entities trying to interpret and evaluate current EHS requirements and risk. This could potentially leverage and build on existing guidance and EHS management systems currently in place at NATO. With this approach, NATO entities' EHS management systems can be strengthened and developed in a coherent manner.

Recommendations

To enhance the efficiency, effectiveness and economy of NATO EHS management, we recommend that Council tasks an appropriate strategic-level NATO committee to establish a NATO-wide EHS management policy framework according to the international standards and good practices cited in this report. At a minimum, this policy framework should:

- 1) Define oversight roles and responsibilities between the appropriate strategic-level NATO committee and NATO entities and a formal mechanism for reporting on NATO-wide EHS management performance;
- 2) Provide coherent EHS management direction and guidance to NATO entities for them to develop comprehensive EHS policies and management systems that also adhere to the international standards and good practices cited in this report;

- 3) Define clear NATO-wide EHS objectives;
- 4) Ensure NATO-wide performance targets and key performance indicators are established and linked to NATO-wide EHS objectives;
- 5) Require NATO entities to regularly monitor and evaluate their EHS management systems against NATO-wide EHS objectives, performance targets and key performance indicators; and;
- 6) Ensure that NATO entities report annually to the appropriate strategic-level NATO committee on their progress toward meeting NATO-wide EHS objectives, performance targets, and key performance indicators.

All tasking decisions by Council should clearly identify those responsible to take action and set deadlines for the delivery of the expected outcomes.

Three NATO entities submitted formal comments and did not dispute the findings, conclusions, and recommendations in our report. IBAN appreciates and recognises these comments and maintains the position that our recommendations will help improve the efficiency, effectiveness and economy of EHS management NATO-wide. See appendix 4 for their detailed comments.

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**ANNEX 2
IBA-AR(2021)0006**

30 April 2021

INTERNATIONAL BOARD OF AUDITORS FOR NATO

**PERFORMANCE AUDIT REPORT ON NATO OCCUPATIONAL HEALTH AND SAFETY,
ENVIRONMENTAL PROTECTION, AND ENERGY EFFICIENCY MANAGEMENT
POLICIES AND PRACTICES**

PUBLICLY DISCLOSED - PDN(2023)0015 - MIS EN LECTURE PUBLIQUE

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1. BACKGROUND

1.1 Overview

1.1.1 NATO has headquarters, commands and installations from which it conducts activities that could be hazardous to the environment, health and safety of its staff and surrounding communities. These include air and ship operations, equipment and chemical waste management (e.g., Communications and Information Systems (CIS) equipment disposal, weapon systems maintenance and petro-chemicals for flight or ship operations), extensive energy and water consumption, and noise and carbon dioxide emissions. In addition, NATO-led military operations and exercises can affect the Host Nations, the environment, and health and safety of deployed NATO staff.

1.1.2 NATO's unique mission and legal position may exempt the Alliance from full compliance with host nation laws and regulations on occupational health and safety, environmental protection and energy efficiency (EHS). However, irrespective of any immunity privileges, NATO should strive to have a governance structure and policy for areas like occupational health and safety, environmental and energy management to ensure that its numerous entities follow a common approach to collectively reduce human and environmental safety, reputational, legal and financial risks to the Alliance. Without a NATO-wide governance structure and policy, NATO entities risk having weak occupational health and safety, environmental and energy management systems lacking accountability and enforcement mechanisms to proactively protect the Alliance from major incidents. Additionally, NATO entities may not be able to adequately measure the performance of their existing occupational health and safety, environmental and energy management systems and improve them to become more efficient, effective and economical over time.

EHS management system disciplines and definitions

1.1.3 Throughout this report, we apply definitions and concepts from the International Organization for Standardization (ISO). According to ISO, a management system is a set of interrelated or interacting elements of an organisation to establish policies and objectives and processes to achieve those objectives. Unless specified, we use the term "EHS" to mean a system or activity that includes ISO standards for occupational health and safety management (ISO 45001), environmental management (ISO 14001), and energy management (ISO 50001). See more in table 1 below.

Table 1 – EHS disciplines and definitions

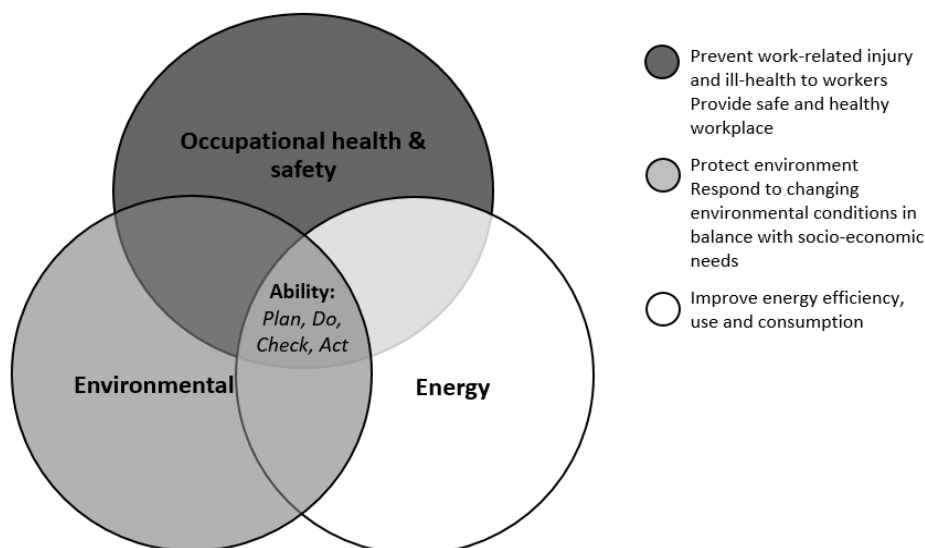
Disciplines	Definitions
Occupational health and safety	Preventing injury and ill health to workers and providing safe and healthy workplaces. These are the intended outcomes of an occupational health and safety management system and policy.
Environmental protection*	Protecting the physical and natural environment from the harmful and detrimental impact of an organisation's activities. The environment includes surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships. It also includes environmentally friendly infrastructure.
Energy management**	Managing energy use and enhancing energy efficiency while users have permanent access to sufficient energy. This may include quantifiable objectives of energy performance improvement and implementation of energy-efficient technologies. It is connected to environmental management, production, procurement, and logistics. Often driven by the desire to reduce costs, carbon targets, reliance on fossil fuels, and enhancement of reputation.

Source: International Standardisation Organisation.

* This excludes environmental security: Security challenges emanating from the physical and natural environment.

** This excludes energy security: Security challenges emanating from energy availability and dependence.

1.1.4 Conceptually, management systems can address a single discipline or several disciplines. Therefore, we selected three ISO management system standards most relevant to NATO around the disciplines described in table 1. While each discipline has its own definitions and can be regarded separately, they are overlapping in nature, and coordination and integration should be considered. See figure 1 below.

Figure 1 – EHS management systems – ability to “Plan, Do, Check, Act”

Source: IBAN analysis of International Standardisation Organisation.

1.1.5 Figure 1 illustrates the interrelated nature of EHS management systems and how the appropriate implementation and integration of these systems can enable individual organisations to respond to EHS risks and hazards through a “Plan, Do, Check, Act” approach. Implementing coherent and cohesive EHS management systems enables organisations to manage EHS risks and improve EHS performance. Some EHS risk areas can impact more than one of the three EHS areas. For example, the handling of hazardous

materials pose risks to both occupational health and safety of staff and is also a risk to the environment. Therefore, hazardous materials might need to be managed through elements from more than one management system. Through a proactive approach, EHS management systems can also assist an organisation to identify and fulfil its legal and regulatory requirements. The implementation of EHS management systems is a strategic and operational decision for an organisation. Overall, the success of an EHS management system depends on good governance, leadership, commitment and participation from all levels and functions of the organisation.

1.2 Audit objectives

1.2.1 In accordance with Articles 2 and 14 of the IBAN Charter, our performance audit assessed NATO EHS governance and policies, EHS practices at NATO entities, and whether the EHS policies and practices can be better aligned with international standards and good practices. Further, the purpose of the audit is to understand whether the Alliance can improve EHS management to better protect the Alliance from human, environmental, reputational, legal and financial risks. Our specific audit objectives were as follows:

1. Determine if there are NATO-wide governance structures, direction and policies that efficiently and effectively address occupational health and safety risks to the Alliance and meet international good practices.
2. Assess NATO governance structures and entities' implementation of environmental protection and energy efficiency activities according to the 2014 NATO Green Defence Framework and international good practices.
3. Evaluate if NATO entities have occupational health and safety, environmental and energy management systems that efficiently, effectively and economically address risks to the Alliance and meet international good practices.

1.3 Audit scope and methodology

1.3.1 We conducted the audit from March 2020 to March 2021 in accordance with International Organisation of Supreme Audit Institutions (INTOSAI) performance auditing standards. The audit scope encompasses EHS management systems policies and practices across and within 24 NATO static civilian and military headquarters, commands, installations, and customer-funded agencies. Collectively, we refer to these as NATO entities in this report. The 24 entities are listed below in table 2.

Table 2 – NATO entities included in IBAN EHS performance audit

NATO Headquarters in Brussels	1. International Staff (IS)
	2. International Military Staff (IMS)
	3. NATO Alliance Ground Surveillance Management Agency (NAGSMA)
	4. Science and Technology Organisation/Office of Chief Scientist (STO/OCS)
Allied Command Operations (ACO)	5. Supreme Headquarters Allied Powers Europe (SHAPE)
	6. Joint Force Command Brunssum (JFCBS)
	7. Joint Force Command Naples (JFCNP)
	8. Joint Force Command Norfolk (JFCNF)
	9. Allied Air Command (AIRCOM)
	10. Allied Maritime Command (MARCOM)
	11. Allied Land Command (LANDCOM)
	12. NATO Communications and Information Systems Group (NCISG)
Allied Command Transformation (ACT)	13. Headquarters Supreme Allied Commander Transformation (HQSACT)
	14. Joint Analysis Lessons Learned Centre (JALLC)
	15. Joint Force Training Centre (JFTC)
	16. Joint Warfare Centre (JWC)
Civilian agencies	17. NATO Airborne Early Warning and Control Programme Management Agency (NAPMA)
	18. NATO Communications and Information Agency (NCIA)
	19. NATO Support and Procurement Agency (NSPA)
Other	20. NATO Airborne Early Warning and Control Force (NAEW&CF)
	21. NATO Alliance Ground Surveillance Force (NAGSF)
	22. Standing Joint Logistics Support Group (SJLSG)
	23. Science and Technology Organisation/Centre for Marine Research and Experimentation (STO/CMRE)
	24. Science and Technology Organisation/Collaboration Support Office (STO/CSO)

Source: IBAN analysis of NATO documentation.

Note: Table only includes static headquarters, commands, installations and customer-funded agencies and not NATO-led military operations (Council-approved missions) or military exercises.

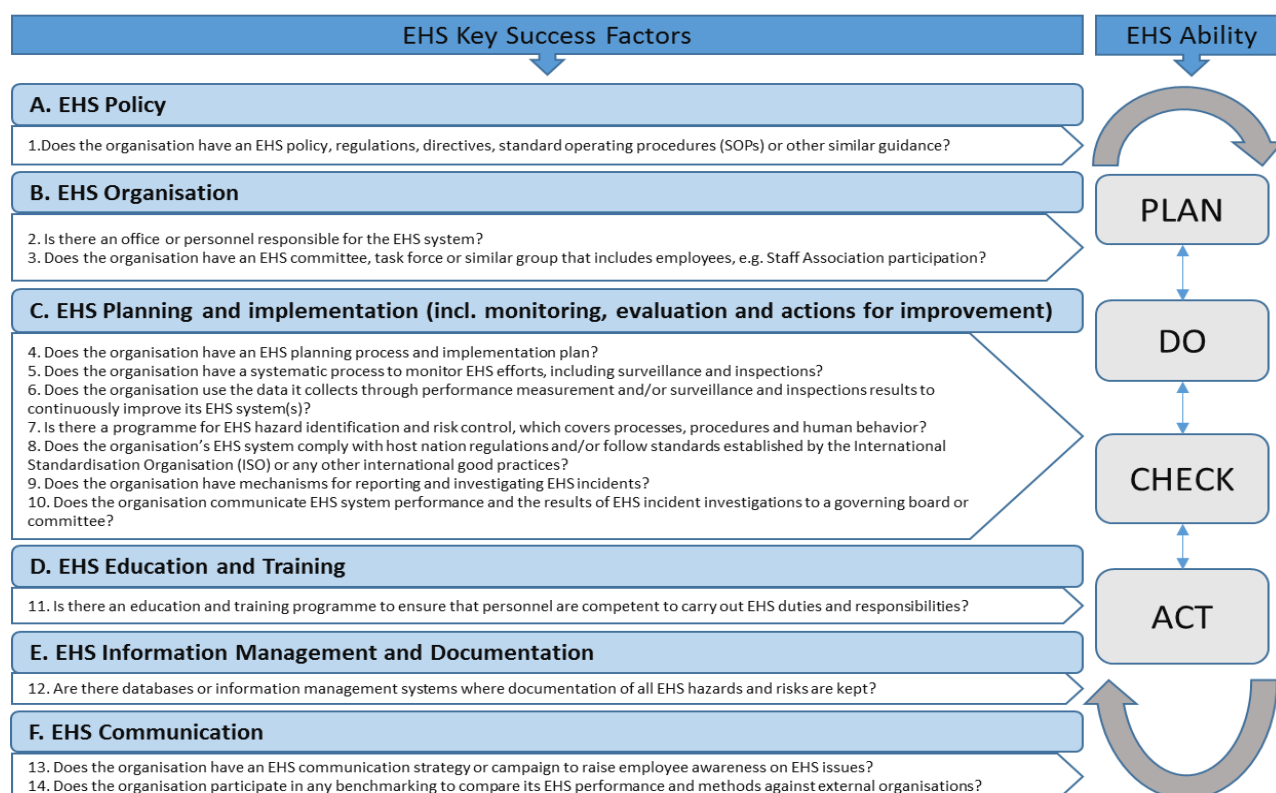
1.3.2 In addition, we included strategic-level NATO committees (i.e., North Atlantic Council (Council), Military Committee, Deputy Permanent Representatives Committee and Resource Policy and Planning Board) to determine their role in NATO-wide EHS governance and policy issuance. The scope does not include EHS policies and practices related to Council-approved operations and military exercises. However, we do include EHS education and training activity that occurs within the 24 NATO entities.

1.3.3 Since effective EHS management systems are designed to address all the EHS risks and opportunities identified by the entities applying the systems, this audit did not focus on, nor limit itself to, specific EHS issues. Instead, the audit assesses to what extent NATO EHS management systems are able to respond to a range of EHS risks and issues, such as food safety, operation of machinery, psycho-social support, crisis management and emergency services. Therefore, we did not focus on any particular EHS issue unless specifically integrated into NATO EHS management systems.

1.3.4 We based our audit criteria on an extensive assessment of ISO standards and International Labour Organisation guidelines most applicable to the NATO context. According to ISO, the success of an EHS management system depends on a number of key success factors. We found 14 key success factors most applicable to NATO and grouped them into six categories: 1) Policy, 2) Organisation, 3) Planning and Implementation (also includes monitoring, evaluation, and actions for improvement), 4) Education and Training,

5) Information Management and Documentation, and 6) Communication. We then assessed the 24 NATO entities against these 14 key success factors to determine the comprehensiveness and thus effectiveness of their EHS management systems. Figure 2 below illustrates the 14 key success factors and how they impact an organisation's ability to implement a "Plan, Do, Check, Act" approach to address EHS risks and hazards.

Figure 2 – Key EHS management success factors and abilities relevant to NATO



Source: IBAN assessment of international standards and good practices relevant to NATO.

1.3.5 We used the 14 key success factors to develop detailed questionnaires and document requests for the 24 NATO entities in our performance audit. We assessed the questionnaire responses and accompanying EHS policies, directives, risk registers, incident reports and other relevant documentation to determine to what extent these key success factors were present in each NATO entity. The analysis of to what extent the key success factors exist within the 24 NATO entities are presented in sections 2 and 3 below. We also interviewed NATO entity officials when we needed additional information or clarification on questionnaire responses and documentation.

1.3.6 Using publicly available information, we also conducted a high-level assessment of NATO's EHS management practices against those of five international organisations: the European Commission; Organisation for Economic Co-operation and Development; Organisation for Security and Co-operation in Europe; the World Bank Group and the United Nations. We used a subset of key success factors as criteria for this assessment, because they represent the minimum to establish an effective EHS management system. We then reviewed publicly available documents from the official websites of all six international

organisations and assessed whether the subset of key success factors were present in each organisation. However, we did not assess the efficiency, economy or effectiveness of the non-NATO international organisations' EHS management systems and practices.

1.3.7 Finally, we conducted three case studies to provide a deeper look and identify EHS management lessons across NATO. The EHS case studies are on NATO's response to the COVID-19 pandemic, moving to the new NATO Headquarters in Brussels, and fuel spill incidents. These case studies are available in appendixes 1 through 3.

1.3.8 Prior to issuing the report, we shared a draft with the NATO International Staff, Allied Command Operations, Allied Command Transformation, International Military Staff, NATO Communications and Information Agency, NATO Support and Procurement Agency, NATO Airborne Early Warning and Control Programme Management Agency, NATO Airborne Early Warning and Control Force, NATO Alliance Ground Surveillance Management Agency and NATO Alliance Ground Surveillance Force. We incorporated their comments into this report, as appropriate.

2. THERE IS LIMITED NATO-WIDE OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT GUIDANCE AND PERFORMANCE REPORTING

NATO guidance on occupational health and safety does exist, but there is no NATO-wide guidance that applies coherently and universally to all NATO entities

2.1 Though occupational health and safety management policies and guidance exist at the local level within many NATO entities, there is a lack of cohesive NATO-wide direction and guidance in this subject area. Instead, NATO-wide direction and guidance on occupational health and safety management are spread across several official documents as seen below in table 3.

Table 3 – NATO-wide occupational health and safety management guidance

NATO guidance	Summary	Applies to
Article 16.1, NATO Civilian Personnel Regulations (CPRs)	States "the Head of the NATO body shall ensure that adequate health and safety conditions exist, based on Host Nation standards. For this purpose, the Head of the NATO body shall, where practicable, establish a health and safety committee on which the Staff Association shall be represented. Members of the staff shall comply with the occupational health and safety regulations of the NATO body concerned".	All NATO entities' civilian staff
Supreme Headquarters Allied Powers Europe (SHAPE) memoranda on compliance with European Union (EU) standards on health and safety, 1996 and 2002	Reminds subordinate commands that, "in accordance with the NATO Status of Forces Agreement (SOFA) and Paris Protocol, NATO International Headquarters and subordinate elements are bound to respect Host Nation occupational health and safety legislation."	Allied Command Operations only
Bi-Strategic Command Directive on NATO Criteria and Standards for Peace Headquarters Facilities, August 2019*	For planning of new buildings and infrastructure and modernizing, reconstructing or converting existing infrastructure, including the NATO Security Investment Programme. Strategic commands and subordinated commands must strictly comply with Host Nation laws in defined areas like employment of local wage rate and staff and health and safety. However, where compliance is not obligated or not possible due to operational requirements, the strategic commands will generally seek to be compliant with Host Nation law and will reach arrangements with Host Nation to ensure local laws are respected.	NATO Command Structure only

Source: IBAN summary of NATO documentation.

* NATO bi-strategic commands are Headquarters Supreme Allied Commander Transformation (HQSACT) and Supreme Headquarters Allied Powers Europe (SHAPE).

2.2 NATO does have some regulations concerning occupational health and safety. The NATO Civilian Personnel Regulations provide general guidance to NATO entities about occupational health and safety. In addition, the Supreme Headquarters Allied Powers Europe (SHAPE) memoranda from 1996 and 2002 and the Bi-Strategic Command Directive described above provide occupational health and safety guidance for NATO entities that are part of Allied Command Operations and Allied Command Transformation.

2.3 Specifically, Article 16.1 of the NATO Civilian Personnel Regulations states:

"[...]the Head of the NATO body shall ensure that adequate health and safety conditions exist, based on Host Nation standards. For this purpose, the Head of the NATO body shall, where practicable, establish a health and safety committee on which the Staff Association shall be represented. Members of the staff shall comply with the occupational health and safety regulations of the NATO body concerned".

2.4 However, the NATO Civilian Personnel Regulations do not clearly require NATO entities to establish occupational health and safety management systems based on Host Nation standards or international standards and good practices. Further, the NATO Civilian Personnel Regulations only apply to NATO civilian staff and not to military staff. As a result, some NATO entities interpret Article 16.1 of the NATO Civilian Personnel Regulations as a requirement to have an occupational health and safety policy and formal management system while others do not.

2.5 As for the SHAPE memoranda from 1996 and 2002 and the Bi-Strategic Command Directive described above, both provide guidance that does not apply to all NATO entities

regarding compliance with European Union standards and Host Nation laws on health and safety. Specifically, the memoranda and directive only apply to the NATO command structure, which includes Allied Command Operations, Allied Command Transformation and their subordinate commands. In addition, the Bi-Strategic Command Directive is limited to building and infrastructure related activities. Therefore, though NATO occupational health and safety management guidance does exist, it is fragmented and not universally applicable to NATO entities.

There is limited NATO-wide performance reporting on occupational health and safety management systems

2.6 We found that no NATO strategic-level committee receives reports on NATO-wide occupational health and safety management performance. Reporting on NATO-wide occupational health and safety performance is relevant, because the absence of such information potentially hinders Allies from making effective and timely decisions aimed at producing safe, healthy and sustainable working environments. In addition, performance information is essential for continually improving management systems and proactively managing legal, financial and reputational risks.

2.7 While NATO consists of a number of entities in multiple international locations, and each have their own head, senior management and local committees, NATO activities are overseen by NATO Allies represented in strategic-level committees that report directly to the Council. We found that the International Staff is the only NATO entity that reports to the Deputy Permanent Representatives Committee and only on the health and safety performance and risks of NATO Headquarters in Brussels. The remaining 23 NATO entities stated they were unaware of performance reporting requirements to a strategic-level committee. Two NATO entities in particular—the NATO Airborne Early Warning and Control Force and the NATO Support and Procurement Agency—specifically stated that ad hoc reports could potentially be sent to higher-level headquarters, commands or agency supervisory governing boards, but only in severe cases or upon request. The NATO Support and Procurement Agency also indicated that, though it does not report to the Deputy Permanent Representatives Committee, Resource Policy and Planning Board or another NATO strategic-level committee on its occupational health and safety management system performance, this should be encouraged to ensure commonality and that a joint approach is adopted.

2.8 In addition, we found that only four of the 24 NATO entities use key performance indicators or similar measures to monitor and evaluate their occupational health and safety management systems on a regular basis. For example, the NATO Airborne Early Warning and Control Force formulates annual safety goals, monitors these through its Ground Safety Council and reports performance results in an annual report. The NATO Support and Procurement Agency also has several objectives and key performance indicators that it uses to systematically monitor and evaluate the efficiency, effectiveness and economy of its occupational health and safety management system and describes these objectives and key performance indicators in the latest versions of its occupational health and safety manuals. However, none of this information is regularly reported to a NATO strategic-level committee. There is also one entity in the process of developing key performance indicators, and

another entity providing performance information to its Host Nation base's health and safety office, which has key performance indicators.

There is no NATO-wide policy or governance structure for occupational health and safety management

2.9 NATO-wide guidance and performance reporting of occupational health and safety management is limited, because there is no authoritative policy and governance structure to oversee NATO-wide occupational health and safety management. As stated, occupational health and safety guidance is spread across three different official NATO documents that do not clearly relate to one another and have limited applicability. International Labour Organisation guidelines, which are not NATO requirements, but universally recognised as good practices, state that an occupational health and safety policy is the foundation of an effective occupational health and safety management system, and without such a policy, safety and health is not properly managed or assured. Among other things, this policy should describe the duties and responsibilities of everyone in the organisation, which would include a governance structure of those who regularly monitor and evaluate the management system and are held accountable for performance.

2.10 However, there is no one at the strategic decision-making level to promulgate a NATO-wide occupational health and safety policy. In its response to our questionnaire, the International Staff confirmed that “[t]here is no formal mechanism that enables reporting to Nations (via NATO Committee) on NATO-wide performance and risks related to occupational health and safety, environmental protection or energy efficiency.” According to key success factors based on ISO and other good practices, organisations should communicate the results of their occupational health and safety management system performance and the results of incidents to a governing board or committee. Without a NATO strategic-level committee responsible for NATO-wide occupational health and safety management, there is no one with the authority to develop a NATO-wide policy that provides cohesive direction and guidance to NATO entities or a formal mechanism for EHS performance reporting.

NATO entities have to some extent implemented occupational health and safety management system key success factors

2.11 Though there is no NATO-wide occupational health and safety policy and governance structure, many NATO entities have implemented to some extent a number of occupational health and safety management system key success factors at the local level. In order to provide a NATO-wide view, we analysed 24 NATO entities against 14 key success factors to assess the comprehensiveness and thus effectiveness of the entities' occupational health and safety management systems. Our assessment in table 4 below shows whether these success factors exist within the 24 NATO entities to; 1) a limited or no extent (N); 2) a partial extent (P); or 3) a comprehensive extent (C).

Table 4: Summary of key success factors present in occupational health and safety management systems of 24 NATO entities

Key success factors ¹	Policy	Organisation	Planning and implementation ²	Education and Training	Information Management and Documentation	Communication
Success factor No.	1	2-3	4-7, 8, 9, 10	11	12	13-14
NATO Headquarters in Brussels						
IS	C	C	P	P	P	P
IMS ³	C	C	P	P	P	P
NAGSMA ³	N	N	N	P	N	N
OCS ³	C	N	N	N	N	N
Allied Command Operations						
SHAPE	P	P	P	P	N	N
JFCNP	C	C	C	C	C	P
JFCBS	C	C	P	C	C	P
JFCNF ⁴	N	N	N	N	N	N
AIRCOM	C	C	P	N	N	N
MARCOM	C	P	C	P	C	C
LANDCOM	N	C	P	P	P	N
NCISG	C	C	P	P	P	C
Allied Command Transformation						
HQ SACT	C	C	P	P	C	P
JALLC	N	P	N	N	N	P
JFTC	N	P	P	C	N	N
JWC	C	C	C	P	N	P
Civilian Agencies						
NAPMA	P	P	P	C	C	P
NCIA	C	C	P	P	P	N
NSPA	C	C	C	C	C	C
Other						
NAEW&CF	C	C	C	C	C	C
NAGSF	C	C	P	C	P	P
SJLSG ⁴	N	P	P	N	N	N
CMRE	N	C	P	C	C	P
CSO	N	C	P	P	C	P
Total Comprehensive	14/24	15/24	5/24	8/24	9/24	4/24

Source: IBAN analysis of NATO documentation and questionnaire responses.

¹ Contributing to the entity's ability to plan, do, check, act on occupational health and safety management system risks and hazards.

² Includes monitoring, evaluation and actions for improvement.

³ As tenants, these entities fall under the IS policy for NATO Headquarters.

⁴ JFCNF is a new command and SJLSG is a new group and have not yet developed EHS management systems.

Note: This table does not make comparisons between the NATO entities due to their differences in composition, size, geographical location and other characteristics.

2.12 For example, 14 out of 24 NATO entities in our audit scope have localised occupational health and safety policies and committees to manage their efforts. NATO entities without a localised occupational health and safety policy are either tenants of an installation and follow their host's existing policies and procedures or exempt themselves from having a policy due to their small number of personnel, limited resources, and other priorities.

2.13 However, there are a number of success factors that are present to a partial, limited or no extent in many NATO entities. For example, SHAPE's health and safety policy and committee only addresses local wage rate workers and has no occupational health and safety policy or committee for SHAPE civilian and military staff. The NATO Airborne Early Warning and Control Force has a health and safety policy and robust ground safety manual and ground safety council with representatives from across the command, including civilian and military staff.

2.14 In another example, the International Staff's NATO Headquarters health and safety management system includes a comprehensive policy, office with dedicated and competent staff and a representative local health and safety committee. However, other success factors are partially present in the NATO Headquarters' health and safety management system. The NATO Headquarters' occupational health and management policy was approved in 2019 and is relatively new. As a result, many of the planning and implementation, education and training, information management and communication success factors are also new, evolving or in the process of being developed. This is an improvement from 2018 when NATO moved into its new headquarters building in Brussels. Prior to this move, there was no occupational health and safety management system, policy or governance structure for NATO Headquarters. As a result, essential health and safety risk assessments were not conducted prior to building acceptance to allow time to implement effective mitigation measures. Though no significant health and safety incidents occurred, the outcome could have been different (See appendix 1 for full case study).

2.15 Overall, without a NATO-wide policy and governance structure, NATO Allies will not be informed of occupational health and safety performance issues and make timely decisions to mitigate risks. Further, NATO entities will continue to apply existing guidance in different ways, which could open the Alliance up to additional legal, financial and reputational risks. In responses to the questionnaire, all 24 NATO entities stated there have not been any major incidents or accidents in recent years where a claim was made against NATO, which suggests existing occupational health and safety management systems could be functioning as they should. However, several officials also stated that existing occupational health and safety management systems may not be sufficient at responding to incidents that are low probability but high risk to NATO. In our case study on NATO's occupational health and safety management system's response to COVID-19, we found that seven NATO entities would have liked more NATO-wide governance, coordination, and guidance (See appendix 2 for full case study.)

Lessons identified from IBAN case studies support that NATO could benefit from further developing its occupational health and safety management systems

2.16 IBAN conducted case studies and identified a number of lessons that could help NATO further develop its occupational, health, and safety management systems. These lessons are summarised below:

- 1) A NATO-wide governance structure and policy could have made response to the COVID-19 pandemic more efficient and effective: An appropriate and effective NATO-wide governance structure and policy would have provided guidance to NATO entities and help ensure a more coordinated response to the COVID-19 pandemic. It could also

have ensured better reporting, and alignment and use of systems for reporting during the response.

2) Policies and guidance must be flexible yet provide clear guidance: NATO entities are different so policies and guidance must be both flexible and provide clarity in areas critical for continued achievement of organizational goals. Lack of relevant policies was emphasised by some entities.

3) Capacity to quickly adapt to the crisis and mitigate risks must be ensured prior to a crisis: In the case of the COVID-19 pandemic, communications and information systems equipment for teleworking, stocks of personal protective equipment and staff mental health are some of the significant issues that should be considered and prepared for in advance of crises. Doing so would allow entities to more quickly adapt to a crisis and mitigate occupational health and safety risks prior to a crisis.

4) An EHS communication strategy that includes identification of all internal and external stakeholders is an important part of effective incident responses: Communication strategies must be in place prior to a crisis and take into consideration that NATO lacks enforcement measures. Also, after the 2010 fuel spill, NATO Airborne Early Warning and Control Force increased regular exchanges of information with Host Nation authorities on environmental incidents, which led to better coordinated communication with external stakeholders.

5) Necessary equipment and stock investments must be made to effectively mitigate occupational health and safety risks before and during a crisis: When asked about lessons identified from the COVID-19 pandemic, NATO entities indicated, that appropriate investments must be made in communications and information systems equipment for teleworking and in maintenance of stocks of personnel protective equipment, such as masks and sanitizing gel.

2.17 These lessons identified generally support IBAN's findings that NATO can improve further in key success areas of occupational health and safety management systems. The lessons identified are further described in appendixes 2 and 3.

Conclusion

2.18 Currently, there is some NATO guidance on occupational health and safety, but this guidance does not fully apply to all NATO entities or provide clear direction on following Host Nation legislation or other international standards and good practices. In addition, there is no NATO-wide governance structure or policy to ensure that occupational health and safety is implemented in a coherent, accountable, and consistent manner. Thus, there is no NATO-wide agreed description of and requirements for a governance structure and the relationships between overseeing and decision-making committees and NATO entities regarding occupational health and safety. This is a risk to NATO, because the lack of a NATO-wide occupational health and safety policy and strategic-level governance has resulted in an inconsistent application of existing direction and guidance. NATO entities have to some extent implemented occupational health and safety management system key

success factors. Events like the COVID-19 pandemic and move to the new NATO Headquarters in Brussels show that NATO's decentralised approach to managing occupational health and safety may not be sufficient.

3. NATO-WIDE ENVIRONMENTAL AND ENERGY MANAGEMENT GUIDANCE DOES NOT EXIST FOR NATO STATIC HEADQUARTERS, COMMANDS AND INSTALLATIONS

There is no NATO-wide guidance for NATO static headquarters, commands and installations on environmental and energy management

3.1 There is no evidence of NATO-wide direction and guidance for NATO static headquarters, commands and installations on environmental and energy management. The NATO-wide environmental and energy management-related documentation that does exist primarily focuses on environmental protection and energy efficiency for NATO-led military operations as seen in table 5.

Table 5 – NATO environmental and energy management direction and guidance

NATO direction and guidance	Summary
Allied joint publications	Acknowledges existence of NATO-agreed/adopted terminology and establishes official doctrine and standardisation agreements on environmental protection and energy efficiency. Allied joint publications are ratified by all NATO member countries for NATO-led military operations.
Military Committee Principles and Policies for Environmental Protection (EP) (MC 469/1), October 2011	Environmental protection and energy efficiency for deployed operations and military exercises are regulated through this policy.
NATO Green Defence Framework, February 2014	Adopted by Council, the framework rests on 3 pillars: (1) reinforcing efforts of NATO bodies; (2) facilitating Allies' efforts, and (3) improving NATO's "green" profile to the public. Among other things, recognises need to enhance NATO-wide oversight and share best practises in environmental protection and energy efficiency.

Source: IBAN summary of NATO documentation.

3.2 For example, the NATO Green Defence Framework suggests certain changes be made to enhance NATO-wide oversight of environmental protection and energy efficiency. Among other things, this Council-approved framework calls on NATO committees, working groups, and NATO entities to improve coordination and streamlining of green activities across the Alliance. The framework also calls on NATO Headquarters, the NATO Command Structure and NATO agencies to consider using green accounting standards and principles, as appropriate, and benchmarks to measure progress.

3.3 However, according to Allied Command Operations officials that maintain the Military Committee environmental protection policy and one of the original drafters of the Green Defence Framework, NATO's current environmental and energy management guidance focuses on deployed operations and integrating environmental protection and energy efficiency into the operational planning process and thus has no cross over with environmental and energy management in NATO static headquarters, commands and installations. These officials also noted that little has been done to implement the Green

Defence Framework NATO-wide, which was confirmed in the questionnaire responses we received from all 24 NATO entities. Only two entities, the NATO Support and Procurement Agency and Headquarters Supreme Allied Commander Transformation, provided evidence on its efforts to implement the Green Defence Framework.

3.4 IBAN found that the lack of policy in this area can have concrete implications for NATO entities. For example, the lack of NATO-wide environmental and energy management policy can present challenges for NATO entities like the NATO Communications and Information Systems Group. This group provides information technology support to NATO exercises and operations with staff working in 14 different countries. The NATO Communications and Information Systems Group stated that it is difficult to know which rules should apply when environmental protection and energy efficiency laws and regulations can vary from country to country. Due to the lack of a NATO-wide environmental and energy management policy, the group generally ends up following Host Nation regulations, especially for building management. However, a NATO-wide policy in this area would establish a uniform NATO standard that NATO entities like the NATO Communications and Information Systems Group could use to compare against Host Nation laws and regulations to identify gaps in coverage and better address risks.

There is no NATO-wide performance reporting on environmental and energy management

3.5 There is no NATO-wide strategic-level committee receiving reports on environmental and energy management performance from NATO entities. Similar to occupational health and safety, NATO-wide environmental and energy performance is relevant, because the absence of such information potentially hinders NATO Allies from making effective and timely decisions aimed at producing safe, healthy and sustainable working environments and surrounding communities.

3.6 In addition, performance information is essential for continually improving management systems and proactively managing legal, financial and reputational risks. For environmental and energy management, key performance indicators can be used to inform the Nations and other decision makers on progress made in these areas. According to international standards and good practices, environmental key performance indicators could include measures like return on investment from energy efficiency activities, frequency of environmental incidents, and other quantitative and qualitative measures derived from NATO-wide environmental and energy management policy objectives that are defined by the Nations via a NATO strategic-level committee.

3.7 All 24 entities stated that they were not aware of any official NATO requirement describing what types of environmental protection and energy efficiency performance information they should report to the Nations via a NATO strategic-level committee. In addition, only a few NATO entities report to their higher headquarters either systematically or stated they could report on an exceptional basis upon request from an overseeing board.

There is no NATO-wide policy and governance structure to guide and oversee environmental or energy management in the NATO entities

3.8 Based on our assessment of questionnaire responses, official NATO documentation and interviews with officials from 24 NATO entities, we found no NATO-wide policy and governance structure to guide and oversee NATO entities on environmental or energy management. We asked 24 NATO entities to describe if, in practice, roles and responsibilities were clearly defined and understood between their organisations and NATO strategic-level committees. All 24 NATO entities responded that they are not aware of any such definition. One entity in particular, the NATO Airborne Early Warning and Control Force, stated that the governance roles and responsibilities among its operational command, Supreme Headquarters Allied Powers Europe, Allied Air Command and NATO Headquarters should be clarified and documented. The NATO Airborne Early Warning and Control Force also supported the need for NATO-wide performance reporting on environmental protection and energy efficiency performance information, targets, risks to Supreme Headquarters Allied Powers Europe, Allied Air Command or the Nations via NATO committees or working groups.

A majority of NATO entities have not comprehensively or partially implemented key success factors for environmental and energy management systems

3.9 The absence of NATO-wide environmental and energy management policies and governance structures has resulted in a majority of NATO entities without comprehensive and thus potentially less effective environmental and energy management systems. In order to provide a NATO-wide view, we analysed 24 NATO entities against 14 key success factors to assess the comprehensiveness and thus effectiveness of the entities' environmental and energy management systems. Tables 6 and 7 below summarise our assessment of environmental and energy management system success factors that exist to; 1) a limited or no extent (N); 2) a partial extent (P); or a comprehensive extent (C) within 24 NATO entities.

Table 6: Summary of key factors present in environmental management system at 24 NATO entities

Key success factor ¹	Policy	Organisation	Planning and implementation ²	Education and Training	Information Management and Documentation	Communication
Success factor No.	1	2-3	4-7, 8, 9, 10	11	12	13-14
NATO Headquarters in Brussels						
IS	N	P	N	N	N	P
IMS ³	N	P	N	N	N	P
NAGSMA ³	N	N	N	P	N	N
OCS ³	N	N	N	N	N	N
Allied Command Operations						
SHAPE	N	N	N	N	N	N
JFCNP	N	P	C	P	C	P
JFCBS	C	C	P	C	C	P
JFCNF ⁴	N	N	N	N	N	N
AIRCOM	N	N	N	N	N	N
MARCOM	C	P	C	P	C	C
LANDCOM	NIL	NIL	NIL	NIL	NIL	NIL
NCISG	N	N	N	N	N	N
Allied Command Transformation						
HQ SACT	N	N	P	P	N	N
JALLC	N	N	P	P	N	N
JFTC	N	N	P	N	N	N
JWC	N	P	P	P	N	P
Civilian Agencies						
NAPMA	N	P	P	N	C	N
NCIA	N	P	N	N	N	N
NSPA	P	P	P	N	P	N
Other						
NAEW&CF	C	C	C	C	C	P
NAGSF	N	N	P	P	P	P
SJLSG ⁴	N	P	P	N	N	N
CMRE	N	P	P	P	C	P
CSO	N	N	N	N	N	N
Total comprehensive	3/24	2/24	3/24	2/24	6/24	1/24

Source: IBAN analysis of NATO documentation and questionnaire responses.

¹ Contributing to the entity's ability to plan, do, check, act on environmental management system risks and hazards.

² Includes monitoring, evaluation and actions for improvement.

³ As tenants, these entities fall under the IS policy for NATO Headquarters.

⁴ JFCNF is a new command and SJLSG is a new group and have not yet developed EHS management systems.

Note: This table does not make comparisons between the NATO entities due to their differences in composition, size, geographical location and other characteristics.

3.10 As seen in table 6 above, 21 out of 24 NATO entities in our audit scope do not have localised environmental management system policies. The table also shows, that only very few of the remaining other key success factors for environmental management systems are present to a comprehensive extent in the 24 NATO entities.

Table 7: Summary of key success factors present in energy management systems at 24 NATO entities

Key success factor ¹	Policy	Organisation	Planning and implementation ²	Education and Training	Information Management and Documentation	Communication
Success factor No.	1	2-3	4-7, 8, 9, 10	11	12	13-14
NATO Headquarters in Brussels						
IS	N	P	P	N	N	P
IMS ³	N	P	P	N	N	P
NAGSMA ³	N	N	N	P	N	N
OCS ³	N	N	N	N	N	N
Allied Command Operations						
SHAPE	N	N	N	N	N	N
JFCNP	N	P	P	P	C	P
JFCBS	N	N	N	N	N	N
JFCNF ⁴	N	N	N	N	N	N
AIRCOM	N	N	N	N	N	N
MARCOM	C	P	C	P	C	C
LANDCOM	NIL	NIL	NIL	NIL	NIL	NIL
NCISG	N	N	N	N	N	N
Allied Command Transformation						
HQ SACT	N	N	P	N	N	N
JALLC	N	N	P	P	N	N
JFTC	N	N	P	N	N	N
JWC	N	N	N	N	N	N
Civilian Agencies						
NAPMA	N	P	P	N	C	N
NCIA	N	P	N	N	N	N
NSPA	N	P	P	N	P	P
Other						
NAEW&CF	P	P	P	N	C	N
NAGSF	N	N	P	N	P	P
SJLSG ⁴	N	P	P	N	N	N
CMRE	N	P	P	P	C	N
CSO	N	N	N	N	N	N
Total comprehensive	1/24	0/24	1/24	0/24	5/24	1/24

Source: IBAN analysis of NATO documentation and questionnaire responses.

¹ Contributing to the entity's ability to plan, do, check, act on energy management system risks and hazards.

² Includes monitoring, evaluation and actions for improvement.

³ As tenants, these entities fall under the IS policy for NATO Headquarters.

⁴ JFCNF is a new command and SJLSG is a new group and have not yet developed EHS management systems.

Note: This table does not make comparisons between the NATO entities due to their differences in composition, size, geographical location and other characteristics.

3.11 Table 7 above shows that only one entity has a separate energy management policy. Though there are two NATO entities with local committees dedicated to environmental management, there are no NATO entities with local committees dedicated to energy management. Overall, tables 6 and 7 shows that key success factors are far less present in NATO entities' environmental management systems compared to their occupational health

and safety management systems, and NATO-wide energy management systems are almost non-existent.

3.12 In responses to our questionnaire, NATO entities indicated that environmental and energy management is typically covered by Host Nation support, tenant agreements or technical agreements. Based on the evidence provided to IBAN, at least 13 NATO entities have Host Nation support, tenant agreements or technical agreements. Of these 13 entities, seven specifically noted that they did not have their own EHS policy, because they have these other agreements in place. These agreements typically delineate environmental and energy management roles and responsibilities between NATO entities and the Host Nation or among multiple NATO entities located in the same NATO-owned location. Therefore, many NATO entities do not see the need to develop a separate environmental and energy management policy. In addition, there is no NATO-wide regulation similar to health and safety article 16.1 of the NATO Civilian Personnel Regulations that compels NATO entities to establish an environmental or energy management policy.

3.13 Host Nation support, tenant agreements and technical agreements may be sufficient, but it is IBAN's opinion that having these alone does not fully exempt NATO entities from accountability and responsibility for monitoring and evaluating environmental and energy-related performance, risks and hazards. If there is no NATO-wide policy that directs NATO entities to define EHS standards of performance, then there is no systematic, fact-based way to assess whether Host Nations or tenant and technical agreements sufficiently protect NATO entities and the Alliance against environmental and energy risks and hazards. Further, Host Nation support, tenant agreements and technical agreements cannot establish reporting lines between a NATO strategic-level committee and NATO entities so that key decision-makers receive quality information on NATO-wide environmental and energy management risks and performance.

3.14 Without NATO-wide environmental and energy management policies and governance structures, NATO Nations will not be informed of performance issues within sufficient time to make decisions and allocate appropriate resources. In responses to the questionnaire, NATO entities stated there have not been any major environmental or energy-related incidents or accidents in recent years where a claim was made against NATO, which suggests existing management systems could be functioning as they should. However, the lack of a NATO-wide policy, governance structure, key performance indicators and reporting show that the Nations have no fact-based assurance that the current systems to manage environmental and energy risks will continue to be sufficient. In our case study on fuel spills and the NATO Airborne Early Warning and Control Force, we found that while required reporting to the Host Nation was provided, there was no reporting provided to a higher command or headquarters on the fuel spill incidents. Since the fuel spills, the NATO Airborne Early Warning and Control Force has introduced a Significant Incident Reporting Requirement to both NATO Allied Air Command and Supreme Headquarters Allied Powers Europe. Incidents like these fuel spills would now be reported as significant incidents. (See appendix 3 for full summary of this case study). In addition, our case study on the move to the new NATO Headquarters in Brussels shows how the absence of a NATO-wide environmental and energy management system governance structure, policy, performance measures and reporting has made it difficult for NATO International Staff to accurately

assess to what extent benefits from its sustainability efforts are being realised. (See appendix 1 for full summary of this case study.)

Lessons identified from IBAN case studies illustrate that key success factors are critical to effective and efficient environmental and energy management systems management systems

3.15 IBAN developed case studies and identified a number of lessons related to NATO environmental and energy management systems. These are listed below:

- 1) An established environmental and energy management system could have increased cost savings and effectiveness of ongoing energy efficiency and sustainability efforts in the new NATO Headquarters: The lack of environmental and energy governance and formal management system makes it difficult to assess to what extent benefits from sustainability measures introduced in NATO Headquarters are being realised. This also hinders NATO Headquarters' ability to continuously improve ongoing or future green initiatives and ultimately undermines the Alliance's message to the world about its commitment to environmental protection and energy efficiency.
- 2) An EHS policy should ensure that established and implemented risk assessments are conducted systematically to better prevent and manage EHS incidents: The new NATO Airborne Early Warning and Control Force Environmental Protection Force Policy introduced after the 2010 and 2018 fuel spills now stress explicitly the need to conduct environmental impact assessments and risk analyses.
- 3) Continuous proactive review and streamlining of EHS processes and systems based on lessons learned could be a requirement in a future NATO-wide EHS policy: Such review ensured that required procedures for immediate emergency response and initiation of remedial action were in place and followed in the 2018 NATO Airborne Early Warning and Control Force fuel spill.
- 4) Having a sufficient environmental and energy management system in place enables effective responses to incidents: The NATO Airborne Early Warning and Control Force Headquarters' environmental management system was used to help minimise the environmental impacts that the 2018 fuel spill had on the area surrounding the building where the spill happened and nearby communities.
- 5) Reporting to higher command and/or NATO strategic-level committee or similar might be beneficial for decision making stakeholders: The NATO Airborne Early Warning and Control Force did not report the health and safety and/or environmental effects of the 2018 fuel spill on its staff and surrounding communities to Supreme Headquarters Allied Powers Europe, NATO Allied Air Command or a strategic-level NATO committee/working group, because there was no requirement to have reported those effects.

3.16 These lessons identified support IBAN's findings that NATO will benefit from introducing further requirements that can ensure implementation of more key success

factors in existing environmental protection and energy management systems. The lessons identified are further described in appendixes 1 and 3.

Conclusion

3.17 The lack of NATO-wide environmental and energy management policy and governance structure means that NATO entities do not have unified guidance and no one is overseeing their activities from a comprehensive perspective. As a result, only four out of 24 NATO entities have a local-level environmental and energy management policy. Further, there is no strategic-level oversight of NATO-wide environmental and energy management activities. This also results in no NATO-wide requirement to monitor and report on the performance of NATO environmental and energy management efforts and thus no one with a comprehensive understanding of potential risks and opportunities. Also, NATO environmental and energy management systems are currently less comprehensive than occupational health and safety management systems. This is because a majority of NATO entities have not comprehensively or partially implemented key success factors for environmental and energy management systems. This limits their ability to plan, do, check, and act on related risks and potential hazards.

3.18 Additionally, 22 out of 24 NATO entities responded to our questionnaire that they were either not aware of the Green Defence Framework or not responsible for or involved in implementing any parts of the framework. Though NATO publicly states its dedication to environmental protection and energy efficiency in military operations, there is little evidence of this same level of focus or dedication at NATO static headquarters, commands and installations. Therefore, the lack of a NATO-wide environmental and management system governance structure and policy contradicts the Alliance's public message about its commitment to environmental protection and energy efficiency.

4. NATO'S EHS MANAGEMENT SYSTEM LAGS BEHIND THOSE OF OTHER INTERNATIONAL ORGANISATIONS

4.1 NATO is unique as a political-military alliance that links two continents with the goal of enabling defence and security consultation and cooperation, and conducting multinational crisis-management operations. Where NATO is not unique, however, is in its outputs (products), and governance and administrative processes, which are for the most part similar to other organisations. Therefore, we compared NATO EHS management practices against five international organisations: the European Commission, Organisation for Economic Co-operation and Development; Organisation for Security and Co-operation in Europe, United Nations and the World Bank Group. We found that NATO's EHS management practices lack certain success factors that appear to be present in many of these international organisations as seen below in table 8.

Table 8: Presence of select EHS management system success factors in NATO and five international organisations

	Governance and oversight	Policies, international standards or good practices	Integrated management systems
European Commission	Yes	Yes	Yes
United Nations	Yes	Yes	Yes
World Bank Group	Yes	Yes	Yes
OECD	Yes	Partial	Unknown
NATO	Partial	Partial	No
OSCE	Unknown	Unknown	Unknown

Source: IBAN analysis of NATO documentation, ISO and publicly available information.

4.2 For example, the United Nations has publicly available and easily accessible information about its EHS management system, which includes oversight from a strategic-level management committee and a manual with which compliance is mandatory. The aim of the United Nations occupational health and safety framework is to ensure harmonisation among different United Nations organisational policies and establish an integrated occupational health and safety management system. In another example, the European Commission has a strategy and action plan under the governance of a strategic-level committee. One of the objectives of the European Commission's programme is for staff to work in a safe working environment with key performance indicators to track physical and mental health, physical activity, work/life balance, physical working environment and supportive working conditions. Another objective of this programme is to have an organisation respectful of its environmental impact and its social responsibility.

4.3 However, there is little public information available on NATO EHS governance and oversight, policies, usage of international standards or good practices and integration of its EHS management systems. For example, in searches on the public internet, there are job postings for occupational health and safety positions and professional profiles of individuals who currently have these responsibilities within NATO Headquarters and the NATO Communications and Information Agency. However, there is no public access to NATO occupational health and safety management policies or procedures or official statements made on NATO's commitment to occupational health and safety management within the NATO entities.

4.4 There is more public information available on NATO's governance and oversight, policies, usage of international standards and good practices and integration of environmental and energy management, but all are focused externally on NATO deployed military activities and not internally within NATO entities. For example, there is the Environmental Protection Working Group that reports to the Military Committee, but its aim is "to reduce possible harmful impacts of military activities on the environment by developing NATO policies, standardization documents, guidelines and best practices in the planning and implementation of operations and exercises." There is also the Specialist Team on Energy Efficiency and Environmental Protection that reports to the Conference of National Armament Directors, but its aim is "to integrate environmental protection and energy efficiency regulations into technical requirements and specifications for armaments, equipment and materials on ships, and for the ship to shore interface in the Allied and partner nations' naval forces."

4.5 There is also public information available on the NATO Support and Procurement Agency's environmental protection and energy efficiency services, but this is also externally-focused. The NATO Support and Procurement Agency's General and Cooperative Services Programme adheres to ISO environmental management system standards by ensuring that projects are "in compliance with ISO 14001:2015 standards, international multilateral conventions and international best practices." However, there is no mention of whether NATO Support and Procurement Agency headquarters and facilities are also ISO 14001 certified.

Conclusion

4.6 Several international organisations have EHS key success factors in place (see table 8 in section 4.1) that, if adopted by NATO, could enhance and strengthen NATO-wide EHS management. The fact that NATO partially meets a number of key success factors means the Alliance could miss opportunities to increase the efficiency, effectiveness and economy of its EHS management efforts, ability to proactively control EHS risks and hazards and keep pace with other comparable international organisations.

5. NATO MUST RESPECT HOST NATION EHS STANDARDS BUT IS NOT REQUIRED TO FULLY COMPLY WITH HOST NATION EHS LAWS AND REGULATIONS

There is no NATO-wide requirement for NATO entities to fully comply with Host Nation EHS laws and regulations

5.1 Overall, there is no NATO-wide requirement for NATO entities to comply with Host Nation EHS laws and regulations to establish an EHS management system to support compliance activities. A reason for not having NATO-wide requirements to comply with Host Nation EHS laws and regulations is that NATO possesses special privileges and immunities as an international organisation. According to several NATO entities, NATO's unique legal position may exempt the Alliance from full compliance with Host Nation EHS laws and regulations.

5.2 As a consequence of NATO's special legal position, NATO internal policies, procedures and governance structures are the primary ways to keep NATO entities accountable in areas like EHS management. International standards and good practices state that organisations should comply with national laws and regulations and keep their stakeholders accountable with organisational policies and governance structures. Though some NATO entities have local Host Nation agreements that provide EHS requirements, there is no NATO-wide policy to ensure that such requirements are applied consistently across all of NATO. As a result, there is no unified guidance and therefore no one overseeing NATO entities' EHS management systems from a comprehensive perspective.

5.3 Despite the lack of a NATO-wide requirement, we found that many NATO entities choose to comply with Host Nation EHS laws and regulations. We also found that more NATO entities responded that they are compliant with Host Nation occupational health and

safety laws and regulations but less so with environmental protection and energy efficiency laws and regulation. Table 9 below summarises the NATO entities' responses.

Table 9 – NATO entities stated compliance with local Host Nation EHS laws and regulations

	Occupational health and safety	Environmental protection	Energy efficiency
NATO Headquarters in Brussels			
IS	Maybe	Maybe	Maybe
IMS	IS policy	IS tenant	IS tenant
NAGSMA	IS policy	IS tenant	IS tenant
OCS	IS Policy	IS tenant	IS tenant
Allied Command Operations			
SHAPE	Partial	Maybe	Maybe
JFCNP	Yes	Yes	Yes
JFCBS	Yes	Yes	Maybe
JFCNF	Yes	Yes	Yes
AIRCOM	Partial	Maybe	Maybe
MARCOM	Yes	Yes	Yes
LANDCOM	Yes	Yes	Yes
NCISG	Partial	Partial	Partial
Allied Command Transformation			
HQ SACT	Yes	Yes	Yes
JALLC	Yes	Yes	Yes
JFTC	Yes	Yes	Yes
JWC	Yes	Yes	Maybe
Civilian agencies			
NAPMA	Yes	Partial	Partial
NCIA	Maybe	Maybe	Maybe
NSPA	Yes	Partial	Partial
Other			
NAEW&CF	Yes	Yes	Yes
NAGSF	Yes	Yes	Yes
SJLSG	Maybe	Maybe	Maybe
CMRE	Yes	Yes	NIL
CSO	Yes	Maybe	Yes
Total	15/24 (63%)	12/24 (50%)	10/24 (42%)

Source: IBAN summary of NATO entity information.

5.4 For example, NATO entities responded that they are compliant with Host Nation occupational health and safety laws and regulations but less so with environmental protection and energy efficiency laws and regulations. Specifically, 15 of the 24 NATO entities responded that they comply with Host Nation occupational health and safety laws and regulations while only 12 out of 24 stated they comply with Host Nation environmental protection laws and regulations. Finally, only 10 out of 24 NATO entities stated they comply with Host Nation energy efficiency laws and regulations.

5.5 NATO entities provided varying explanations in relation to compliance with Host Nation EHS laws. For example, the Joint Warfare Centre stated that it complies with Host Nation regulations wherever practicable, and there are no Host Nation occupational health and safety and environmental protection laws or regulations with which it has decided to be

non-compliant. In comparison, the NATO Alliance Ground Surveillance Force stated that it is fully compliant with Host Nation EHS laws and that it does not believe that NATO's legal status can allow it to not fully adhere to Host Nation regulations.

5.6 Other explanations include:

- Joint Force Command Brunssum: This large sub-command complies with Host Nation EHS laws and regulation with the exception of some related to COVID-19 restrictions. The reason for this is that, due to the nature of the work conducted at the command, fully implementing the Host Nation's COVID-19 restrictions would increase rather than decrease the chances of COVID-19 transmission. JFCBS also sees the term "respect" is not the same as "compliance" and interprets "respecting Host Nation standards" as following the rules as much as possible but making exceptions when mission essential.
- NATO Airborne Early Warning and Control Force: This operational command is an air base and follows the substantive content of Host Nation occupational health and safety laws and regulations but does not subordinate itself to the executive authority of Host Nation supervisory authorities. For example, the NATO Airborne Early Warning and Control Force does not follow routine Host Nation legal occupational health and safety reporting requirements to Host Nation civilian or military supervisory authorities, because these Host Nation organisations do not have legal oversight over the NATO Airborne Early Warning and Control Force. The NATO Airborne Early Warning and Control Force added that information may be exchanged on a voluntary case-by-case basis as mutual administrative support among official Host Nation organisations. The NATO Airborne Early Warning and Control Force further referred to the NATO Status of Forces Agreement and understands that respecting Host Nation laws and regulations does not include adopting the receiving state's administrative rules and procedures, which includes occupational health and safety standards. The NATO Airborne Early Warning and Control Force added that the Host Nation's armed forces have established their own occupational health and safety supervisory organisation, which mirrors the Host Nation's civilian occupational health and safety supervisory structure. According to the NATO Airborne Early Warning and Control Force, the Host Nation ministry of defence pointed out that it is not legally responsible for the NATO Airborne Early Warning and Control Force in this respect.
- NATO International Staff: When it comes to compliance with Host Nation regulations, NATO establishes its own internal rules based on Host Nation standards, but this does not require compliance with Host Nation legislation. In addition, NATO International Staff also pointed to NATO's "special status" which "guarantees its functional independence".

5.7 As a result of NATO's stated legal immunity and absent EHS governance structures and policies, NATO entities are deciding which Host Nation laws, regulations and international standards and good practices to follow and ignore, which may or may not align with broader NATO-wide strategic objectives. If NATO has legal immunity, and there is no NATO-wide governance structure or policy to define EHS standards or performance expectations, then there is no one with the authority and information to hold NATO entities accountable and ensure NATO staff and surrounding communities are sufficiently protected against EHS risks and hazards.

NATO's stated legal immunity necessitates NATO-wide EHS governance and policy

5.8 Overall, NATO may be exempt from full compliance with Host Nation EHS laws and regulations, but this does not mean that NATO cannot be held accountable or responsible for EHS hazards and incidents. We asked NATO entities to provide documentation on the number of litigation cases, if any, brought against them due to EHS hazards or incidents from the last three years. All entities reported that they had not been involved in such litigation during this time period.

5.9 However, NATO may be increasingly challenged with respect to its stated legal immunity. In prior years, multiple cases generally challenging NATO's immunity have been brought before national courts and the European Court of Human Rights. Though NATO's immunity has been upheld in these court cases, the trend indicates that NATO may not be able to rely on its special legal status in perpetuity. In addition, there are NATO-wide internal policies, procedures and governance structures in other areas where NATO also has legal immunity. For example, NATO has strategic-level committees dedicated to budgeting and financial management and established NATO-wide financial regulations. However, there are no equivalent NATO-wide policies, procedures and governance structures for EHS management like there are for financial management though both are subject to legal, financial and reputational risks and potential litigation.

Conclusion

5.10 Despite NATO's stated legal immunity, many NATO entities follow Host Nation EHS laws and regulations, which adheres to international standards and good practices. However, the lack of a NATO-wide EHS governance structure and policy means a significant number of NATO entities interpret and apply NATO's stated immunity differently when it comes to EHS management. By following international standards and good practices pertaining to Host Nation laws and regulations, Allies would have reasonable assurance that NATO's numerous entities have established adequate EHS management systems to protect NATO staff, citizens and surrounding communities. Allowing NATO entities to choose to what extent they follow Host Nation EHS laws and regulations could potentially affect the Alliance's public reputation, create management inefficiencies and weaken the effectiveness of ongoing EHS efforts. Moreover, prior court cases suggest that NATO's legal status will continue to be challenged, which could include costly litigation related to NATO EHS in the future.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

6.1.1 As environmental health and safety issues continue to evolve and have lasting impacts on organisations, workers, and communities, it is important that NATO recognises, it is not immune to the associated risks and hazards. As such, NATO should see the importance and urgency in establishing a clear and cohesive NATO-wide EHS policy and governance framework. This would provide the necessary starting point for more strategic

oversight, guidance, and enhanced EHS decision making arrangements for NATO Nations. Also, it should decrease the uncertainty and pressure currently experienced by individual NATO entities trying hard to interpret and evaluate current EHS requirements and risks, including the associated pressure on individual staff. This work could potentially leverage and build on existing guidance and those elements of EHS management systems currently in place at NATO. With this approach, NATO entities' EHS management systems can be strengthened and new elements can be added where needed and in a coherent manner.

6.1.2 Currently, NATO lacks a coherent approach to EHS management. There is no strategic-level committee that provides NATO-wide oversight and direction on EHS management to NATO entities. Most EHS policies are developed at the NATO-entity level with varying degrees of comprehensiveness, oversight and direction provided by a limited number of local EHS committees, Heads of NATO entities and/or the military chain of command. EHS management system performance information typically stays within NATO entities, which means decision makers at the highest levels of NATO lack performance information needed to fully assess whether NATO is adequately protected against EHS risks and hazards. Without a NATO-wide EHS governance structure, policy, and performance reporting, NATO Nations do not receive information needed to allocate resources appropriately and cannot ensure NATO staff, surrounding communities and their citizens are adequately protected against workplace accidents and ecological disasters. In addition, NATO is unable to take advantage of any cost savings from the environmental protection and energy efficiency efforts occurring in several NATO entities.

6.1.3 Though we assessed that NATO lacks a number of EHS key success factors, this also provides NATO a roadmap for where the Alliance should consider integrating and improving its EHS management. Several comparable international organisations have EHS key success factors in place that, if incorporated at NATO, could enhance and strengthen NATO-wide EHS management. Some NATO entities already have relatively comprehensive EHS management systems established and can share what they have learned with other entities with less developed systems. In addition, the NATO Green Defence Framework provides an overarching NATO-wide foundation for environmental protection and energy efficiency that could become part of a NATO-wide EHS policy. However, this framework is being under-utilised.

6.1.4 Finally, many NATO entities already comply with Host Nation EHS laws and regulations and follow international standards and good practices. Therefore, a NATO-wide EHS governance and accountability approach should leverage what is already occurring across the Alliance to develop a cohesive approach to EHS management. Rather than rely on its stated legal immunity, the Alliance should plan for the future and establish more state of the art NATO-wide governance and accountability systems according to Host Nation laws and regulations, EHS international standards, and good practices. This should not be an obstacle since many NATO entities already comply with Host Nation laws and regulations or follow international standards and good practices. In doing so, NATO can go above and beyond what it is currently doing so that the Alliance's EHS management system can become a leading example.

6.2 Recommendations

6.2.1 To enhance the efficiency, effectiveness and economy of NATO EHS management, we recommend that Council tasks an appropriate strategic-level NATO committee to establish a NATO-wide EHS management policy framework according to the international standards and good practices cited in this report. At a minimum, this policy framework should:

- 1) Define oversight roles and responsibilities between the appropriate strategic-level NATO committee and NATO entities and a formal mechanism for reporting on NATO-wide EHS management performance;
- 2) Provide coherent EHS management direction and guidance to NATO entities for them to develop comprehensive EHS policies and management systems that also adhere to the international standards and good practices cited in this report;
- 3) Define clear NATO-wide EHS objectives;
- 4) Ensure NATO-wide performance targets and key performance indicators are established and linked to NATO-wide EHS objectives;
- 5) Require NATO entities to regularly monitor and evaluate their EHS management systems against NATO-wide EHS objectives, performance targets and key performance indicators; and;
- 6) Ensure that NATO entities report annually to the appropriate strategic-level NATO committee on their progress toward meeting NATO-wide EHS objectives, performance targets, and key performance indicators.

6.2.2 All tasking decisions by Council should clearly identify those responsible to take action and set deadlines for the delivery of the expected outcomes.

7. COMMENTS RECEIVED AND THE IBAN'S POSITION

7.1 Comments Received

7.1.1 Three NATO entities submitted formal comments and did not dispute the findings, conclusions, and recommendations in our report. See appendix 4 for their detailed comments. The remaining NATO entities did not submit formal comments. However, some provided factual comments that we incorporated into the report, as appropriate, or provided informal comments agreeing with the findings, conclusions and recommendations in our report. The formal comments can be grouped into three areas:

1. Resources: The two customer-funded agencies raised concerns about additional funding and the source of this funding if required to expand EHS efforts.

2. Scope: The two customer-funded entities commented on certain topics that were not included in the scope of our report.
3. Plans and activities as they relate to our recommendations: Two NATO entities provided additional details and updates on their EHS efforts.

7.2 IBAN's Position

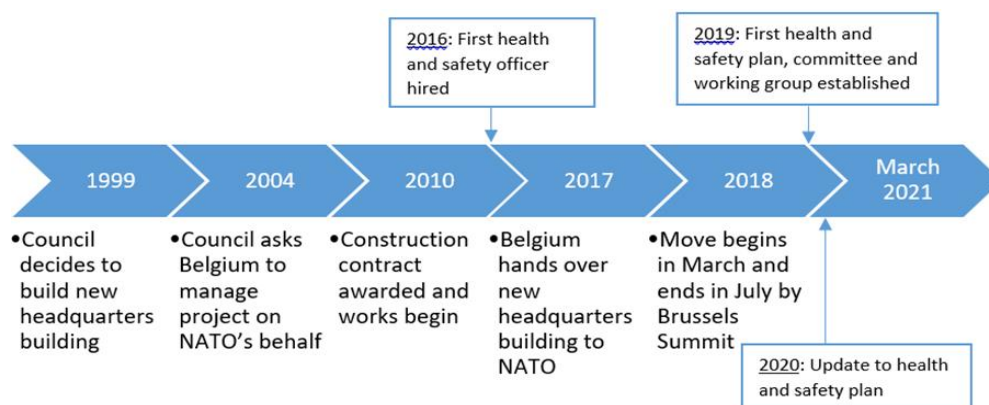
7.2.1 While IBAN appreciates and recognises these formal comments, we maintain the position that our recommendations will help improve the efficiency, effectiveness and economy of EHS management NATO-wide.

Appendix 1: Case study on occupational health and safety, environmental and energy management related to moving to the new NATO Headquarters

1. Background

1.1 At the Washington Summit in 1999, the North Atlantic Council decided to build a new headquarters building to better accommodate NATO's changing needs. Nearly 20 years later, NATO began the last phase of its move into its new headquarters in March 2018 to be completed in time for the Brussels Summit in July 2018. Figure 1 provides a timeline of events from the 1999 Washington Summit decision until March 2021. The figure also shows major milestones in the development of occupational health and safety management at NATO Headquarters during this same time period.

Figure 1: Time line of new NATO Headquarters construction, move and development of occupational health and safety management (1999-2021)



Source: IBAN analysis of NATO documentation

1.2 As seen in figure 1, the International Staff in NATO Headquarters did not have a formal occupational health and safety management system during most of this time period. Six years after beginning construction on the new building, the International Staff in NATO Headquarters hired its first health and safety officer in September 2016 and placed the Health and Safety Office inside the division of Executive Management. Health and safety responsibilities are split between two divisions within NATO Headquarters. Responsibilities related to occupational health and safety, environmental and energy management belong to several offices under the Executive Management division while fire safety and emergency services are under the Joint Intelligence and Security Division/NATO Office of Security. By 2019, the International Staff in NATO Headquarters established its first health and safety plan, local health and safety governance committee and working group.

1.3 Figure 1 also shows that the International Staff in NATO Headquarters did not have a formal environmental or energy management system in place prior to moving into the new building. The Infrastructure and Facilities Management office within Executive Management monitors and manages the infrastructure and facilities services at NATO Headquarters, which includes energy management and environmental management for the areas under its

responsibility. However, there is no dedicated function (environmental manager) to support follow-up in these areas or specific policies, norms or general plan for NATO Headquarters. Also, there is no committee oversight of NATO Headquarters' environmental and/or energy management.

2. Case study findings

Occupational health and safety management during and after move to new NATO Headquarters

2.1 The International Staff in NATO Headquarters established an occupational health and safety management system at the same time it was working on acceptance of the new building. Since construction began six years prior to the health and safety officer's arrival, the health and safety acceptance criteria were not well defined in the delivery process. Also, there was a NATO Headquarters office already managing construction issues with the Host Nation and a parallel team preparing for the move before the arrival of the health and safety officer. This resulted in the health and safety officer having to introduce safety measures retrospectively as opposed to from the outset, which presented a number of challenges. Although there was a risk analysis conducted for the NATO Headquarters Fire Prevention Strategy, essential health and safety risk assessments related to prevention, medical intervention and fire were not conducted until after the move. These health and safety risk assessments should have been completed prior to building acceptance to allow time to implement effective mitigation measures. Management should have received tests of active and passive measures to maintain awareness and ensure safe use and maintenance of the building.

2.2 Due to building construction and information technology issues, Executive Management delayed the move to the new headquarters several times, which gave more time to address a "punch list" of items needing immediate attention. However there were health and safety issues that had to be resolved after the move. For example, the Headquarters Fire Emergency Services team was not consulted on the development of plans and various structures of the building's fire strategy. As a result, fire hydrants were received but not functional, pictograms of evacuation routes did not comply with Host Nation legislation and fire detection was not 100 percent operational at the time of building acceptance. The Executive Management division managed to resolve these and other residual health and safety issues and stated there was no significant impact on building occupants or major costs incurred.

2.3 Though NATO Headquarters has made progress in implementing its health and safety management system, our performance audit shows a lack of NATO-wide occupational health and safety governance, including policy, performance measurement and reporting. Without applying these key success factors NATO-wide, other NATO entities do not have the oversight and guidance that could help them avoid similar health and safety challenges during construction and acceptance of new facilities in the future.

Environmental and energy management during and after move to new NATO Headquarters

2.4 The Infrastructure and Facilities Management office also experienced challenges at the time of building acceptance. For example, the principal contractor provided the Infrastructure and Facilities Management office with a set of as-built documentation, but the documents were of poor quality. This negatively impacted plant operation as well as hindered the launch of energy improvement initiatives. The Infrastructure and Facilities Management office also had to implement temporary solutions to address increased energy needs during the Brussels Summit in July 2018. Specifically, the Infrastructure and Facilities Management office rented additional power generators to cope with insufficient power from the existing electrical cabinets.

2.5 In addition, energy meters were on the punch list since the provisional acceptance of the building. Though the main contractor worked in 2019 and 2020 to fix the energy meters, the problems with the installation and the parameters of the energy meters did not allow for proper energy consumption analyses until recently. Starting in January 2021, the Infrastructure and Facilities Management office was able to more accurately analyse energy consumption of the NATO Headquarters for charge-back purposes, detect possible anomalies and optimize installations in order to save energy.

2.6 Despite these challenges, the Infrastructure and Facilities Management office has partially implemented a number of leading sustainability practices in the new headquarters based on an independent assessment conducted by an external contractor in August 2013. In this assessment, the external contractor identified over forty potential sustainability opportunities in the new headquarters. Many of the leading practices were low-to-no cost solutions, such as establishing sustainable landscape design, increasing telework where possible and publicly establishing and publishing a “NATO Sustainability Vision.”

2.7 However, the external contractor’s assessment also noted NATO’s lack of sustainable governance to oversee and monitor the implementation of these leading practices. The contractor assessed that “the lack of existing formal governance is a clear opportunity to implement low-cost or no-cost solutions to provide oversight and direction to NATO’s sustainability goals.” Therefore, establishing sustainable governance, such as formal policies, roles and responsibilities, could enable NATO to more effectively implement sustainability leading practices and move NATO from a “follower” to a “leader” organisation. Our findings from this performance audit confirm and expand upon the external contractor’s 2013 assessment by revealing there is a lack of NATO-wide environmental and energy management governance and policy. As such, many NATO entities like the International Staff in NATO Headquarters do not have key performance indicators, performance reporting, risk assessments and planning processes to manage their environmental protection and energy efficiency efforts.

2.8 According to publicly available information, NATO intentionally built its new headquarters to be more environmentally sustainable. This included an architectural design that would maximise use of natural light; a rain water collection system designed for use in toilets, cleaning and landscaping; a heating and circulation system harnessing geothermal

energy from below the building's surface; and automatic motion sensor office lights that dim based on the amount of sunlight that enters the room. In addition, NATO stated that it would recycle a significant part of the waste generated by its occupants. However, the absence of a NATO-wide environmental and energy management system with defined governance structures, policies, performance measures and reporting makes it difficult to assess to what extent the benefits from these sustainability measures are being realised.

3. EHS lessons identified from move to new NATO Headquarters

An established occupational health and safety management system could have made moving into the new NATO Headquarters more efficient and effective.

3.1 A NATO-wide occupational health and safety governance structure and policy could have established essential health, safety and fire roles and responsibilities, controls and risk assessments prior to building acceptance. This could have made the move more efficient and effective by reducing the number of safety measures introduced retrospectively and helping to ensure that the fire detection system was operational prior to the move. According to a health and safety lessons-learned document concurred by the International Staff division of Executive Management and NATO Office of Security, a solid health and safety programme should have been in place to allow the Health and Safety Office and Headquarters Fire and Emergency Services to work with a clear mandate across different divisions.

3.2 Also within this lessons-learned document, it states that a NATO-wide construction health and safety policy should be developed to establish health and safety criteria prior to building acceptance. However, our performance audit shows that NATO needs to establish a broader and more cohesive EHS governance structure and policy versus one solely dedicated to construction. Overall, though Executive Management stated there was no significant health and safety impact on building occupants or major costs incurred, outcomes could have been different.

An established environmental and energy management system could have increased cost savings and effectiveness of ongoing energy efficiency and sustainability efforts in the new NATO Headquarters.

3.3 Several practical steps have been taken to ensure a more environmentally friendly NATO Headquarters, but IBAN finds the lack of environmental and energy governance and management makes it difficult to assess to what extent benefits from these sustainability measures are being realised. This also hinders NATO Headquarters' ability to continuously improve ongoing or future green initiatives and ultimately undermines the Alliance's message to the world about its commitment to environmental protection and energy efficiency.

Appendix 2: Case study of NATO entities' occupational health and safety response to COVID-19

1. Background

1.1 IBAN developed this case study to learn more about how NATO entities' occupational health and safety management systems responded to the COVID-19 pandemic. The audit team developed and sent a questionnaire to the 24 NATO entities that were part of the audit scope.

1.2 The questionnaire consisted of questions and statements asking NATO entities to provide a rating (1 (Strongly disagree) – 5 (Strongly agree)). For example, the audit team asked about existence of sufficient financial resources to respond to the pandemic, usage of entity-level occupational health and safety policies, adherence to Host Nation rules and regulations, implementation of communication strategies and enforcement of COVID-19 prevention measures. Some questions also asked respondents to provide a short description, such as what occupational health and safety management lessons they identified from their entity's COVID-19 response. All 24 entities completed the questionnaire.

2. Case study findings

NATO entities' responses to the COVID-19 pandemic

2.1 Generally, the NATO entities indicated that they responded to the COVID-19 pandemic outbreak in ways that ensured staff occupational health and safety. They did this by using and/or adapting existing tools and policies and using funds from within their organisations. However, entities raised several issues, such as a lack of NATO-wide governance and reporting during the crisis and a lack of policies in certain areas, such as teleworking. In addition, entities noted a need for investment in areas such as better capabilities for teleworking and personal protective equipment.

2.2 Twelve NATO entities responded that their organisation's existing safety measures and protocols were sufficient, effective, clear, and well-understood by staff to address COVID-19. For example, one entity indicated that clear guidance was produced and a key performance indicator dashboard developed to track impact on its organisation and inform decision making on return to office plans. Only two entities responded that existing safety measures and protocols were not sufficient, clear and well-understood. Specifically, one NATO entity indicated that the decision-making process within their organisation was too long, decisions were not always well-understood, and there was no clear way to ask for an explanation. In addition, five NATO entities mentioned the need for sufficient stocks of personal protective equipment, such as hand sanitisers, temperature monitors and masks.

Potential areas of improvement for future crisis

2.3 Eighteen NATO entities provided responses indicating the need to improve policies and capabilities for teleworking or provide other alternative working arrangements during COVID-19. For example, two NATO entities indicated the need for a NATO policy and guidelines on teleworking. Six entities indicated a need for more investment in information technology resources to better support teleworking. Finally, one NATO entity stated that providing communications and information technology capabilities to staff members working from home decreases the risk of exposure while maintaining business continuity and fostering resilience.

2.4 Not all NATO entities had communication strategies in place to respond to the COVID-19 pandemic. One NATO entity indicated that, beyond regular awareness campaigns, staff awareness was enhanced through dedicated communications campaign on both COVID-19 (hygiene, advice, regulations) and more generally on health and safety at work. Two NATO entities described challenges due to the lack of communication between NATO entities regarding NATO-wide medical advice.

2.5 Eight NATO entities provided responses concerning absence of formal enforcement processes, procedures and tools. One NATO entity specifically noted the absence of a formal enforcement process and a core crisis response team. This entity also noted that any NATO-imposed restrictions in excess of Host Nation regulations may not be enforceable in court. Three other entities made similar comments indicating that lack of an enforcement mechanism can cause challenges. For example, one entity indicated that there are inherent difficulties in enforcing compliance with military personnel due to potentially conflicting national guidance among NATO Nations.

2.6 All NATO entities surveyed provided lessons identified from their responses to COVID-19. These are summarised by themes in the figure below.

Figure 1: Summary – NATO entities lessons identified from the COVID-19 pandemic which would improve their organisation’s occupational health and safety



Source: IBAN summary of COVID-19 questionnaire responses from 24 NATO entities.

3. EHS lessons identified from NATO’s COVID-19 response

Governance structures and policy could have made the NATO response to the COVID-19 pandemic more efficient and effective.

3.1 An appropriate and effective NATO-wide occupational health and safety management governance structure and policy could have helped ensure better coordination and guidance for responding to the COVID-19 pandemic. For example, a NATO-wide governance structure and policy could have ensured better information sharing by aligning occupational health and safety management reporting requirements and reporting systems with crisis management information during the response.

Policies and guidance must be flexible to fit the nature and characteristics of the different NATO entities, but must at the same time provide clear guidance within areas critical for continued achievement of organizational goals.

3.2 Lack of relevant policies was emphasized by some entities. Policy on teleworking was an area that could have been better developed during the response.

Capacity to quickly adapt to the crisis and mitigate risks must be ensured prior to a crisis

3.3 In the case of the COVID-19 pandemic, communications and information systems equipment for teleworking, stocks of personal protective equipment, and staff mental health are some of the significant issues that should be considered and prepared for in advance of crises. Doing so would allow entities to more quickly adapt to a crisis and mitigate occupational health and safety risks prior to a crisis. In one NATO entity, existing safety measures and protocols (pre-COVID-19 pandemic) were clear and well-understood by staff

yet neither were sufficient nor effective to address the COVID-19 emergency. However, this entity was able to implement new COVID-19 safety measures and protocols, which allowed staff to overcome the first pandemic wave without any active COVID-19 cases.

Communication strategy must take into consideration that NATO lacks enforcement measures

3.4 It is important that a communication strategy is in place prior to a crisis. While most entities did not report significant challenges concerning staff adhering to advice and measures, ensuring that measures are implemented by all staff is a challenge as enforcement measures were largely absent.

Necessary equipment and stock investments must be made to effectively mitigate risks from the COVID-19 pandemic

3.5 When asked about lessons identified from the COVID-19 pandemic, NATO entities indicated that appropriate investments should be made in communications and information systems equipment for teleworking and maintaining sufficient stocks of personnel protective equipment, such as masks and sanitizing gel. Additionally, communications and information systems equipment should enable teleworking while overcoming the security limitations of processing classified material, which for several NATO entities is restrictive.

Appendix 3: Case study on environmental incidents – Significant spills of aircraft fuel in 2010 and 2018 at NATO Airborne Early Warning and Control Force**1. Background**

1.1 The NATO Airborne Early Warning and Control Force (NAEW&CF) in Geilenkirchen, Germany operates NATO Airborne Warning & Control System (AWACS) aircraft. In 2010 and again in 2018, there were significant spills of aircraft fuel on the air base where NAEW&CF operates. In August 2010, an AWACS defueling tank was overfilled and spilled a maximum of 5000 litres of aircraft fuel in an area of approximately 200 square meters. In December 2018, 10.000 litres of kerosene was spilled near a building. Kerosene is toxic and may cause long-term adverse environmental effects. In both cases, NAEW&CF immediately responded to stop the spills and mitigate damages, including excavating the spill site with support from contractors.

1.2 This case study is based on incident investigation reports and responses to a questionnaire we sent to NAEW&CF. The questionnaire consisted of questions and statements asking NATO entities to provide a rating (1 (Strongly disagree) – 5 (Strongly agree)). For example, the audit team asked about usage of entity-level environmental health and safety (EHS) policies, adherence to Host Nation rules and regulations and impacts, if any, to staff and surrounding communities. Some questions also asked respondents to provide a short description, such as what EHS management lessons they identified from their entity's responses to these fuel spills.

2. Case study findings

2.1 The incident reports noted a number of factors leading to the spills and specific recommendations to mitigate against future incidents. For both spills the incident reports noted that there was no evidence that related risk management/assessment were implemented. In the 2010 incident report, it was noted that risk management principles should be applied as outlined in the NAEW&CF's Risk Management Order and use the Risk Assessment Database and Form to classify, identify, assess, accept, and supervise the risks involved. Further, the new February 2020 NAEW&CF Environmental Protection Force Policy now stresses the need to conduct environmental impact assessments and risk analysis.

2.2 Also, in coordination with Host Nation authorities the NAEW&CF's standard operating procedures on petroleum, oil, and lubricants management was amended. This resulted in shift handover briefings, documentation of ongoing works and approaches to handling of contractors was reviewed and updated. In addition, petroleum, oil, and lubricants operator training and briefings were reviewed to include lessons learned from the 2018 fuel spill. After the 2010 fuel spill, procedures for investigating work accidents and environmental incidents in the Safety Branch were streamlined, which helped improve the investigation process and quality of environmental incident reports. The Environmental Response Plan and underlying checklists were also reviewed after the 2010 fuel spill. NAEW&CF stated, that in the 2018 fuel spill, this ensured required procedures for immediate emergency response and initiation of remedial action were in place and followed.

2.3 NAEW&CF reported that there is no indication of a larger environmental damage involving the ground water and surrounding communities from the 2018 spill. At this time, remedial action is ongoing with routine monitoring by contracted experts and in coordination with Host Nation authorities, until agreed remedial objectives have been achieved. NAEW&CF has stated that the spills were not reported to SHAPE, NATO Allied Air Command, or a strategic-level NATO committee. However, one of the incident reports states that a required report to the local authorities was provided. Since the fuel spills, NAEW&CF has introduced a Significant Incident Reporting Requirement to both Allied Air Command and SHAPE. Incidents like the fuel spills in 2010 and 2018 would now be reported as significant incidents.

2.4 NAEW&CF filled out a case study questionnaire for IBAN concerning the response to the 2018 spill. In the responses NAEW&CF stated that they had a comprehensive system in place to effectively manage occupational health and safety performance and risks when the 2018 spill happened, and that NAEW&CF Headquarters was in full compliance with European Union directives, Host Nation laws/regulations, international standards and good practices related to occupational health and safety prior to the 2018 spill. NAEW&CF also indicated that their occupational health and safety management system helped to minimise the health and safety impacts that the 2018 spill had on NAEW&CF staff and surrounding communities. Finally, NAEW&CF stated that NAEW&CF staff involved with the response and restoration process and surrounding communities experienced zero to minimal negative health and safety effects from the 2018 spill.

2.5 Finally, the questionnaire on the 2018 fuel spill, along with the associated documentation from the spill, illustrated areas where lessons were identified. These are elaborated below.

3. EHS lessons identified from NAEW&CF 2010 and 2018 fuel spills

An EHS policy should ensure that established and implemented risk assessment are conducted systematically to better prevent and manage EHS incidents.

3.1 Sufficient risk assessments were not identified in connection with both spills comprised by this case study. The new NAEW&CF Environmental Protection Force Policy introduced after the 2010 and 2018 fuel spills now stresses explicitly the need to conduct environmental impact assessments and risk analysis.

Continuous proactive review and streamlining of EHS processes and systems, based on lessons learned, could be a requirement in a future NATO wide EHS policy.

3.2 After the fuel spills, training and briefings were reviewed to include lessons learned. Also, procedures for investigating work accidents and environmental incidents were streamlined, which helped improve the investigation process and quality of environmental incident reports. Further, the entity's Environmental Response Plan and checklists were reviewed, this ensured, that required procedures for immediate emergency response and initiation of remedial action were in place and followed in the 2018 spill.

An EHS communication strategy that includes identification of all internal and external stakeholders is an important part of effective incident responses

3.3 The regular exchange of information and routine reporting between NAEW&CF with local Host Nation authorities on environmental incidents was intensified on the working level after the 2010 fuel spill. This led to a better coordinated communication with external stakeholders after the 2018 fuel spill.

Having a sufficient management system in place enables effective responses to incidents

3.4 NAEW&CF Headquarters' environmental management system was used to help minimise the environmental impacts that the 2018 fuel spill had on the area surrounding the building where the spill happened and nearby communities.

Reporting to higher command and/or NATO strategic level committee or similar did not occur, but a comprehensive view might be beneficial for decision making stakeholders

3.5 NAEW&CF did not report the health and safety and/or environmental effects of the 2018 fuel spill on its staff and surrounding communities to SHAPE, NATO Allied Air Command or a strategic-level NATO committee because there was no requirement to have reported those effects and also due to the fact that there were no significant health and/or safety effects to be considered. Since the fuel spills, NAEW&CF has introduced a Significant Incident Reporting Requirement to both Allied Air Command and SHAPE. Incidents like these fuel spills would now be reported as significant incidents.

**Allied Command Transformation, NATO Communications and Information Agency,
and NATO Support and Procurement Agency Formal Comments
on the Performance Audit Report**

1. Allied Command Transformation

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ANNEX A TO
ACT/RM/BS/TT-3924/SER:NU;
DATED APR 21

**HQ SACT FORMAL COMMENTS TO IBAN DRAFT REPORT ON THE PERFORMANCE
AUDIT ON NATO EHS MANAGEMENT POLICIES AND PRACTICES**

1. ACT Feedback

a. Occupational Health and Safety. Overall, HQ SACT concurs with the International Board of Auditors – NATO (IBAN) findings. In order to provide an update on HQ SACT's progress solidifying Occupational Health and Safety practices, the following statements of fact are for consideration. The following key success factors have been achieved since the original audit submission on 24 November 2020. Supporting documentation is available upon request.

- (1) Planning and Implementation. HQ SACT's Health and Safety directive is fully implemented. ACT has completed installation of COVID mitigation measures throughout the building.
- (2) Education and Training. Implementation includes establishment of Command Safety Representatives (CSR), training CSRs, and including Health and Safety as a topic in HQ SACT's Newcomer Orientation Training.
- (3) Communication. Baseline building inspections and deficiency closeout was performed. The initial HQ SACT Health and Safety Command Assessment Report was completed and promulgated. Quarterly Health and Safety committee meetings have been conducted.

b. Environmental Protection. Overall, HQ SACT concurs with the IBAN findings. In order to provide an update on HQ SACT's progress solidifying Environmental Protection practices, the following statements of fact are for consideration. The following key success factors have been achieved since the original audit submission on 24 November 2020. Supporting documentation is available upon request.

- (1) Planning and Implementation. Converted Water Source Heat Pump (WSHP) Refrigerant from R22 to R410a. To date 30 of 143 WSHPs completed. Implemented environmentally friendly sanitation and cleaning products/procedures throughout ACT building.
- (2) Education and Training. Grease trap and Galley Environmental Certification. Environmental Compliance Assessment Training and Tracking System Training (equivalent to Host Nation Hazardous Material (HAZMAT) training and certification).

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(3) Information Management and Documentation. A 'Satisfactory' assessment on all Naval Facility (NAVFAC) inspections. Performed Air Quality Survey to determine condition/performance of HVAC ducting throughout HQ SACT building.

c. Energy Management. Overall, HQ SACT concurs with the IBAN findings. In order to provide an update on HQ SACT's progress solidifying Energy Management practices, the following statements of fact are for consideration. The following key success factors have been achieved since the original audit submission on 24 November 2020. Supporting documentation is available upon request.

(1) Policy. Energy Conservation Directive approved by Chief of Staff (COS). This directive applies uniform standards and best practices across HQ SACT for responsible energy consumption and energy savings. Attached as Enclosure 1.

(2) Planning and Implementation. SOLAR system installation and Light Emitting Diode (LED) lighting conversion commenced and on track for completion by May 2021. 40 percent of HQ SACT motor pool vehicles replaced with electric vehicles, to include installation of electric vehicle charging stations.

(3) Communication. Regimen of all-hands alerts/reminders (i.e. blog posts and computer popup messages) for energy conservation measures used as an Energy Management information campaign to promulgate best practices and lessons learned to HQ SACT staff.

(4) Information Management and Documentation. Performed Air Quality Survey to determine efficiency of HVAC ducting throughout HQ SACT building.

2. JALLC Feedback

Concur with IBAN findings. In particular, paragraph 6.2 of the IBAN Report provides an opportunity to standardize strategic concepts, principles, performance targets and key performance indicators across the Alliance. It is imperative to design a fit-for-purpose system enabling each NATO Command or Entity the adequate flexibility to adjust the system and requirements to its organizational structure. This will also require sufficient human resources allocated and local Host Nation regulations adhered to.

3. JFTC Feedback

Concur with IBAN findings. No additional comments.

4. JWC Feedback

Concur with IBAN findings. No additional comments.

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2. NATO Communications and Information Agency



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NCIA/IA/2021/08074

Annex

International Board of Auditors for NATO (IBAN) draft Performance Audit Report on the NATO occupational health and safety, environmental protection, and energy efficiency management policies and practices – IBA-AR(2021)0006

Formal Comments of the NCI Agency

Overall, NCI Agency supports a common approach with NATO wide policy in this area. However, we do not support the creation of yet another committee to generate requirements without the required funding. Standards and guidance should be provided to Agency Supervisory Board rather than creating a new committee. It must also take into account that meaningful objectives and KPIs must necessarily be NATO body specific and consider the specific location of each site.

Resources

The key issue of resourcing was not reflected or addressed neither in the assessment of compliance set out in table 4 'Summary of key success factors present in occupational health & safety management systems of 24 NATO entities' (page 2-12) nor in the benchmarking element.

If the purpose of the audit aims to "evaluate if NATO entities have occupational health and safety, environmental and energy management systems that efficiently, effectively and economically address risks to the Alliance and meet international good practices" an assessment of resources committed in comparison to the size of the organisation and footprint, is a necessary part of the criteria and should be put into context for the benefit of all stakeholders against resources available. EHS responsibility in most cases is down to one or two individuals in relatively recently created posts.

Good EHS systems are not cost neutral and in fact require significant input with a multidisciplinary approach.

For the NCIA, the customer funded model with a cap on 27% overhead is a very real constraint, in particular when allied with a complex geographical footprint, a diverse workforce mix of military, civilian and contractors, and multiple main sites across a range of Host Nations and legislative frameworks.

Resourcing is required to retain competent health & safety professional advice; invest in technology, equipment, systems; design and deliver processes & procedures; maintain, inspect, audit; provide information, instruction & training; control contractor activity; communicate; and coordinate activities in a safe manner. The more complex the operations and higher number of locations, the more resource is needed.

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Duty of care

Good H&S management is based on three key drivers: legal compliance, financial costs & penalties and the moral responsibility of organisations. Only one was addressed in the report – legal. No mention was made of the moral 'duty of care' NATO owes to its people which would be a key definition going forward.

Business Continuity & Crisis Management

There is an element of confusion between the establishment of an EHS system ensuring the capacity to adapt quickly in a crisis such as the pandemic response (2.16 3) and.... (please have a look at this sentence, something is missing here). Business Continuity Planning and Crisis Management is a separate discipline & determines the effectiveness of crisis response which requires a multi-disciplinary approach. For the NCI Agency, H&S expertise provided key processes, guidance and risk management to the pandemic response. An EHS system is not primarily aimed at effective crisis management although containing an element of emergency preparedness.

ISO

Implicit in the audit is alignment with International Standards. This has significant resource implications which should not be discounted.

Environmental and Energy management

The Agency wishes to note that while the Agency might not have an Agency dedicated Environmental and Energy management system policy in place, to be derived from an overarching NATO policy which is lacking at this time, it does in fact comply with the applicable Host Nation (HN) legislation as part of the Facility Management (FM) Branch under Business As Usual.

The agency is in full Operating and Maintaining (O&M) control at The Hague, The Netherlands and Oeiras, Portugal. These brand new sites have been built by the respective Host Nation (HN) in accordance with legislations, norms and standards and the Agency operates and maintains these sites in accordance with the applicable norms, standards and legislations. Contractor provided services are subject to quality Assurance if in line with requirements and applicable norms and standards.

Planning and Implementation is based on an O&M plan with subsequent execution (Preventive and Corrective maintenance, monitoring and evaluating). Considering these are brand new sites and at The Hague, the redevelopment construction has just been formally handed over by the HN, the matching of the Facility Management Organisation and subsequent resources are work in progress. Staff competencies, education, training, development and where applicable required certifications, are aligned or in the process of being aligned as per Facility Management standards and best practices.

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The Agency also wished to note that pertaining to our footprint at Brussels HQ and in Mons, we are tenants and although not accountable, the Facility Management branch does exercise oversight to the extent possible and within resource availability.

Comments on Recommendations

6.2.1 Establish the competence of any strategic level Committee, sufficient to support the competent EHS specialists embedded in NATO entities. Define the purpose of any strategic level Committee in terms of benefit provided to NATO Bodies.

6.2.1 1) & 2) Establish the concept of a consultative strategic level Committee to support the ongoing work within NATO entities, recognizing the fragility of resources and not imposing an increased reporting burden on those resources, which prevents progress within organisations.

6.2.1 3) & 4) Recognise EHS objectives & KPIs, while within a broad framework, must be appropriate to each NATO Body, subject to resources available, and may differ. Specific meaningful objectives and KPIs need to be drawn up by and tailored by each NATO Body, specific to the context & complexity of their organization. Recognise that consultative approach is key to EHS success.

6.2.1 5) & 6) Recognise that monitoring, evaluation and annual reporting require resources.

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3. NATO Support and Procurement Agency



NATO Support and
Procurement Agency
(NSPA)

Capellen | Luxembourg

Peter Dohmen

General Manager
Directeur Général

G/2021/2041

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7 April 2021

Mr Amipal Manchanda
Board Member
International Board of Auditors for NATO
Boulevard Léopold III
B – 1110 Brussels

SUBJECT : DRAFT PERFORMANCE AUDIT REPORT ON THE NATO OCCUPATIONAL
HEALTH AND SAFETY, ENVIRONMENTAL PROTECTION AND ENERGY
EFFICIENCY MANAGEMENT POLICIES AND PRACTISES

REFERENCE : IBA-A(2021)0033 dated 26 March 2021

Thank you for the opportunity to review the draft report before it is finalized. The report is clear in each of the areas considered and we find no factual errors. It was noted that you use the NAEW 2018 fuel spill as an example throughout the environmental management element of the study yet make no mention of the experience in this area of the Central Europe Pipeline System Programme, operating under NSPA and its strong links to national and international fuel spill management and environmental organisations.

While the NSPA is fully supportive of the need to pursue EHS initiatives and very willing to engage, it will be necessary to address the broader intent of compliance and reporting to higher NATO authorities. The NSPA is a customer funded organisation and any additional requirements for reporting or compliance with new policy adds to the overhead and hence costs to our customers under the "costs lie where they fall" principle. Furthermore, our Agency Supervisory Board has expressed specific concern over any ambition to pursue environmental protection and energy efficiency initiatives, as there is currently no direct customer requirement in that respect. If any new compliance requirements result from this report, it would be in everyone's interest to ensure that they were centrally funded to allow NSPA to achieve the expected standards.

Paul Hammond
Acting General Manager

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Abbreviations

AIRCOM	Allied Air Command
AWACS	NATO Airborne Warning & Control System
CIS	Communications and Information Systems
CMRE	Centre for Marine Research and Experimentation
CSO	Collaboration Support Office
EHS	Environmental Health and Safety
EU	European Union
HQ SACT	Headquarters Supreme Allied Commander Transformation
IBAN	International Board of Auditors for NATO
IMS	International Military Staff
INTOSAI	International Organisation of Supreme Audit Institutions
IS	International Staff
ISO	International Standardisation Organisation
JALLC	Joint Analysis Lessons Learned Centre
JFCBS	Joint Force Command Brunssum
JFCNP	Joint Force Command Naples
JFCNF	Joint Force Command Norfolk
JFTC	Joint Force Training Centre
JWC	Joint Warfare Centre
LANDCOM	Allied Land Command
MARCOM	Allied Maritime Command
NAGSF	NATO Alliance Ground Surveillance Force

NAGSMA	NATO Alliance Ground Surveillance Management Agency
NAPMA	NATO Airborne Early Warning and Control Programme Management Agency
NAEW&CF	NATO Airborne Early Warning and Control Force
NCIA	NATO Communications and Information Agency
NCISG	NATO Communications and Information Systems Support Group
NSPA	NATO Support and Procurement Agency
OCS	Office of Chief Scientist
SHAPE	Supreme Headquarters Allied Powers Europe
SJLSG	Standing Joint Logistics Support Group
SOFA	Status of Forces Agreement
STO	Science and Technology Organisation