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Environmental Tools for Use during Military Exercises

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I N S T I T U T E F O R D E F E N S E A N A L Y S E S

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Susan L. Clark-Sestak, Project Leader

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Executive Summary

For more than a decade, defense environmental subject matter experts from Finland, Sweden, and the United States have collaborated to develop guidance and tools for environmental considerations during deployments and military exercises. The three nations recognize that a failure to integrate environmental considerations into operational and tactical-level planning increases the risk to the health and safety of military personnel and civilian non-combatants. In addition, inadvertent damage to the natural environment or to significant cultural or historic resources can complicate the attainment of the desired strategic end state through the loss of political capital, negative public image, and increased overall cost.

Through trilateral collaboration, Finnish-Swedish-U.S. working groups created the *Environmental Guidebook for Military Operations* in 2008 and the *Environmental Toolbox for Deploying Forces: An Awareness Training Supplement to the Environmental Guidebook for Military Operations* in 2013, which was then updated in 2016 and supplemented with materials for operations in cold regions. The third phase in this cooperation has focused on developing environmental guidance, checklists, and field cards for use during military exercises. The appendices of this IDA document contain the products of the most recent collaboration.

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1. The Creation of Environmental Tools

An IDA research staff member has participated in environmental cooperation activities led by U.S. European Command for more than a decade. One of the most productive collaborations has been among defense environmental subject matter experts from Finland, Sweden, and the United States. This paper outlines the history of that trilateral initiative and documents the products that have been created.

A. The Evolution of Trilateral Environmental Collaboration

In 2006, defense environmental leaders from the United States, Finland, and Sweden established a working group to develop a guidebook on environmental considerations for military operations. Each nation designated up to five subject matter experts to participate in the working group. One Research Staff Member from IDA was asked to be part of the U.S. team. The guidebook focuses on providing operational planners with the necessary tools to incorporate environmental considerations throughout the life cycle of military operations. While the end product – like all subsequent products created through this trilateral cooperation – does not necessarily reflect the official policies or doctrine of any nation, its creation was driven by the recognition that a failure to integrate environmental considerations into operational and tactical-level planning increases the risk to the health and safety of military personnel and civilian non-combatants. In addition, inadvertent damage to the natural environment or to significant cultural or historic resources can complicate the attainment of the desired strategic end state through the loss of political capital, negative public image, and increased overall cost.

After the publication of the *Environmental Guidebook for Military Operations*,¹ a trilateral working group, consisting of several of the same subject matter experts (including from IDA) but also including new experts, worked to translate the guidebook into training materials. The initial toolbox was completed in 2013 and was then updated in 2016 with additional information on operations in cold regions. The toolbox is designed to provide all members of a deploying military unit—the commander, the environmental protection officer (EPO), and the soldier/sailor/airman—with a set of environmental awareness training resources to plan and implement sound environmental practices.

B. About Environmental Tools for Military Exercises

The third phase in the Finnish-Swedish-U.S. trilateral cooperation, which began in 2017, has focused on developing environmental guidance, checklists, and field cards for

¹ *Environmental Guidebook for Military Operations*,
<https://community.apan.org/wg/environmentaltoolbox/>, March 2008.

use during military exercises. The appendices of this IDA document contain the products of the most recent collaboration. Appendix A outlines strategic-level considerations, describing why it is important for members of the North Atlantic Treaty Organization (NATO), NATO Partners, and the European Union (EU) to use best environmental practices in their individual, bilateral, or multilateral exercises.

Appendices B and C contain operational-level guidance. They consist of checklists for the environmental protection planner (EPP) and the EPO, for both Host Nation (HN) and Sending Nation(s) (SN). These checklists pose specific questions to ensure that all environmental issues have been covered at each stage of the exercise. They may be amended to meet exercise-specific requirements or best practices.

Appendices D and E consist of tactical-level materials: field cards for the soldier and EPO, which capture the key environmental guidance and procedures for an exercise. The intent of the soldier field card is to provide concise information on emergency procedures, environmental protection restrictions, and key exercise guidance. The EPO card is a more detailed document outlining the specific guidance and procedures for environmental protection during the exercise. For both cards, most of this information is relevant to all exercises and the field cards should require only minor adjustments and modifications to include site-specific information for the exercise, such as maps and information about restricted areas and operations.

The intent in creating these materials is to help standardize environmental documents, procedures, and technical solutions among NATO- and EU-member nations so that it will be easier for troops to use such documents and to know where to look for information. Environmental considerations are broader than environmental protection (EP). As underscored in all of the trilateral initiatives, environmental considerations not only incorporate the EP principle of preventing or mitigating adverse environmental impacts, but also examine the ways in which the environment can affect the safety and health of the troops operating in an exercise, operation, or other military activity.

Appendix A.
Environmental Tools for Military Activities:
Introduction

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Environmental Tools for Military Activities

Version: January 2019

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Environmental Tools for Military Activities

1. Introduction

1.1. The Purpose

This product was created to help harmonize environmental considerations and practices among North Atlantic Treaty Organization (NATO) and European Union (EU)-member nations. If environmental documents, procedures and technical solutions can become more standardized, it will be easier for troops to use them and know where to look for information. Environmental considerations are broader than environmental protection (EP); environmental considerations incorporate not only the EP principle of preventing or mitigating adverse environmental impacts, but also examines the ways in which the environment can affect the safety and health of the troops operating in an exercise, operation, or other military activity. From an exercise standpoint, environmental considerations can enhance the military's public image and can reduce remediation or clean-up costs.

The environmental guidance and responsibilities for both Host Nations (HN) and Sending Nations (SN) contained in this product are designed mainly for use in exercises. However, some of this information could also be applied to other types of military activities.¹ In planning for an exercise, checklists are a simple but critical practice to ensure that environmental considerations have been taken into account. It is recognized that there will always be site-specific considerations for a particular exercise, but some considerations will be common to all scenarios. The checklists and templates contained in this product have been designed to assist Environmental Protection Planners (EPP) and Environmental Protection Officers (EPO)² in the planning and execution of an exercise. For soldiers, applicable information can be inserted easily into field card templates and, once distributed, troops will have the information they need at their fingertips, organized into a more standard format from one exercise to another.

In preparing this document and the annexes (the checklists, templates, and field cards), lessons learned were drawn extensively from Nordic and Baltic exercises and operations, but can be applied throughout NATO or EU. Importantly, NATO terminology and symbols have been adhered to as much as possible, although environmental symbols are not all standardized. Hopefully, these materials can be used as a basis to enhance NATO's Allied Joint Environmental Protection Publications (AJEPPs) in the future, or other national or international documents and practices as applicable.

1.2. The Scope

This product recommends best practices to be used in exercises by members of NATO, NATO Partners, and the EU. They can be used by an individual nation or during bilateral or multilateral exercises. The primary operational domain is land, but some consideration was also given to air and maritime. The product focuses on three levels of guidance:

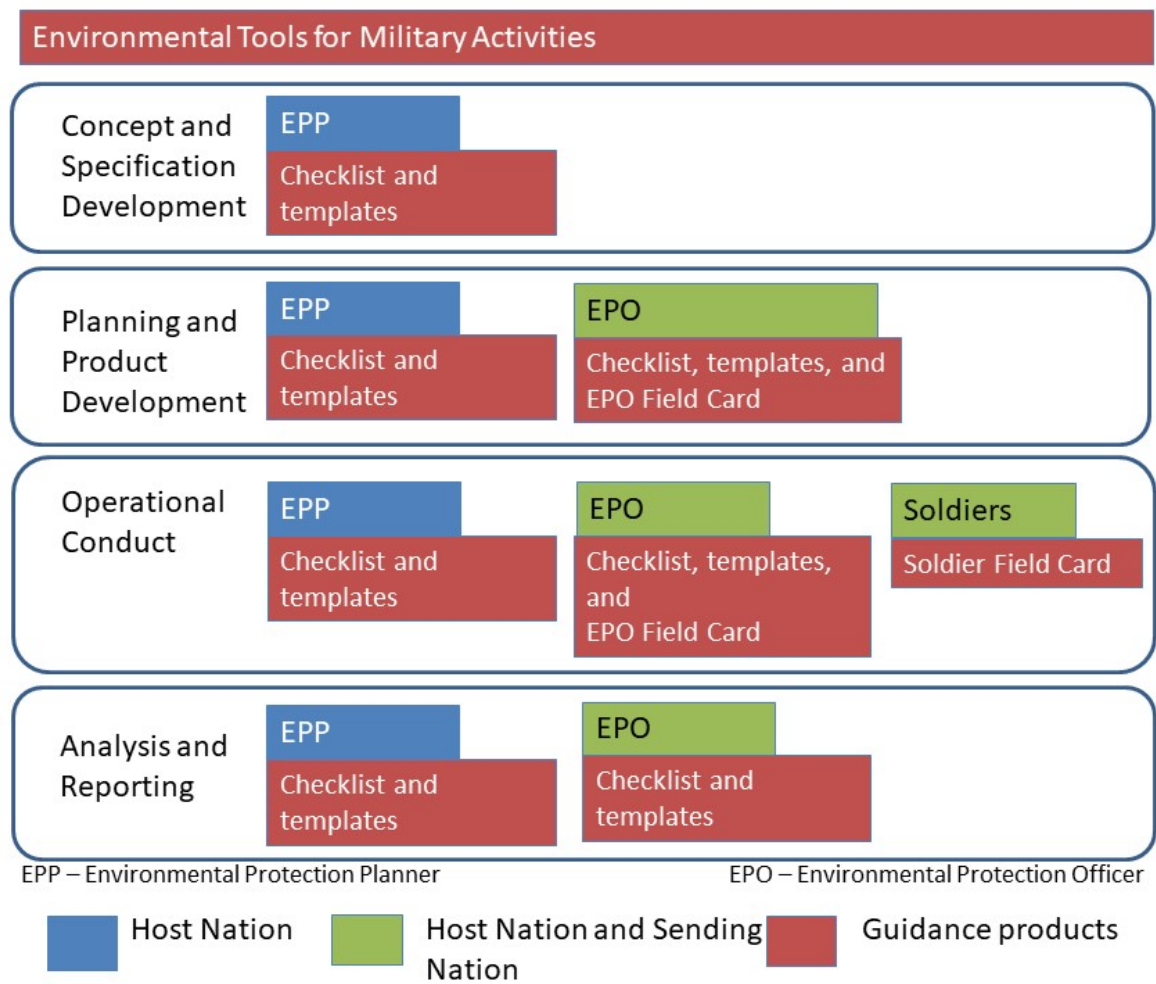
- Strategic: the introductory overview document
- Operational: checklists and links to relevant templates and references for EPPs and EPOs, both among HN and SN (Annexes A and B)
- Tactical: field cards for both the EPO and individual soldiers, adaptable to individualized exercises, taking into consideration issues such as seasonal and environmental variations. These cards contain generic information and place-holders for site-specific information. Completed samples for both of these field cards are also included (Annexes C and D)

Figure 1 shows what materials are especially useful for different phases of the exercise and for which personnel, including whether they are HN or SN personnel. Checklists and templates to be used in each phase are also noted, but it is important to keep in mind that these are only recommendations and not every applicable document is listed in the figure.

¹ The Environmental Toolbox for Deploying Forces offers additional information for deployments and operations. It can be found by going to <https://community.apan.org> and typing "environmental toolbox" into the search bar.

² The Environmental Protection Officer (EPO) is an officer, non-commissioned officer or civilian to whom environmental protection responsibilities have been assigned by a commander. The EPO should have EP experience and training, at a minimum having attended the 5-day NATO Military Environmental Protection, Practices, and Procedures Course (NMEPPPC).+

Figure 1: Tools Available for Use



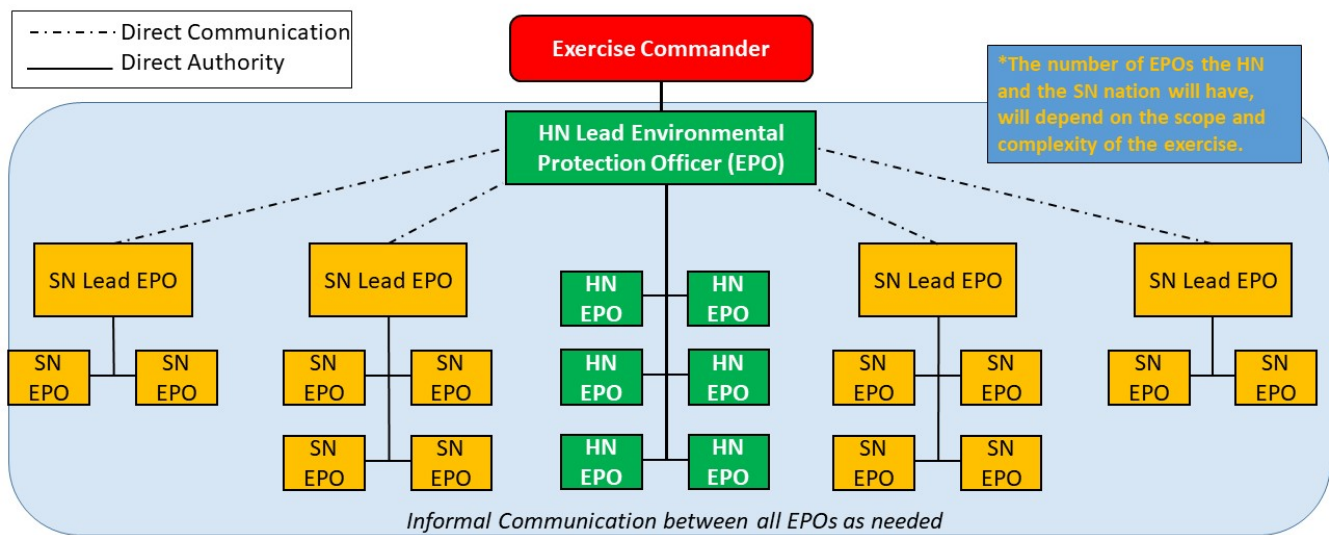
1.3.The Target Group and Environmental Roles

Everyone has environmental responsibilities, so the target audience for this product is broad for both the HN and SN. Environmental considerations need to be taken into account in the earliest stages of exercise planning.

It is recommended that a HN planning staff member with good knowledge of environmental issues be designated the EPP with responsibility for integrating EP considerations. Certainly, the HN-designated lead EPO for the exercise must have environmental knowledge. The HN EPO and EPP should work closely together, using the tools (checklists and templates) developed here; EP inputs are required throughout the life cycle of the exercise. The HN EPP/EPO’s responsibilities include developing field cards by adding site-specific information to the generic version developed here. During the exercise itself, these field cards will be invaluable to all exercise participants, not just the EPO.

Particularly in large-scale exercises, it is common that each HN and SN unit would have a designated EPO; not all these personnel will possess extensive environmental expertise. Just as HN has an EPO lead, each SN should designate a lead EPO. Each SN EPOs will be responsible for direct communications with the HN lead EPO (in addition to the SN’s chain of command). In turn, the HN lead EPO will serve as the centralized environmental POC and the overall environmental advisor to the commander for the exercise. Informal communications among all the EPOs is encouraged to share environmental information. These theoretical relationships are depicted in Figure 2.

Figure 2. Theoretical Relationship of HN and SN EPOs for a Multinational Exercise



1.4. Media Used

All the materials and blank templates produced by this working group have been posted on an openly accessible area of the All Partners Access Network (APAN). The materials may be downloaded by anyone (no APAN account is necessary) by going to <https://community.apan.org> and typing “environmental toolbox” into the search bar.

Once this information is accessed from APAN, each HN and SN can then decide how to make the soldier and EPO field cards available after all the necessary information has been included, whether through a mobile phone application (app) or by printing them. While an app is one solution, it is not always possible to use this type of media due to military download policies, internet access issues in remote geographic locations, or information security concerns once exercise specific information is filled out.

2. Environmental Principles

Military activities have various impacts on the environment. To promote sustainability, the United Nations (UN), EU, and NATO have defined environmental policies and principles for different military activities, from operations to training. The following environmental principles are important to take into consideration; they are not in conflict with existing UN, NATO or EU guidance, international agreements or legislation. These principles are relevant especially for military exercises and are applicable to national or international activities. Moreover, HN environmental documents will provide specific EP guidance during exercises.

2.1. A Precautionary, Proactive, and Preventive EP Approach

It is vital to observe a reasonable standard of care for the environment when military exercises are conducted. It presupposes sufficient knowledge about applicable environmental laws and procedures, demands an overall cautious approach for the sake of the environment and force health, and requires responding to environmental incidents as soon as possible. The prevention (and reduction) of waste, spills, and other environmental damage is more environmentally friendly and less costly than the disposal of waste and remediation of damage. Part of this is a safety precaution: any environmental damage whose magnitude is unknown should be assumed to be significant and protective measures should be designed to protect human life and the environment. Immediate protective measures should be introduced as soon as possible, and should draw upon the best available technology suitable for the conditions.

2.2. Communication to Enhance Credibility

Through effective communication, the military builds trust and enhances its credibility with the public. While not every detail about an exercise can be published, much of the environmental work can be shared. To the maximum extent possible, the military should be proactive about discussing EP measures; addressing any disinformation that accuses the military of poor environmental practices;

admitting if and when there has been environmental damage; and, importantly, how any such damage will be fixed. Throughout the exercise, communication with the public, media, and others is paramount, but should be conducted only by designated HN officials unless otherwise approved by the HN.

2.3. Polluter Pays

Before starting the exercise, it is important to document the existing environmental conditions. This will make it possible to determine whether environmental damage has been caused and, if so, by whom. Producers of waste and environmental damage are ethically and legally (therefore also, generally, financially) responsible for the proper disposal of contamination or remediation of pollution. The Polluter Pays Principle may be applied between nations participating in the exercise. These kind of agreements should ideally be incorporated into one of the exercise planning documents such as a Technical Arrangement. The Polluter Pays Principle may also be applied between the public and HN military in those cases in which private land is used for exercise purposes.

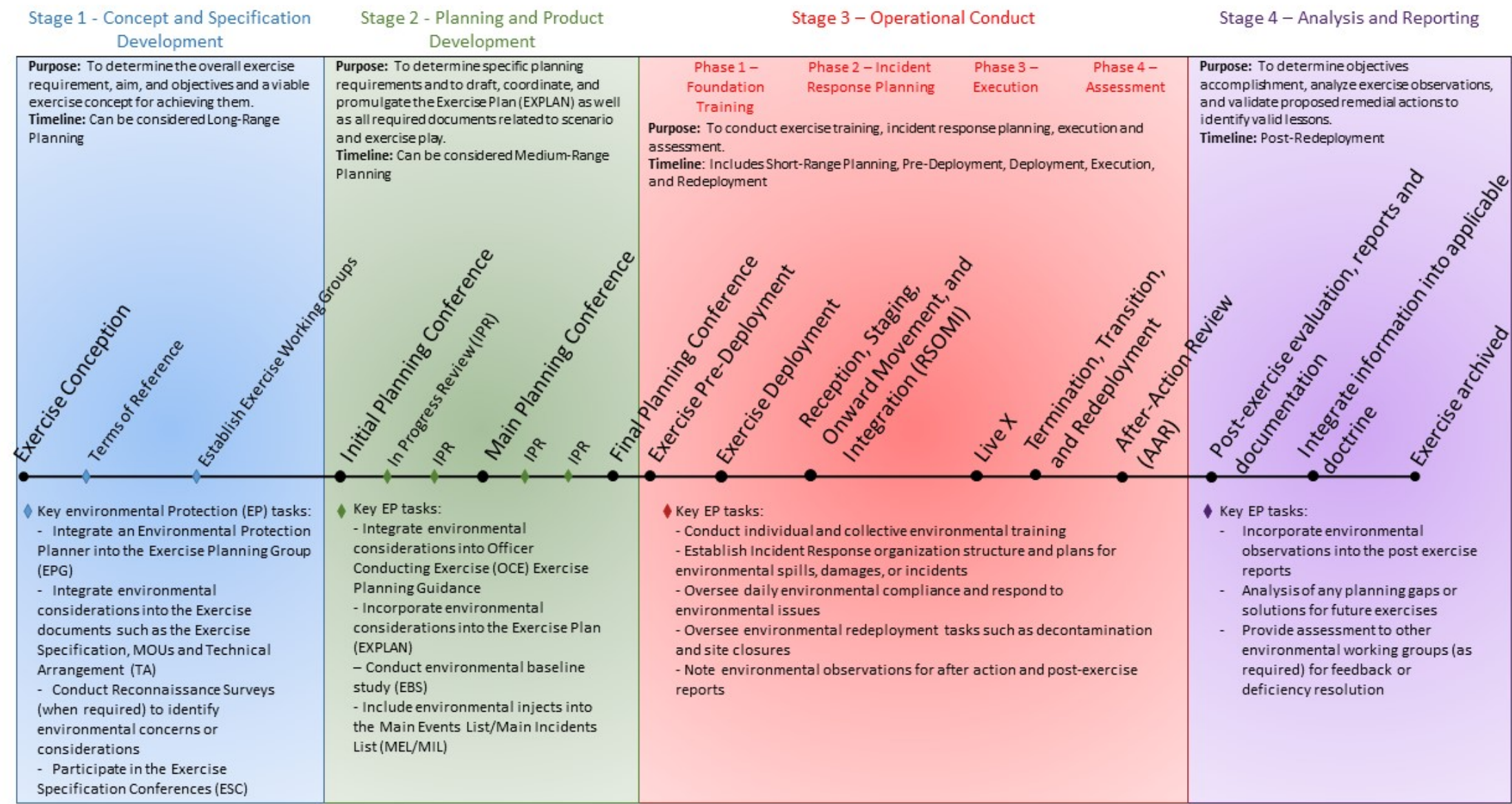
3. Life Cycle of the Exercise

Each exercise necessarily has its own timeline, depending on its complexity, the number of nations and troops involved, etc. Planning can easily begin two years prior to the start of the exercise while payment and remediation for environmental damages can last several years after the exercise.

Regardless of the timeline, each exercise will consist of four stages (Figure 3), as described in NATO's *BI-SC Collective Training and Exercise Directive (CT&ED) 75-3*, dated March 2013. In the example below, the key EP tasks are described for these four stages. While the timeline for each exercise will vary, this provides a template for large-scale exercises.

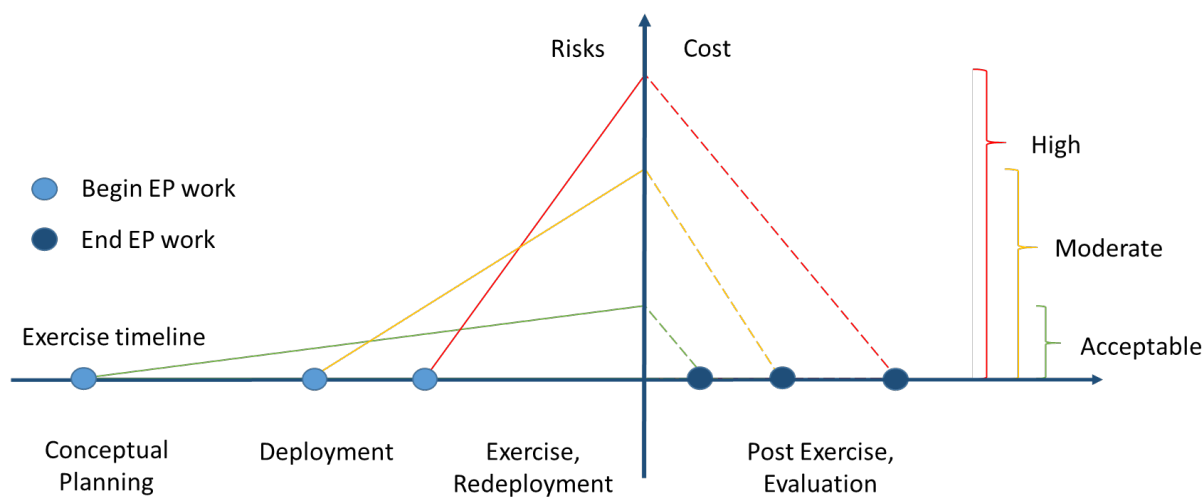
Environmental considerations play a role in all stages of an exercise. If the environment is taken into consideration early on, environmental challenges are more likely to be minimized. On the contrary, the risk of environmental impacts – which means also increased health and safety risks – increases appreciably if the environment is taken into account too late in the process. For example, if secondary containment is not planned for during the storage of hazardous waste or if refueling happens without necessary precautionary measures, these increase the risk of a spill and the resulting clean-up costs. This increased risk is illustrated in Figure 4, which shows that the risk and cost continue beyond the end of the exercise. This diagram is offered strictly for illustrative purposes because actual cost and remediation timelines vary greatly, depending on the type and extent of contamination. For example, if there is an petroleum, oils, and lubricants (POL) spill on soil that can easily be dug up to a level where all contamination has been removed, this will cost much less – and pose a much lower risk – than if the POL seeps into the groundwater.

Figure 3: Key EP Tasks in the Exercise Stages



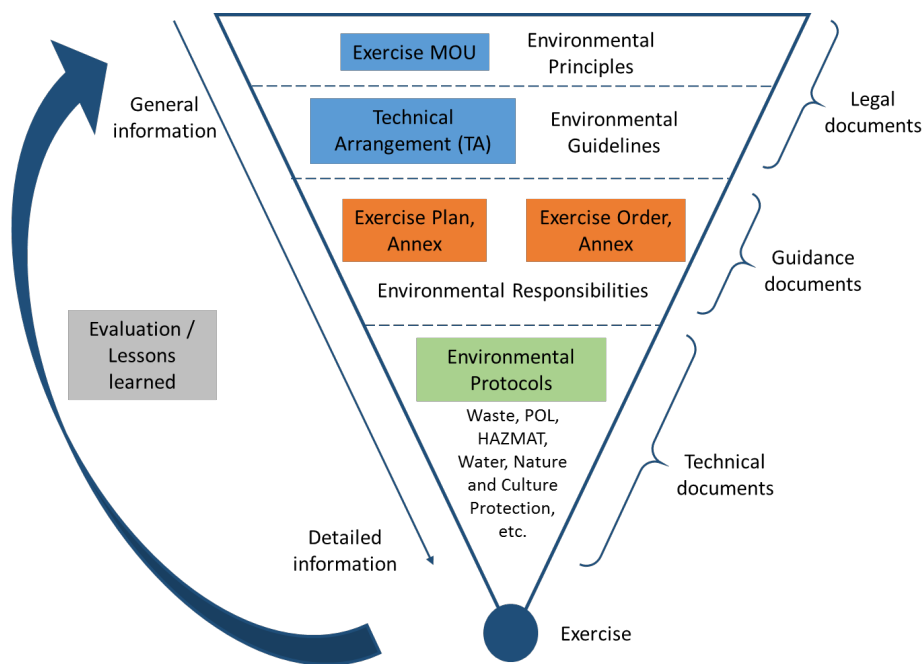
* Reference: BI-SC Collective Training and Exercise Directive (CT&ED) 75-3, March 2013

Figure 4: Delay in Environmental Considerations Increases Risk and Cost



Each exercise will also have different types of documentation. In some cases, there will be an overarching exercise Memorandum of Understanding (MOU) between two or more countries. Under this MOU can be a Technical Arrangement (TA), which outlines the exercise in more detail, including environmental aspects. Both these documents are at a more political, legal level. In parallel, the Exercise Plan and then the Exercise Order provide the guidance, spelling out the roles and responsibilities for each country in the context of that exercise. Environmental roles and responsibilities are included in both of these documents. At the lowest level, there are technical documents, or protocols, on issues such as waste management, POL, and cultural protection. In all cases, an evaluation of what went right and what when wrong in the planning and execution is important to document. These lessons learned should then be incorporated into planning for future exercises. This structure is depicted generically in Figure 5.

Figure 5: Hierarchy of Exercise Documents and EPP/EPO Responsibility



3.1. Stage 1: Concept and Specification Development

The purpose of this initial stage is to determine the overall exercise requirement, aim, and objectives, and a viable concept for achieving them. For the HN, about 24 months in advance of the exercise, the EPP must insert him/herself into the planning process and must remain involved in all high-level HN and HN-SN planning meetings, as described in the Checklist annex. This involvement ensures: (1) that environmental considerations are incorporated into the planning process and official documents and (2) that an environmental message is incorporated into any

strategic communications to help demonstrate that the military is committed to protecting the environment.

It is important to have contact at this early stage with the SNs. Approximately one year before the exercise, there should be a high-level planning meeting, confirming which nations will participate and that there is an environmental POC from each SN.

3.2. Stage 2: Planning and Product Development

This stage is focused on determining specific planning requirements and will require coordination between the EPP and HN EPO. Together they must draft, coordinate, and promulgate the exercise plan as well as all required documents. Once these tasks have been accomplished the EPO will assume primary responsibility for environmental matters by the end of stage 2.

Among the HN EPO responsibilities during this stage, he/she will be involved in:

- Conducting the Environmental Baseline Study and Environmental Impact Assessments for the selected location(s)
- Preparing an Environmental Annex for the Exercise Plan to cover both HN and SN responsibilities, to include protocols for solid waste, hazardous materials (HAZMAT)/hazardous waste (HW), waste water, and a spill response plan
- Assembling environmental awareness training materials (such as field cards) for HN and SN troops, and continuing to provide inputs to strategic communications. An important part of these communications can be working with the appropriate authorities and obtaining necessary permissions for the potential use of civilian lands.

During this stage, the HN EPO should coordinate a meeting with all the SN EPOs, perhaps in conjunction with the Main Planning Conference. The HN should share planning materials so that the SNs have country-specific environmental information and requirements (e.g., consider groundwater level, noise, biodiversity, etc.; that the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Directive must be followed so it is forbidden to use certain chemicals or weapons) and to gain their inputs. Approximately 6 months in advance, the HN EPO should provide EPO and soldier cards to SNs to allow time for translating the materials (if necessary) and then distributing them.

3.3. Stage 3: Operational Conduct

During this stage, the purpose is to conduct exercise training, incident response planning, execution and assessment. HN and SN troops should have reviewed the environmental training materials prior to the start of the exercise, and the EPOs should continue to ensure sufficient awareness and that troops have their field cards with them. Troops should be familiar with what to do in the event of an environmental incident. Because environmental questions and problems can arise during the exercise, it is important for the HN to have a help desk established to answer any questions or problems and provide feedback to both troops and the public.

EPO responsibilities during this stage include: POL and HAZMAT handling; waste management; spill response and reporting; coordination with logistics personnel on things such as vehicle maintenance areas; quality assurance; and re-evaluation of environmental risk. Above all, it is important to maintain environmental monitoring, reporting and documentation; this is both a HN and SN EPO responsibility.

During the execution and assessment part of this phase, the EPO should inspect the exercise areas to determine if clean-up is necessary, develop a closure list, and collect reports from SN EPOs on any environmental damage or impacts. The EPO should ensure appropriate monitoring of the turn in of waste and disinfection of equipment. The EPO's environmental report should be submitted in accordance with the exercise plan environmental protocol, to include incidents (such as spills) and other environmental damage (for example, caused by maneuvering).

3.4. Stage 4: Analysis and Reporting

The purpose of this final stage is to determine how well the objectives were accomplished, analyze exercise observations, validate proposed remedial actions, and identify valid lessons learned. From the EPO perspective, any planning gaps should be identified, complaints and corrective actions should be evaluated to determine what procedures or methods worked best, and then the necessary work should be carried out. Claims and settlements must be processed,

with the HN Lead EPO having responsibility for reviewing environmental-related costs. An After Action Report (AAR) summarizing this work provides important documentation and should be shared with the HN EPP so that the environmental information is incorporated into the overall exercise AAR. It would also be helpful for the HN lead EPO to send the environmental AAR to all SN lead EPOs. Exercise AARs should be archived as appropriate and shared with the Supreme Headquarters Allied Powers Europe (SHAPE) Environmental Officer and NATO’s Environmental Protection Working Group (EPWG). It is recommended that NATO create an AAR exercise repository to serve as a centralized location for these AARs.

4. Checklists and Templates for the EPP and EPO

The checklists for the EPP and EPO pose specific questions to ensure all environmental issues have been covered at each stage of the exercise. The checklists include areas to indicate when the action has been completed and additional reference information when available. The checklists may be amended to meet exercise-specific requirements or best practices.

Several templates are provided. One is a sample MOU between nations; another is a Technical Arrangement, both pertaining to a planned exercise. Another template is an environmental annex for a land-based exercise. Finally, a template for a Daily Experiences Report/Lessons Learned is also included. These templates may also be amended to be more exercise-specific.

5. Field Cards for the EPO and Soldiers

The field cards for the Soldier and EPO capture the key environmental guidance and procedures for an exercise. The intent of the Soldier Field Card is to provide concise information to the Soldier on the emergency procedures, environmental protection restrictions and key exercise guidance. The EPO Card will be a more detailed document outlining the specific guidance and procedures for environmental protection during the exercise. For both the cards, most of this information is relevant to all exercises and the field cards should require only minor adjustments and modifications to include site-specific information for the exercise, such as maps, information about restricted areas and operations, etc. The EPO and Soldier Field Card templates are posted on the APAN website, and the type information to insert have been identified on power point slides. This information can then be tailored and pasted into the template to create a field card for the specific exercise.

6. About the Authors

These products were developed through a trilateral working group of subject matter experts (SMEs) from Finland, Sweden, and the United States. They do not reflect the official policies or products of any nation; rather, they were created to share best practices based on the SMEs’ knowledge and experiences. The authors are listed alphabetically below. We would like to thank other SMEs who have taken the time to comment on drafts of these materials, but any errors or omissions are ours alone.

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7. Definitions and Acronyms³

- AAR: After Action Report
- AJEPP: Allied Joint Environmental Protection Publication
- APAN: All Partners Access Network
- App: Application
- AUL: Authorized Use List
- BI-SC: Bi-Strategic Command
- CECC: Commander's EXSPEC Confirmation Conference
- COA: Course of Action
- CT&ED: Collective Training and Exercise Directive
- EBS: Environmental Baseline Study. A study of the environmental conditions in a defined area prior to the commencement of military activities.
- ECR: Environmental Condition Report. A report on the environmental conditions in a defined area. Note: the report may be periodic or may follow an environmental incident.
- ECS: Environmental Closeout Study. A study of the environmental conditions in a defined area at the cessation of military activities.
- EP: environmental protection. The prevention or mitigation of adverse environmental impacts.
- EPG: Exercise Planning Group
- EPO: Environmental Protection Officer. The Environmental Protection Officer (EPO) is an officer, non-commissioned officer or civilian to whom environmental protection responsibilities have been assigned by a commander. It is recommended that every EPO (or at least all lead EPOs for an exercise) should have EP experience and training, at a minimum having attended the 5-day NATO Military Environmental Protection, Practices, and Procedures Course (NMEPPPC).
- EPP: Environmental Protection Planner
- EPWG: Environmental Protection Working Group
- ESC: Exercise Specification Conference
- EU: European Union
- EXORD: Exercise Order
- EXPLAN: Exercise Plan
- EXSPEC: Exercise Specification
- FI: Finland
- GIS: Geographic Information System
- HAZMAT: Hazardous material(s). Material that may pose a risk for the population, property, safety or the environment owing to its chemical or physical properties or the reactions that it may cause.
- HM: Hazardous material(s)
- HN: Host Nation
- HW: Hazardous Waste
- IPC: Initial Planning Conference
- ITAM: integrated training area management
- MC: Military Committee
- MEL/MIL: Main Events List/Main Incidents List
- MOU: Memorandum of Understanding
- N/A: Not Applicable
- NATO: North Atlantic Treaty Organization
- NMEPPPC: NATO Military Environmental Protection, Practices, and Procedures Course

- OPORD: Operational Order
- PfP: Partnership for Peace
- POC: Point of Contact
- POL: Petroleum, Oils and Lubricants
- PPE: Personal Protective Equipment
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RSOMI: Reception, Staging, Onward Movement, and Integration
- SHAPE: Supreme Headquarters Allied Powers Europe
- SME: subject matter expert
- SN: sending nation
- SOP: Standard Operating Procedure
- SW: Sweden
- TA: Technical Arrangement
- UN: United Nations
- US: United States

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NATO Military Committee (MC) 469/1, *NATO Military Principles and Policies for Environmental Protection (EP)*

NATO STANAG 2582, *Environmental Protection Best Practices and Standards for Military Camps in NATO Operations (AJEPP-2)*

NATO STANAG 2594; *Best Environmental Protection Practices for Sustainability of Military Training Areas (AJEPP-7)*

NATO STANAG 3833, *Symbols for Land Forces Training Area Maps*, July 2016

NATO STANAG 6500, *NATO Camp Environmental File during NATO-Led Operations (AJEPP-6)*

⁴ Note: to ensure you are using the latest version of a NATO document, access NATO publications through: https://www.nato.int/cps/en/natohq/topics_124879.htm.

Appendix B.
EPP Checklist for Multinational Exercises and
Military Activities

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 1: Concept and Specification Development, Long-range planning (Time Frame: Exercise Conception to Initial Planning Conference (IPC))		Yes	No	N/A	Comments	Date Completed	References
1.1	Has an Environmental Protection Planner (EPP) been integrated into the Exercise Planning Team?						Guidebook, page 2; AJEPP4, page 2-1
1.2	Have previous After Action Reports (AARs) for environmental lessons learned during previous exercises been reviewed?						Guidebook, page 7
1.3	Have preventive measures been planned to avoid any concerns from previous AARs?						Guidebook, page 7
1.4	Have exercise planners been informed of or considered:						AJEPP 6, Appendix B
	- Seasonal and nesting restrictions						
	- Environmental concerns that may restrict or affect general planning (e.g. recreation/sport areas, protected habitats, agricultural areas, conservation areas, industrial areas, noise sensitive areas, private lands, hunting/fishing areas, etc.)						
	- Potential environmental impacts or limitations to/from exercise mission (i.e. tanks, heavy vehicles, aircraft, vessels, infantry, ammunition, fuels, etc.)?						
	- Potential environmental impacts from secret/special operations						
1.5	Have applicable Host Nation (HN) environmental laws and regulations been researched and made available to exercise planners?						Guidebook, pp. 2-3
1.6	Has an environmental working group been established to gather and collate environmental intelligence to aid planners?						Guidebook, pp. 9-13

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES
NAME OF EXERCISE:
EPP (Name and Contact Information):

Stage 1: Concept and Specification Development, Long-range planning (Time Frame: Exercise Conception to Initial Planning Conference (IPC))		Yes	No	N/A	Comments	Date Completed	References
1.7	Have environmental considerations been integrated into the Exercise Memorandum of Understanding (MOU), Technical Arrangement (TA) and Exercise Specification (EXSPEC)?						Guidebook, Page 23; Templates
1.8	Are environmental resource requirements (funding, manpower, and equipment) included in the exercise budget?						
1.9	Has an environmental contact list and liaison with local stakeholders been established?						
1.10	Have the Sending Nation Environmental Protection Planners (SN EPP) for planning purposes been identified?						
1.11	Has the availability and usefulness of Geographic Information Systems (GIS) for land and environmental planning and other open source data been researched?						
1.12	Have reconnaissance surveys been conducted to identify initial environmental concerns or considerations?						Guidebook, page 9
1.13	Has an environmental risk analysis been conducted that identifies Courses of Action (COAs) and responsible parties to mitigate environmental risk?						Guidebook, page 10
1.14	Will there be exercise-related construction projects or activities that require an Environmental Impact Assessment or environmental permits?						AJEPP 6, Annex B
1.15	Have exercise planners considered adding environmental injects (such as a major release/spill, discovery of cultural resources, etc.) into the exercise?						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 1: Concept and Specification Development, Long-range planning (Time Frame: Exercise Conception to Initial Planning Conference (IPC))		Yes	No	N/A	Comments	Date Completed	References
1.16	Have sources for potable and non-potable water been identified and the impact of water use on the local population and environment been considered?						AJEPP2, Annex C
1.17	Have refueling points with appropriate storage containers/tanks, secondary containment, and distribution of Petroleum, Oils, and Lubricants (POLs) been identified?						AJEPP2, Annex E
Notes:							

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 2: Planning and product development, Medium-range planning (Initial Planning Conference (IPC) through Final Planning Conference)		Yes	No	N/A	Comments	Date completed	References
2.1	Has an Environmental Annex been included in the Exercise Plan (EXPLAN)?						Guidebook, Appendix 2; Template
2.2	Have environmental considerations been integrated into the Exercise Order (EXORD)?						
2.3	Have the HN and SN EPO positions been integrated into the exercise manning documents?						
2.4	Have HN EPOs for specific areas and their responsibilities been identified?						
2.5	Have contracts or provisions for obtaining potable/non-potable water; solid waste disposal; hazardous waste disposal; sanitary waste treatment and/or disposal; and, spill/decontamination waste disposal been completed?						AJEPP2, Annex C and D
2.6	Has the interface with HN logistics, transportation, medical, safety, security personnel/organizations been established?						
2.7	Has environmental reconnaissance (transport routes, water points, lay-down areas, etc.) been conducted?						
2.8	Have exercise-specific Standard Operating Procedures (SOPs) been developed (spill procedures, claims process, etc.)?						
2.9	Has the contact information for Environmental Protection Planners (EPPs) and Environmental Protection Officers (EPOs) from SNs been identified and sent to HN?						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES
NAME OF EXERCISE:
EPP (Name and Contact Information):

Stage 2: Planning and product development, Medium-range planning (Initial Planning Conference (IPC) through Final Planning Conference)		Yes	No	N/A	Comments	Date completed	References
2.10	Has the information from the initial reconnaissance been shared with SNs? Provided information should include pictures and historical use information.						AJEPP 6, Appendix A
2.11	Has an Environmental Baseline Study (EBS) for the exercise areas already been conducted? If so, does it need to be updated? If not, assign responsibility for conducting the EBS.						Guidebook, Page 11 and Appendices 9-12; AJEPP 6, Appendix A
2.12	Has the following material been prepared and sent to SNs? <ul style="list-style-type: none">- Information on GIS for land and environmental planning- HN Environmental Code, regulations and Standard Operating Procedures (SOPs)- Restriction maps- Authorized Use List (AUL) for hazardous materials (hazmat)- Responsibility for provision of environmentally-related supplies and equipment (e.g. spill kits, secondary containment, Personal Protective Equipment (PPE), etc.)- Compliance requirements with customs regulations- Soldier Field Cards- EPO Field Cards						
							Guidebook, Appendix 4
							Field card templates
							Field card templates
							Templates

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES
NAME OF EXERCISE:
EPP (Name and Contact Information):

Stage 2: Planning and product development, Medium-range planning (Initial Planning Conference (IPC) through Final Planning Conference)		Yes	No	N/A	Comments	Date completed	References
	- Exercise templates, to include daily experiences and lessons learned report, spill report, claims report, etc.						
2.13	Has the HN applied for required permits (land use, water use, range clearance, etc.)?						
2.14	Have environmental considerations been integrated into the Strategic Messages to the public?						
2.15	Has the communication with local stakeholders been on-going to ensure information has been disseminated?						
2.16	Has the environmental risk analysis been reassessed?						
2.17	Has the final environmental-related map preparation been completed?						
2.18	Have the environmental considerations along transit/maneuver routes been identified?						
2.19	Have vehicle wash racks and repair areas been established?						
2.20	Has the decontamination plan (cleaning and disinfection of materiel and vehicles before leaving the exercise area) been established?						
2.21	Has a survey and/or mobile application (apps) for gathering lessons learned information from unit EPOs or leaders been identified or developed?						Guidebook, Page 41; Appendix 14

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)	Yes	No	N/A	Comments	Date completed	References
Phase 1: Foundation and training						
Have the environmental education requirements for EPOs been established, planned and implemented?						Guidebook, Pages 15-16; Environmental Toolbox; AJEPP4, page 5-1
Confirm SNs have most up-to-date copies of the following:						
- SOPs						
- Templates						
- Logistical requirements						
- EPO Field Card						
- Soldier Field Card						
- Contract limitations						
- Area maps						
- Other						
Has a list of HN EPOs for specific exercise areas with the Training Area been distributed to SN EPOs?						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)	Yes	No	N/A	Comments	Date completed	References
Phase 1: Foundation and training						
Has a liaison with other exercise POCs (medical, safety, ammunition, logistics, water, fuel, etc.) been established?						Guidebook, page 15
Has an Environmental Log for HN Exercise EPO been established?						
Has an EPO/EPP coordination (e.g. Environmental Management Board) “battle-rhythm” been established?						Guidebook, page 20
Have HN EP briefings been conducted with unit EPOs or directly to exercise participants, to include environmental SOPs?						Guidebook, page 16
Notes:						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 2: Incident Response Planning							
3.2.1	Are the communication channels with local stakeholders to report issues with movement, noise, etc. established and working?						
3.2.2	Have environmental reporting requirements been developed and communicated, to include cultural resource discoveries, site-specific spill response procedures, spill report forms, and environmental damage claims.						Guidebook, Appendix 5, Appendix 7; AJEPP6, Annex C, Template
3.2.3	Have the reporting templates been sent to the SN EPOs?						
3.2.4	Are “no-go” areas, refueling areas, recycling points, solid waste disposal, cultural property, protected areas, water sources or water purification areas, and hazmat/hazardous waste (HW) accumulation points clearly marked in the field?						Guidebook, Appendix 14
3.2.5	Have surveys/apps been issued to EPOs to collect lessons learned information?						
	Notes:						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 3: Execution (duration of exercise)							
3.3.1	Have surveys/apps been issued to unit EPOs/leaders to collect lessons learned information?						
3.3.2	Have daily reports been collected from SNs?						
3.3.3	Have periodic reports to the Commander on environmental issues/concerns been developed (as required)?						
3.3.4	Have the following periodic checks for compliance been conducted?						
	- Stocked spill kits, drip pans, hazmat/waste storage, etc.						
	- Have drivers been using only designated bridges and crossing sites?						
	- Are refueling or field maintenance operations being conducted away from wetlands or surface waters?						
	- Are units being monitored to ensure they are observing prohibitions against discharging wastewater into wetlands or waterways?						
	- Are units being monitored to ensure they are observing prohibition against filling any wetlands areas?						
	- Has unit compliance with community/installation noise abatement hours been monitored?						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 3: Execution (duration of exercise)							
3.3.5	Are Environmental Condition Reports being completed and submitted to HN EPOs if incidents occur?						Guidebook, Appendix 6
	Notes:						

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 4: Assessment (end of exercise)							
3.4.1	Have exercise areas been inspected to identify areas units needed to clean up/ correct environmental issues/give unit closure checklist?						Guidebook, Appendix 8
3.4.2	Have surveys from units regarding lessons learned been collected?						
3.4.3	Have EPOs signed off on closure checklist prior to units moving to staging area for redeployment?						
3.4.4	Have the HN EPOs collected information from inspections and closure checklists for the environmental site closure survey/report?						AJEPP6, Annex C

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 4: Assessment (end of exercise)							
3.4.5	Has the schedule for units to move to staging and decontamination areas been developed and communicated?						
3.4.6	Have areas to turn-in waste been established?						AJEPP2, Annex C
3.4.7	Have extra containers, overpack containers, marking and labeling materials, and PPE been provided and made available for units?						
3.4.8	Have decontamination areas for equipment and vehicles been established?						
3.4.9	Has the disposal of decontamination waste been monitored for compliance with SOP/regulations?						
3.4.10	Has the packaging of materials and equipment for redeployment been monitored for compliance with SOP and customs regulations?						
3.4.11	Have materials and equipment been prepared and loaded for transportation in compliance with SOP and customs regulations?						
3.4.12	Have transportation routes and related environmental considerations (spill kits, spill report forms/information, etc.) been identified and communicated?						AJEPP2, Annex E

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 4: Assessment (end of exercise)							
3.4.13	Has the compliance monitoring of closure of refueling sites, any spill/release sites, waste management sites, etc. been conducted?						AJEPP2, Annex E
3.4.14	Have areas requiring clean up actions been re-inspected and approved?						
3.4.15	Have the costs incurred from each nation to include waste disposal, corrective actions, land restoration, etc. been identified?						
	Notes:						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 4: Analysis and Reporting (1-4 weeks after exercise)		Yes	No	N/A	Comments	Date completed	References
4.1	Has the environmental closure report documenting any environmental issues, corrective actions, and any pending actions needed been completed?						Guidebook, Appendix 13
4.2	Have all complaints been reviewed and analyzed to determine patterns or trends? Have complaint resolutions been analyzed to determine which procedures/methods (if applicable) worked best?						
4.3	Have risk assessments been reviewed to determine if any risks were not identified; whether Courses of Action (COAs) were implemented and how well they worked; and, whether any new COAs were developed?						
4.4	Have any new best practices for environmental issues been evaluated and analyzed how they could be addressed/implemented for future exercises?						
4.5	Have logistics SOPs/contracts been reviewed to identify any changes needed for future SOPs/contracts?						
4.6	Has an After Action Report been developed to identify any gaps in planning or new courses of action to help improve future exercises?						Guidebook, Appendix 15
4.7	Have all documents regarding environmental considerations to include AARs and lessons learned been shared with Supreme Headquarters Allied Powers Europe (SHAPE) Environmental Officer and the North Atlantic Treaty Organization (NATO) Environmental Protection Working Group?						

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

Stage 4: Analysis and Reporting (1-4 weeks after exercise)		Yes	No	N/A	Comments	Date completed	References
4.8	Have all contracts, agreements, records, and documents with regard to environmental considerations been archived for future reference?						Guidebook, Page 26
	Notes:						

Checklist Acronyms					
AAR	After Action Report	EXPLAN	Exercise Plan	NATO	North Atlantic Treaty Organization
AJEPP	Allied Joint Environmental Protection Publication	EXSPEC	Exercise Specification	POC	Point of Contact
App	Application	GIS	Geographic Information System	POL	Petroleum, Oils, and Lubricants
AUL	Authorized Use List	Hazmat	Hazardous Material(s)	PPE	Personal Protective Equipment
COA	Course of Action	HN	Host Nation	SHAPE	Supreme Headquarters Allied Powers Europe
EBS	Environmental Baseline Study	HW	Hazardous Waste	SN	Sending Nation
EPO	Environmental Protection Officer	IPC	Initial Planning Conference	SOP	Standard Operating Procedure
EPP	Environmental Protection Planner	MOU	Memorandum of Understanding		
EXORD	Exercise Order	N/A	Not Applicable		

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ENVIRONMENTAL PROTECTION PLANNER (EPP) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

EPP (Name and Contact Information):

References:

Environmental Guidebook and Environmental Toolbox for Military Operations: <https://community.apan.org/wg/environmentaltoolbox>.

NATO AJEPPs: <https://nso.nato.int/nso/nsdd/CommonList.html?runQ=no> (and search for “environmental” under Document Title).

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Appendix C.
EPO Checklist for Multinational Exercises and
Military Activities

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 1: Concept and Specification Development, Long-range planning (Time Frame: Exercise Conception to Initial Planning Conference (IPC))	Yes	No	N/A	Comments	Date completed	References
The tasks in this stage are the primary responsibility of the Environmental Protection Planner (EPP).						

Stage 2: Planning and product development, Medium-range planning (Initial Planning Conference (IPC) through Final Planning Conference)		Yes	No	N/A	Comments	Date completed	References
2.1	Have you submitted your contact information as an EPO (through the proper channels) to the Host Nation (HN)?						
2.2	Have you received the EPP/EPO contact list ?						
2.3	Have you received a copy of the Technical Arrangement?						
2.4	Have you received the HN Environmental code and/or Standard Operating Procedure (SOP)?						
2.5	Have you received restriction maps?						
2.6	Have you						
	- received an Authorized Use List (AUL) for hazardous materials (hazmat)?						
	- checked to ensure any hazmat or Petroleum, Oils, and Lubricants (POLs) needed by your unit are on the list?						
	- have you coordinated to obtain a waiver or worked with your logistics Point of Contact (POC) to find an acceptable substitute if you have hazmat or POLs not on the list?						

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 2: Planning and product development, Medium-range planning (Initial Planning Conference (IPC) through Final Planning Conference)		Yes	No	N/A	Comments	Date completed	References
2.7	Have you received a copy of the Environmental Baseline Study (EBS) or applicable information from the EBS?						
2.8	Have you received compliance requirements with customs regulations?						
2.9	Have you received an Environmental Annex from the Exercise Plan (EXPLAN)? Has it been integrated into your unit Environmental Annex?						
2.10	Have you received the Communication Plan with integrated environmental considerations?						
2.11	Have you received the POC information for HN waste management, spill response, complaints and deviations, etc?						
2.12	Have you received a list of environmental-related supplies and equipment your unit should bring (or should not bring) to exercise/operation?						
2.13	Has the EPO field card been developed and distributed to SN EPOs?						
Notes:							

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 1: Foundation and training							
3.1.1	Has your unit acquired supplies needed to comply with the SOP and customs regulations for the packaging of materials and equipment for transportation?						
3.1.2	Has your unit acquired the supplies needed to prepare and load materials and equipment for transportation in compliance with SOP and customs regulations?						
3.1.3	Has your unit been scheduled for loading and inspection of materials and equipment?						
3.1.4	Have you received the environmental reporting requirements (spill reports, cultural resource discoveries, lessons learned report, etc.) and how to communicate them to the HN?						Guidebook, Appendix 5; Appendix 7
3.1.5	Have the logistical or contract specifications for waste management, spill response, etc. been given to you?						
3.1.6	Have you received any specific responsibilities as an EPO?						
3.1.7	Have you received the final environmental-related maps?						
3.1.8	Have you received your EPO card?						
3.1.9	Have you received the Soldier Field Cards?						

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 1: Foundation and training							
3.1.11	Have you received information regarding the environmental considerations about transit/maneuver routes?						
3.1.12	Have you received information on preventive measures planned to avoid any environmental impacts or concerns?						
3.1.13	Have the EPO responsibility boundaries been clearly identified?						
3.1.14	Have you been informed how to deal with communication from local stakeholders to report issues with movement, noise, etc.?						
3.1.15	Have you acquired the environmental-related supplies and equipment your unit was instructed to bring to the exercise/operation?						Guidebook, Appendix 4
3.1.16	Have you received the environmental education requirements with EPOs?						Guidebook, Pages 15-16; Toolbox
3.1.17	Have you distributed the finalized Soldier Field Cards?						
3.1.18	If applicable, have you received a survey and/or access to a mobile application (app) for gathering lessons learned information from unit EPOs or leaders?						Guidebook, Page 41; Appendix 14

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 1: Foundation and training							
3.1.19	Have you received exercise specific SOPs as required (spill procedures, claims process, etc.)?						
3.1.20	Have you received information on where hazmat storage and waste management points will be located and any requirements/restrictions associated with them?						
3.1.21	Are you aware of the location of any "no-go" areas, recycling points, solid waste disposal, cultural property, protected areas, water sources or water purification areas, and hazmat/HW accumulation points? Are they clearly marked in the field?						
3.1.22	Have you established a liaison with other unit/organizational POCs (medical, safety, ammunition, logistics, water, fuel, etc.)?						
3.1.23	Has your unit been scheduled for loading and inspection of materials and equipment?						
3.1.24	Have you received information on location of vehicle wash racks and repair areas?						
Notes:							

Disclaimer: This checklist should be used as a non-binding list of recommendations and as an aid for EPOs. EPOs may add or delete items to meet specific exercise requirements.

Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.

ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 2: Incident Response Planning							
3.2.1	Have you received the environmental reporting requirements and templates to include cultural resource discoveries, site specific spill response procedures, spill report forms, and environmental damage claims?						
3.2.2	Have you trained/briefed your personnel on how to respond to cultural resource discoveries, spills, and environmental damage?						
3.2.3	Are spill kits and personal protection equipment (PPE) included with your equipment?						
	Notes:						

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 3: Execution (duration of exercise)							
3.3.1	Has your unit complied with the SOP and customs regulations for the packaging of materials and equipment for transport to HN?						
3.3.2	Has your unit prepared and loaded materials and equipment for transportation in compliance with SOP and customs regulations?						
3.3.3	Have you reviewed your EPO card?						
3.3.4	Have you conducted periodic checks for compliance (e.g. stocked spill kits, drip pans, hazmat/waste storage, etc.)?						
3.3.5	Have you reported to the Commander on environmental issues/concerns (as required)?						
3.3.6	Has your unit unit complied with community/installation noise abatement hours?						
3.3.7	Have your drivers been using only designated bridges and crossing sites?						
3.3.8	Has your unit conducted refueling or field maintenance operations away from wetlands or surface waters?						
3.3.9	Has your unit complied with prohibitions against discharging wastewater into wetlands or waterways?						

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ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 3: Execution (duration of exercise)							
3.3.10	Has your unit complied with prohibitions against filling any wetlands areas?						
3.3.11	Have you reported any issues, new preventive practices, or lessons learned?						Daily Lessons Learned report
3.3.12	Have you completed and submitted Environmental Condition Reports or spill reports if incidents occur?						AJEPP 6 Spill report
3.3.13	Have you completed and submitted survey/app information used to collect lessons learned information?						
Notes:							

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Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.

ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES
NAME OF EXERCISE:
HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:
SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 4: Assessment (end of exercise)							
3.4.1	Have you submitted surveys regarding lessons learned?						
3.4.2	Has the HN EPO given you a closure checklist?						
3.4.3	Has your unit completed the checklist? If so, have you contacted the HN EPO to arrange for a closure inspection to identify areas your unit needs to clean up or that may require corrective environmental issues?						
3.4.4	Has your unit completed/complied with any identified clean up actions? If so, have you contacted the HN EPO for a reinspection?						
3.4.5	Has the HN EPO signed off on closure checklist prior to unit moving to staging area for redeployment?						
3.4.6	Have you received the schedule for your unit to move to staging and decontamination areas?						
3.4.7	Has your unit turned in waste at the appropriate location(s)?						
3.4.8	Have you contacted the HN EPO or waste management coordinator for any extra containers, overpack containers, marking and labeling materials, and PPE you need?						

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Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.*

ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 3: Operational Conduct (Includes Short-Range Planning, Pre-Deployment, Deployment, Execution, and Redeployment)		Yes	No	N/A	Comments	Date completed	References
Phase 4: Assessment (end of exercise)							
3.4.9	Has your unit decontaminated equipment and vehicles at the designated decontamination sites?						
3.4.10	Has your unit complied with the SOP/requirements for the disposal of decontamination waste?						
3.4.11	Has your unit complied with the SOP and customs regulations for the packaging of materials and equipment for return to home station?						
3.4.12	Has your unit prepared and loaded materials and equipment for transportation in compliance with SOP and customs regulations?						
3.4.13	Have you received information from HN EPOs on transportation routes and related environmental considerations– spill kits, spill report forms/information, etc.?						
Notes:							

Disclaimer: This checklist should be used as a non-binding list of recommendations and as an aid for EPOs. EPOs may add or delete items to meet specific exercise requirements.

Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.

ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES
NAME OF EXERCISE:
HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:
SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Stage 4: Analysis and Reporting (1-4 weeks after exercise)		Yes	No	N/A	Comments	Date completed	References
4.1	Has the HN EPO informed you of any costs incurred from each nation to include waste disposal, corrective actions, land restoration, etc.? If so, have you communicated the information to your Commander and Financial Officer?						
4.2	Have risk assessments been reviewed to determine if any risks were not identified; whether Courses of Action (COAs) were implemented and how well they worked; and, whether any new COAs were developed?						
4.3	Have any new best practices developed to address environmental issues been evaluated and analyzed how they could be addressed/implemented for future exercises?						
4.4	Has an After Action Report (AAR) been developed to identify any gaps in planning or new courses of action to help improve future exercises?						Guidebook, Appendix 15
4.5	Have all agreements, records, and documents with regard to environmental considerations been archived for future reference?						Guidebook, Page 26
4.6	Have all documents regarding environmental considerations been shared with Supreme Headquarters Allied Powers Europe (SHAPE) Environmental Officer and the North Atlantic Treaty Organization (NATO) Environmental Protection Working Group?						
4.7	Have all lessons learned and AARs been provided to the EPP for incorporation or consideration into the next exercise?						
	Notes:						

*Disclaimer: This checklist should be used as a non-binding list of recommendations and as an aid for EPOs. EPOs may add or delete items to meet specific exercise requirements.
Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.*

ENVIRONMENTAL PROTECTION OFFICER (EPO) CHECKLIST FOR MULTI-NATIONAL EXERCISES AND MILITARY ACTIVITIES

NAME OF EXERCISE:

HOST NATION (HN) LEAD ENVIRONMENTAL OFFICER:

SENDING NATION (SN) LEAD ENVIRONMENTAL OFFICER:

Checklist Acronyms					
App	Application	Hazmat	Hazardous Material(s)	POC	Point of Contact
AUL	Authorized Use List	HN	Host Nation	POL	Petroleum, Oils, and Lubricants
COA	Course of Action	HW	Hazardous Waste	PPE	Personal Protective Equipment
EBS	Environmenal Baseline Study	IPC	Initial Planning Conference	SHAPE	Supreme Headquaraters Allied Powers Europe
EPO	Environmental Protection Officer	NATO	North Atlantic Treaty Organization	SN	Sending Nation
EXPLAN	Exercise Plan	N/A	Not Applicable	SOP	Standard Operating Procedure

References:

Environmental Guidebook and Environmental Toolbox for Military Operations <https://community.apan.org/wg/environmentaltoolbox>

NATO AJEPPs: <https://nso.nato.int/nso/nsdd/CommonList.html?runQ=no> (and search for “environmental” under Document Title).

Disclaimer: This checklist should be used as a non-binding list of recommendations and as an aid for EPOs. EPOs may add or delete items to meet specific exercise requirements.

Note: Comments should address items such as responsible parties for actions, specials considerations, explanations, etc.

Appendix D. EPO Field Card

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Environmental Protection Officer Card

Instructions:

The field cards for the Soldier and EPO capture the key environmental guidance and procedures for an exercise. The intent of the Soldier Field Card is to provide concise information to the Soldier on emergency procedures, environmental protection restrictions and key exercise guidance. The EPO Card will be a more detailed document outlining the specific guidance and procedures for environmental protection during the exercise. For both the cards, most of this information is relevant to all exercises and the field cards should require only minor adjustments and modifications to include site-specific information for the exercise, such as maps, information about restricted areas and operations, etc. The EPO and Soldier Field Card templates are posted on the APAN website, and the type of information to insert have been identified on power point slides. This information can then be tailored and pasted into the template to create a field card for the specific exercise.

Content:

- Key Roles and Responsibilities
- Important contact numbers
- Petroleum, Oils and Lubricants (POL)
- Spill response
- Hazardous Material and Hazardous Waste Management
- Waste handling
- Cultural Property and Natural Resource Protection
- Vehicle Movement
- Noise Management
- Redeployment Considerations



Key Roles and Responsibilities

This document is to assist the Environmental Protection Officer to further understand the role they assume during the exercise and to allow them to correctly guide leaders, assist soldiers, and document any unforeseen issues that occur during the training exercise. Below are some of the areas that the EPO should be knowledgeable about and be able to access or pull information to provide to the training units

- Why we do this
 - It's the law!
 - It supports Mission Readiness
 - It supports civil/military public relations
- References/documentation
 - AJEPPS, HN Laws, EP Tool Box, TA, OPORD, EXORD
 - Safety Data Shield, field cards
 - GIS tools (Geographic Information System)
- Reporting Requirements
- Risk Analysis
- Educate the Soldiers
- Monitoring
 - Restricted areas (no go, foot traffic only, tactical vehicle movement restrictions, ground/surface water, points/polygons)
 - Hazardous Material (HM/Hazmat)/Hazardous Waste (HW) collection/disposal points
 - Solid waste collection points
 - Refueling points
 - Key points in the legend (e.g., avoid residential areas, planted fields, gardens, etc.)
 - Ranges, range ops, training facilities, impact areas, Drop Zones/Landing Zones

Important Contact Numbers

- Environmental/Damage/Safety Officer
- Range Control (Exercise or training area) NOTE: Understand emergency, spill response, wildland fire, etc. procedures.
- Emergency Response
- Hazmat/HW collection/disposal POC
- Blank lines to be filled in with exercise or training area specific POCs

EMERGENCY POCs

Medical Emergencies in Europe:
112 or 999

TRICARE INTERNATIONAL:
+44 (0) 22-8762-8133

Host Nation Emergency
Number: _____

* Enter HN specific information as necessary

Emergency Contacts

Environmental Protection Officer

Name: _____

Tel: _____

Alternative Environmental Protection Officer

Name: _____

Tel: _____

Emergency

Tel: _____

Notify Emergency Services immediately if:

- You cannot contain the spill
- A poisonous gas is spilled
- The release is dangerous to human health and/or the environment
- The hazmat has been released in or near water

Petroleum, Oil and Lubricants (POL)

- Refueling points and procedures
 - Surface or groundwater restrictions
 - Specified refueling locations
 - Report locations or accidents
- Storage and transportation
 - Secondary containment
- Vehicle maintenance guideline

- Inspect fueling locations to ensure that secondary containment is in place
- If possible, ensure that camo netting is in place to limit the amount of snow/rain entering the secondary containment



Secondary containment should be constructed of materials capable of containing a spill and it must be compatible with the stored material



Spill Response

YOU SPILL YOU DIG!

The sooner you start digging the easier it will be - time saves sweat.

Remove the source

Stop the continuing release of HW

Envelop the spill

Encircle the spill area with absorbent materials to stop the spread of the hazmat/HM

Absorb/accumulate

Use absorbent materials to soak up the spill substance

Containerize/clean up

Collect the soiled materials and place in the appropriate container

Tell your Host Nation representative

Report the incident and steps for remediation etc. to the Host Nation representative



Spill Response

REACT

Remove the source, **E**nclose the spill, **A**bsorb/accumulate, **C**ontain/clean up, **T**ell your Host Nation representative

- You spill, You dig!
- If you can deal with the spill with a shovel, do it. Anything more: contact the Host Nation or Emergency and follow their guidance.
- Personal Protective Equipment (PPE) available that is compatible for the type(s) of hazmat used
- Effects of spills (graphic, environmental damage, description), HN Reporting Requirements

The EPO is required to inspect all spills and report the extent of the spill and steps for remediation. The EPO will need to ensure the information has been uploaded to used GIS tool, either by the EPO or Host Nation representative, if needed.

Spill response kits should meet the following criteria:

- Readily available in all areas where hazmat/HW are used, accumulated and handled
- Readily available in all areas where POL is handled
- Specific to the type and volume of hazmat/HW at each site.

Spill kits:

- Absorbents, such as spill pads, pillows, socks, and or loose absorbents (what kind do you have, where are they located, how many do you have, etc.)
- Sanitizers, such as waste bags, sealing tape, HW labels, and detergent
- Tools, such as broom or brush, plastic scoop, dust pan, non-spark shovel, and tongs

At a minimum, the spill response kits will contain the following:

- Absorbents
- Fire extinguishers (type ABC)
- Non-sparking shovels
- Push brooms
- Waste bags for HW



Spill Response Kits and Reporting

Spill response kits should be stocked with the appropriate equipment for a particular hazard and items.

Common hazards and their associated clean up equipment include:

BATTERIES

- Chemical-resistant PPE
- Acid neutralizer
- Absorbent
- Clean-up tools
- Durable, waterproof container



FUELS & OILS

- Chemical-resistant PPE
- Water-repellent absorbents
- Clean-up tools
- Durable, waterproof container

CHEMICALS

- Chemical-resistant PPE
- Chemical absorbents
- Non-sparking clean-up tools
- Corrosion-resistant container



Gather important data about the spill to report to your EPO or Host Nation representative:

Your Name: _____

Your Unit: _____

Your Phone Number: _____

Local Time and Date of Spill: _____

Spill Location (site, exercise name and grid coordinates): _____

Source of Spill (tanker truck, unknown, etc.) _____

Estimate of how much was spilled (gallons or liters): _____

Material spilled (gasoline, diesel, etc.): _____

Operation underway when spill occurred (fueling, repair work, etc): _____

Cause of Spill (faulty tank level indicator, monitoring error, collision, etc.): _____

Movement of Spill (direction, rate, etc.): _____

Description of area (proximity to water; any damage to health, property, wildlife, etc. whether inside or outside the site perimeter): _____

Description of action taken: _____

Hazardous Material Management

A hazardous material (hazmat) is a substance considered to be harmful to human health or the environment.

When hazmats are not stored, used or disposed of correctly, you and the members of your unit are in danger of being exposed to the harmful materials. Exposure can lead to health problems that will affect your and your unit members' physical readiness.

Common hazardous materials include the following:

- Fuel
- Engine oil
- Bleach
- Solvent
- Antifreeze
- Transmission and brake fluid
- Batteries
- Meals Ready to Eat (MRE) Heaters

Health hazard



Hazards: Short-term (acute hazards) and/or long-term (chronic hazards) effects
Examples: Antifreeze, methanol, and pesticides

Flammable



Hazards: Heat/burns can be poisonous, and evaporate easily and may make the area unsafe
Examples: Methanol, solvent, and fuel

Irritant



Hazards: General discomfort, acute toxicity, and allergic reaction
Examples: Degreasing agents, solvents, lubricating oils, ammonia, and acetic acid

Gas cylinder



Hazards: Rupture and rapid release; contents can be hazardous
Examples: Oxygen gas, propane, and ammonia

Acute toxicity



Hazards: Symptoms typically include those of a sudden illness; short-term exposure can produce irreversible and/or fatal results, or can contribute to chronic illnesses
Examples: Fluorine, hydrogen sulfide, nitrobenzene, pesticides, antifreeze, and poison

Explosive



Hazards: Physical injuries from the sudden release, harm or injury from the mixture formed during the explosion, potential inhalation danger; re-ignition can occur after extinguished
Examples: Picric acid, TNT, ammunition, and lithium batteries

Oxidizer



Hazards: Skin and eye irritation, corrosive potential and fires may produce toxic fumes
Examples: Nitric acid, ammonium nitrate, calcium hypochlorite and oxygen

Environmental



Hazards: Contaminants can be ingested through groundwater or through other consumables (for example, animals and plants); potential for costly cleanup or fines
Examples: Oils, fuels, and chlorine

Corrosive



Hazards: Cause damage to the skin and eyes and irreversible damage to metals; can be harmful if inhaled, can produce toxic and/or corrosive fumes if burned, and may react with water
Examples: Battery acid, hydrochloric acid, spent bleach, sulfuric acid, and ammonium hydroxide

Hazardous Material Documentation

- Key Environmental Protection sections of the Safety Data Sheets
- Labeling, lists of chemicals.
- Pictures of safety labels

Product identifier DIESEL FUEL OIL (NO.2)

Pictogram(s)

Signal word DANGER

Hazard statement Flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
May be fatal if swallowed.
May cause drowsiness or dizziness.
Suspected of causing cancer.
May cause damage to thymus, blood, and liver.

Precautionary statement

PRECAUTIONS

- Keep away from heat, sparks, and open flames.
- No smoking.
- Keep container tightly closed.
- Do not breathe vapors.
- Wear protective gloves when handling.
- Use only outdoors or in a well-ventilated area.

If swallowed: Immediately call a Poison Center or doctor.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on skin (or hair): Remove contaminated clothing. Wash contaminated skin thoroughly after handling.

Distributor contact ABC Chemical Company
1234 Laboratory Street, Chem City, AA
555-555-5555

Photo: You Spill, You Dig, 2018, Forces in Europe

EPO must:













- understand and communicate the precautions that must be taken for the different Hazardous materials involved in the exercise
- know how to access the information
- hold soldiers accountable that they are using secondary containment, when available



Hazardous Material Handling and Containment

- Storage and transportation
- Always keep the following types of chemicals stored apart from one another:
 - Flammables, Oxidizers, Corrosives and Toxics
 - A physical hazard outweighs a health hazard. For example, methanol antifreeze is flammable and toxic (store to flammable).
 - Keep organic, oil-based chemicals away from inorganic chemicals.

EPO will inspect the storage areas and ensure storage and transportation of hazmat complies with HN standards.

							
Explosive 		Green	Red	Red	Red	Red	Red
Oxidizing 		Red	Green	Red	Yellow	Red	Red
Flammable 		Red	Red	Green	Red	Green	Red
Toxic 		Red	Red	Red	Green	Green	Red
Irritant 		Red	Yellow	Green	Green	Green	Yellow
Corrosive 		Red	Red	Red	Red	Yellow	Green

LEGEND

- Separate storage Required
- Joint storage permitted
- Joint storage is only permitted with specific restrictions

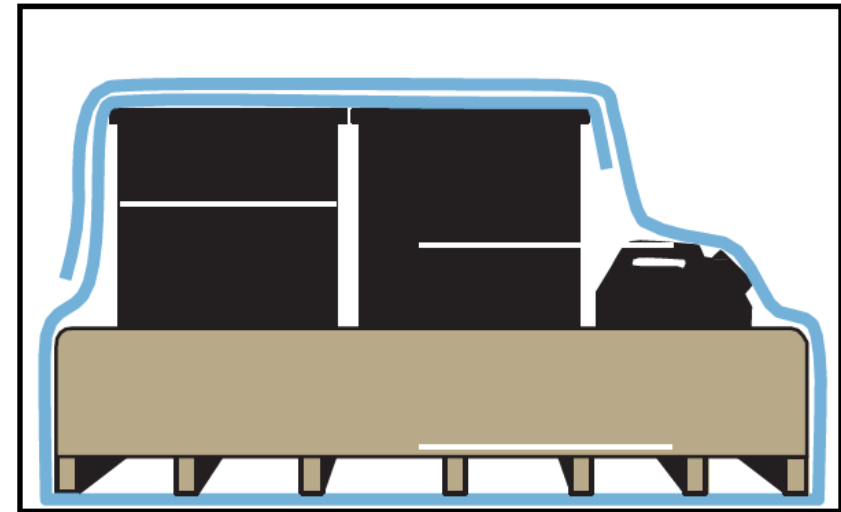


Photo: You Spill, You Dig, 2018, Forces in Europe

Use rain covers or other forms of protection to minimize the amount of precipitation collected in secondary containment

Hazardous Waste Management

Waste products that pose a threat to human health and the environment are considered hazardous waste. Hazardous Waste (HW) is any discarded material (either solid, liquid, or gas) that exhibits characteristics that are potentially dangerous to humans, material, equipment, facilities and/or the environment.

Common Hazardous Wastes include:

- Used oil filters
- Soiled spill kit materials
- Used batteries
- Spent solvents, thinners, adhesives, paints, and resins
- Contaminated rags and wipes
- Contaminated soil
- Unused MRE Heaters

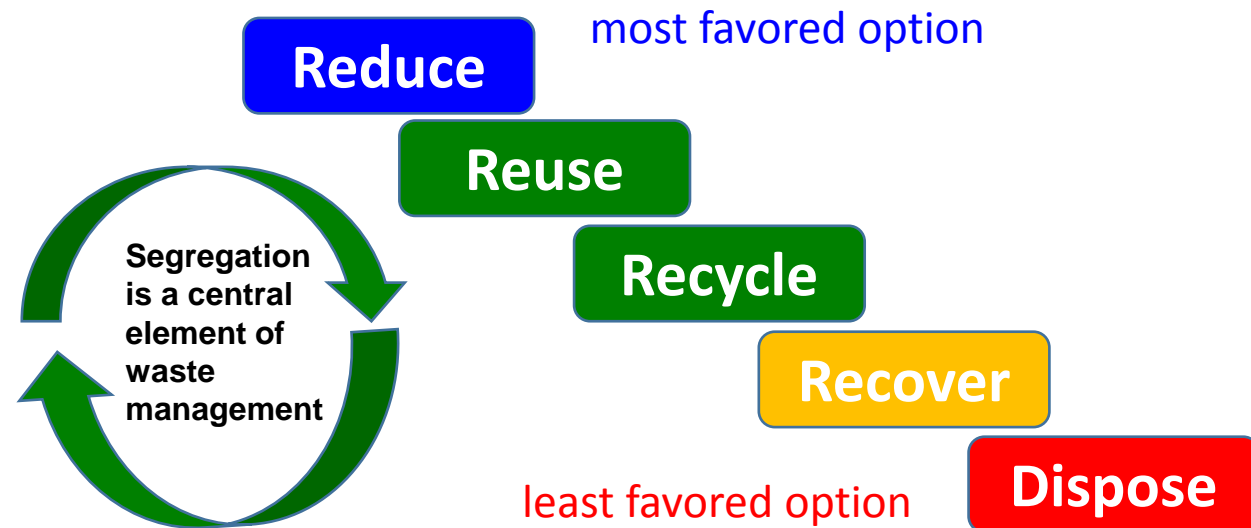
The EPO should know what the host nation expects (symbology, structure, vicinity) and how the SN is expected to execute the guidance (inspections, ensuring compliance, creating reports in accordance with the Host Nation standards)



Solid Waste Disposal

- Do not litter!!!
- Inspect the deployment areas before, during and after use
- Never burn trash with open fire or bury trash in the field
- Collect all waste (including kitchen waste) in appropriate containers at approved collection points
 - If the soldier living area has waste collection points and sorting areas, use it
 - Be aware if the living area collection points differ from waste collection and sorting during exercises
- Follow Host Nation sorting guidance
- Use permanent or portable latrines for human waste
- Brass recovery: track where there is a large amount of brass to recover it in the spring or summer

Elements of a Waste Hierarchy



Cultural Property and Natural Resource Protection

- See Map Recommendations (NATO standard symbology)
- Understand and obey Host Nation restricted areas
- Understand and obey Host Nation procedures for tactical digging and cutting of trees for camouflage

Nature Conservation areas

- Respect the signs and restricted areas (for example, NATURA 2000 nature reserved areas)

- Don't cut off branches or trees for camouflage without permission
- Don't dig holes without permission



Cultural Properties and Resources:

- Respect and do not damage grave sites, historical and archaeological sites
- Sites may not be modified, destroyed, or defaced
- Do not collect artifacts as souvenirs

Water protection:

- Use only approved water and river crossings
- Protect all water sources from contamination
- Wastewater is not to be disposed of in any waterway or wetland
- Vehicle, generators, and camp activities must be placed 200m from all water sources



Animals

- Do not harass, capture, touch or kill fish and wildlife
- Do not feed, adopt, or buy wildlife

Report

- Report the discovery of any artifacts
- Report cultural/natural resource damages
- Report injured animals

Vehicle Movement

- Stay on established roads and trails within the training area. Remain inside the training area boundary. Follow exercise procedures for driving outside training areas
 - Avoid unnecessary destruction of vegetation
 - Be aware of potential risk of collision with wild animals
 - Observe posted traffic signs, obey traffic signs, and obey speed limits
 - Wear seat belts; no riding in cargo compartments
 - Wear safety equipment (seat belts, gunner restraints, and PPE)
 - Ensure all loads are secure and cargo covers are fully tied down
-
- Drivers must be licensed for the equipment they operate
 - Keep headlights on at all times while driving
 - Do a “360” check around vehicles prior to movement.
 - Use drip pans, chock blocks, and antenna tie downs
 - Turn off vehicle engines when not moving



Report

- Complaints from the landowners / civilians
- Spills, accidents, and damages
- Damages to the property, land, roads, fences
- Cultural/natural resource damage

Noise Management

- Try to limit heavy weapon noise inside military training areas
- Plan helicopter operations to minimize noise effects to civilian communities and animal farms, etc.
- Restrict use of training ammunition when operating near civilian premises (200m from residential structures)



Redeployment Considerations

- Only use designated vehicle and equipment wash facilities
- Confirm all fighting positions, foxholes, and trenches are properly closed and filled in
- Collect all communication, electrical and obstacle wires
- Dispose of all waste and litter
- Mark and report unexploded munitions
- Report, contain, and clean up spills
- Inspect all sites before departing
- Clean up trash, police call/environmental walk
- Complete Host Nation checklist prior to departure



Appendix E.
Soldiers Field Card: Template and Sample

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SOLDIERS FIELD CARD TEMPLATE

Instructions:

The field cards for the Soldier and EPO capture the key environmental guidance and procedures for an exercise. The intent of the Soldier Field Card is to provide concise information to the Soldier on the emergency procedures, environmental protection restrictions and key exercise guidance. The EPO Card will be a more detailed document outlining the specific guidance and procedures for environmental protection during the exercise. For both the cards, most of this information is relevant to all exercises and the field cards should require only minor adjustments and modifications to include site-specific information for the exercise, such as maps, information about restricted areas and operations, etc. The EPO and Soldier Field Card templates are posted on the APAN website, and the type of information to insert have been identified on power point slides. This information can then be tailored and pasted into the template to create a field card for the specific exercise.

How to use make soldiers card:

- Fill the exercise information into the PowerPoint card template
- Save the PowerPoint as PDF when ready
- Copy one page at a time with "take a snapshot"
- Paste the pages to this PowerPoint overview template
- Print it to size A3, fold it to 8 panels

Proposed content:

1. Front – soldiers field card
2. Hazardous Material and Hazardous Waste
3. Spill response
4. Natural and cultural protection
5. Waste handling
6. Specific instructions; groundwater / safety and health information
7. Blank page for notes / special maps
8. Back – Important contact information

Layout:

A3, folded 8x8 panels - printed on water resistant paper (if possible)

1

2

BACK

FRONT

3

4

5

9

BACK - Map over training area

Example of map information:

- **Restricted areas (no go, foot traffic only, tactical vehicle movement restrictions, ground/surface water, points/polygons)**
- **Hazmat/HW collection/disposal points**
- **Solid waste collection points**
- **Refueling points**
- **Key points in the legend (e.g., avoid residential areas, planted fields, gardens etc.)**
- **Ranges, range ops, training facilities, impact areas, Drop Zones/Landing Zones**

SPILL RESPONSE

(Insert specific information, local routines and instructions)

YOU SPILL YOU DIG!

The sooner you start digging the easier it will be - time saves sweat.

Remove the source
Stop the continuing release of HW
Envelop the spill
Encircle the spill area with absorbent materials to stop the spread of the HM
Absorb/accumulate
Use absorbent materials to soak up the spill substance
Containerize/clean up
Collect the soiled materials and place in the appropriate container
Tell your EO
Report the incident to your units EO



1 liter of POL could contaminate up to a 1 000 000 liters of fresh water.

If you can't handle the spill, Call Emergency!

SPILL PREVENTION

- Have spill kits / equipment on hand for example containers, drip pans and absorbent material
- Use a nozzle and absorbent mat on jerry/fuel cans to avoid spill
- Obey restriction areas (maps)
- Do not locate refueling points within 200m of lakes and water courses.
- Use only approved refueling points

• Used soil materials and absorbent materials needs to be treated like Hazardous Waste

• Report all POL spills!
Local environmental POC tel.....



HAZARDOUS MATERIALS (HM)

A Hazardous materials (HM) is a substance considered to be harmful to human health or dangerous to human health or the environment (either solid, liquid or gas) that is potentially hazardous to human health or the environment

Hazardous material must be labeled. Labels must include written information what it is and why it is hazardous

Handle HM carefully
Use drip pans and absorbent material or mats always when handling HM

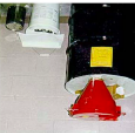
Store hazardous material only in designated areas with secondary containment.

Safety

- Use Personal Protective Equipment (PPE)



Examples:
Fuel, engine oil, bleach (chlorine) solvents, contaminated soil,



HAZARDOUS WASTE (HW)

A Hazardous waste (HW) is discarded material (either solid, liquid or gas) that is potentially dangerous to human health or the environment

Deliver hazardous waste and POL products to a designated waste collection point.

HW are separated from usable HM and nonhazardous wastes

All containers holding free liquids require secondary containment

Hazard signs are posted for each type of waste

Separation (ask you EO)

HAZARDOUS MATERIALS & WASTE

(Insert specific information, local routines and instructions)

NATURAL & CULTURAL PROTECTION

(Insert specific information, local routines and instructions)

Natural Resources:

- Don't cut of branches or trees for camouflage without permission
- Don't dig holes without a permission

Water protection:

- Protect all water sources from contamination.
- Wastewater is not to be disposed of in any waterway or wetland.
- Vehicle, generators, and camp activities must be placed 150m from all water sources.
- Water/river crossings only in designated places

Animals

- Do not harass, capture, touch or kill fish and wildlife.
- Do not feed, adopt or buy wildlife.
- Report injured animals to the Environmental Officer.

Private land

- Do not harass, capture, touch, or kill, fish and farm animals.
- Obey street / area limits

Report

- Complaints from the landowners / civilians
- Spills, accidents and damages
- Damages to the property, land, roads , fences
- Cultural/natural resource damages

Cultural Resources:

- Respect and do not damage grave sites, historical and archaeological sites.
- Sites may not be modified, destroyed, or defaced.
- Do not collect artifacts as souvenirs.
- Report the discovery of any artifacts to the Environmental Officer.

Nature Conservation areas

- Respect the signs and restricted areas for example NATURA 2000 nature reserved areas



Vehicle movement

- Keep to set speed limits
- Drive on established roads except when instructed otherwise during tactical deployment
- Manoeuvre in designated areas only
- Avoid unnecessary destruction of vegetation.
- Avoid sharp turns when possible.
- Turn off vehicle engines when not moving.



- ❖ Hazardous waste
- ❖ Latrine
- ❖ Metal, brass cartridges
- ❖ Plastics
- ❖ Cardboard
- ❖ Food waste
- ❖ Biodegradable
- ❖ Paper, plastics, packages
- ❖ Burnable:

For example:

Insert here the specific regulations of waste sorting.



Do Not Litter!

(Insert specific information, local routines and instructions)

WASTE HANDLING

IMPORTANT CONTACTS

(Insert important contact information, call signs, frequencies etc)

Contacts

- Emergency
- Ambulance
- Fire
- Police
- MEDEVAC
- Range safety
- Firing desk
- Environmental officer

FIRST AID INFORMATION

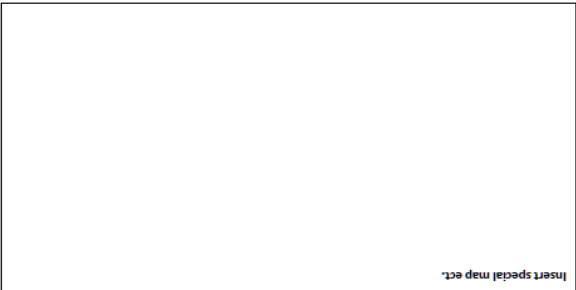
- Location
- Call sign and radio frequency

MEDEVAC INFORMATION / MIST

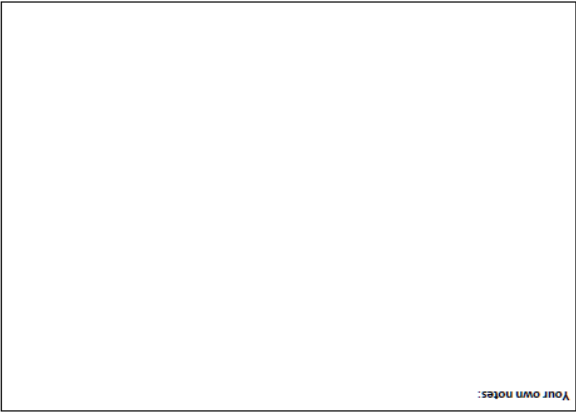
- Contact information

Frequencies

Call signs



Insert special map ect.



Your own notes:

(Insert specific information, local routines and instructions)

NOTES

SOLDIERS FIELD CARD

(Logo - Name of exercise/training area etc)

(Strategic message - purpose of this field card)

Use this field card to contribute to the success of the mission/training by protecting the environment, yourself and the members of your unit.

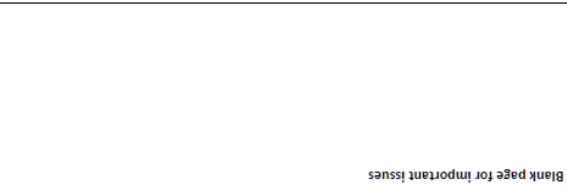
This field card provides information

- Environmental and safety directions
- Sustainable use of the training area
- Reduce risk of accidents and risks on health and environment
- Your responsibilities on environmental protection
- How to Report accidents, spills, problems etc

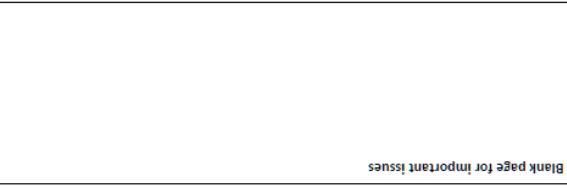
Your name and title:_____

Your Unit:_____

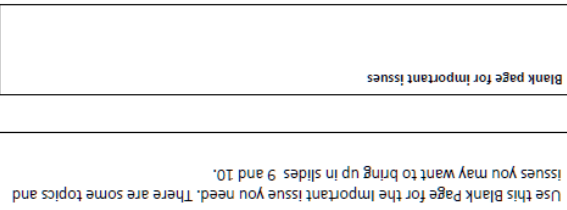
Your Environmental Officer: _____



Blank page for important issues



Blank page for important issues



Use this Blank Page for the Important issue you need. There are some topics and issues you may want to bring up in slides 9 and 10.

(Insert specific information, local routines and instructions)

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BACK - Map over training area

EXAMPLE

Example of map information:

- Restricted areas (no go, foot traffic only, tactical vehicle movement restrictions, ground/surface water, points/polygons)
- Hazmat/HW collection/disposal points
- Solid waste collection points
- Refueling points
- Key points in the legend (e.g., avoid residential areas, planted fields, gardens etc.)
- Ranges, range ops, training facilities, impact areas, Drop Zones/Landing Zones

SOLDIER FIELD CARD

(Logo - Name of exercise/training area etc.)

(Strategic message - purpose of this field card)

Use this field card to contribute to the success of the mission/training by protecting the environment, yourself and the members of your unit.

This field card provides information regarding:

- Environmental and safety directions
- Sustainable use of the training area
- Reducing risk of accidents and risks on health and environment
- Your responsibilities on environmental protection
- How to report accidents, spills, problems etc.

Your name and title: _____

Your Unit: _____

Your Environmental Protection Officer (EPO):



SPILL RESPONSE

(Insert specific information, local routines and instructions)

YOU SPILL YOU DIG!

The sooner you start digging the easier it will be - time saves sweat.

Remove the source

Stop the continuing release of HW

Envelop the spill

Encircle the spill area with absorbent materials to stop the spread of the hazmat or HM

Absorb/accumulate

Use absorbent materials to soak up the spill substance

Containerize/clean up

Collect the soiled materials and place in the appropriate container

Tell your EPO

Report the incident to your units EPO

**If you can't handle the spill, call
Emergency!**

SPILL PREVENTION

- Have spill kits / equipment on hand for example containers, drip pans and absorbent material
- Use a nozzle and absorbent mat under jerry/fuel cans to avoid spill
- Obey restriction areas (maps)
- Do not locate refueling points within 200m of lakes and water courses
- Use only approved refueling points

- Used soil materials and absorbent materials needs to be treated like Hazardous Waste

- Report all POL spills!
Local environmental POC tel #####



**1 liter of POL could contaminate up to a
1 000 000 liters of fresh water.**



NATURAL & CULTURAL PROTECTION

(Insert specific information, local routines and instructions)

Natural Resources:

- Don't cut off branches or trees for camouflage without permission
- Don't dig holes without permission

Water protection:

- Protect all water sources from contamination
- Wastewater is not to be disposed of in any waterway or wetland
- Vehicle, generators, and camp activities must be placed 150m from all water sources
- Water/river crossings only in designated places

Animals

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- Do not feed, adopt, or buy wildlife
- Report injured animals to the Environmental Protection Officer

Private land

- Do not harass, capture, touch, or kill fish and farm animals
- Obey street / area limits

Report

- Complaints from the landowners / civilians
- Spills, accidents, and damages
- Damages to the property, land, roads, fences
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Cultural Properties and Resources:

- Respect and do not damage grave sites, historical and archaeological sites
- Sites may not be modified, destroyed, or defaced
- Do not collect artifacts as souvenirs
- Report the discovery of any artifacts to the Environmental Protection Officer

Nature Conservation areas

- Respect the signs and restricted areas; for example, NATURA 2000 nature reserved areas



Vehicle movement

- Keep to set speed limits
- Drive on established roads except when instructed otherwise during tactical deployment
- Manoeuvre in designated areas only
- Avoid unnecessary destruction of vegetation
- Avoid sharp turns when possible
- Turn off vehicle engines when not moving

HAZARDOUS MATERIALS & WASTE

(Insert specific information, local routines and instructions)

HAZARDOUS MATERIALS (HM/Hazmat)

A Hazardous material (Hazmat) is a substance considered to be harmful to human health or the environment

Hazardous material must be labeled

- Labels must include written information what it is and why it is hazardous

Handle HM/Hazmat carefully

- Use drip pans and absorbent material or mat always when handling Hazmat

Store Hazmat only in designated areas with secondary containment.

Safety

- Use Personal Protective Equipment (PPE)



Examples:

Fuel, engine oil, bleach (chlorine), solvents

HAZARDOUS WASTE (HW)

Hazardous waste (HW) is discarded material (either solid, liquid or gas) that is potentially dangerous to human health or the environment

Deliver hazardous waste and POL products to a designated waste collection point

HW are separated from usable hazmat and nonhazardous wastes

All containers holding free liquids require secondary containment

Hazard signs are posted for each type of waste

Separation (ask your EPO)



Examples:

Used batteries, discarded chemicals, POL-contaminated soil



Skull and Crossbones
Acute toxicity via oral, dermal, or inhalation



Flame Over Circle
Oxidising substances



Health Hazard
Aspiratory or respiratory hazard, carcinogenicity, mutagenicity



Environment
Hazardous to the environment



Exploding Bomb
Explosives, self-reactive substances, organic peroxides



Gas Cylinder
Compressed, liquefied, or dissolved gases



Flame
Flammable, pyrophoric, self-heating substances, water reactive



Corrosion
Corrosive, skin damage, eye damage



Exclamation Mark
May cause immediate health effect - eye, skin, respiratory

WASTE HANDLING

(Insert specific information, local routines and instructions)

Waste must never be left in the field

- Collect all waste in appropriate containers at approved collection points
- Waste should be sorted according to [specific regulations]
- Disposal and burning of waste is strictly forbidden - do not bury or burn any waste
- Use permanent or portable latrines for human waste
- Always collect hazardous waste separately

Do Not Litter!



Insert here the specific regulations of waste sorting.

For example:

- ❖ Burnable:
- ❖ Paper, plastics, packages
- ❖ Biodegradable
- ❖ Food waste
- ❖ Cardboard
- ❖ Plastics
- ❖ Metal, brass cartridges
- ❖ Latrine
- ❖ Hazardous waste



NOTES

(Insert specific information, local routines and instructions)

Your own notes:

Insert special maps, graphics, etc.

BLANK PAGE

(Insert specific information, local routines and instructions)

Use this Blank Page for any important issues you need to emphasize. There are some topics and issues you may want to bring up in slides 9 and 10.

Blank page for important issues

Blank page for important issues

Blank page for important issues

IMPORTANT CONTACTS

(Insert important contact information, call signs, frequencies etc.)

Contacts

- Emergency
- Ambulance
- Fire
- Police
- MEDEVAC
- Range safety
- Firing desk
- Environmental Protection Officer

FIRST AID INFORMATION

- Location
- Call sign and radio frequency

MEDEVAC INFORMATION / MIST

- Contact information

Frequencies

Call signs

BLANK PAGE

(Insert specific information, local routines and instructions)

Use this Blank Page for any important issue you need to emphasize. There are some topics and issues you may want to bring up:

Safety and Health Protection:

- Pesticides and diseases
- Weather conditions
- Poisonous plants, insects, snakes

PROTECTING GROUNDWATER AND SOIL

- Training areas are important groundwater areas
- Groundwater level can be very near to the ground surface at some places and the soil can be very permeable so all possible leaks, spills, and environmental incidents must be notified and cleaned.
- Any activities around groundwater intake structures and wells are prohibited (protection zones!)
- There are several wells in the area (protection zone around wells 200 m)
- Ensure you have spill response equipment!



Redeployment Considerations:

WHEN YOU LEAVE THE TRAINING AREA

- Only use designated vehicle and equipment wash facilities
- Confirm all fighting positions, foxholes, and trenches are properly closed.
- Collect all communication, electrical, and obstacle wires
- Dispose of all waste and litter
- Mark and report unexploded munitions
- Report, contain, and clean up spills
- Inspect all sites before departing

BLANK PAGE

(Insert specific information, local routines and instructions)

Use this Blank Page for any important issue you need to emphasize. There are some topics and issues you may want to bring up:

Live Ammunition

- What to do if found

Media guidelines

Don't:

Lie to the reporter

Discuss sensitive information

Speak for the Command or your friends, or on behalf of other agencies

Discuss details of serious incidents / accidents or speculate

Let the situation or reporter rush you

Do:

Be honest, but remember OPSEC

Check your appearance; remove your sunglasses

Avoid military acronyms

Talk about personal experiences

Stay in your lane

Say "I don't know" if you don't know

Social media guidelines

- Soldiers, civilian and contractor employees are encouraged to use their personal social media accounts while deployed to Europe
- Remember OPSEC. Don't post sensitive information or details about troop movements or events until after they have occurred
- Even if your social media accounts are locked or hidden, it is considered worldwide release. Your posts, photos, and comments are a direct reflection upon you, your unit, and the military

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Appendix F. References

Environmental Guidebook for Military Operations.

<https://community.apan.org/wg/environmentaltoolbox/>. March 2008.

Environmental Toolbox for Deploying Forces: An Awareness Training Supplement to the Environmental Guidebook for Military Operations.

<https://community.apan.org/wg/environmentaltoolbox/>. August 2013 and March 2017.

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Appendix G. Abbreviations

AAR	after action report
AJEPP	Allied Joint Environmental Protection Publication
APAN	All Partners Access Network
App	Application
AUL	Authorized Use List
BI-SC	Bi-Strategic Command
CECC	Commander's EXSPEC Confirmation Conference
COA	Course of Action
CT&ED	Collective Training and Exercise Directive
EBS	Environmental Baseline Study
ECR	Environmental Condition Report
ECS	Environmental Closeout Study
EP	environmental protection
EPG	Exercise Planning Group
EPO	Environmental Protection Officer
EPP	Environmental Protection Planner
EPWG	Environmental Protection Working Group
ESC	Exercise Specification Conference
EU	European Union
EUCOM	(U.S.) European Command
EXORD	Exercise Order
EXPLAN	Exercise Plan
EXSPEC	Exercise Specification
FI	Finland
GIS	Geographic Information System
HAZMAT	Hazardous material(s)
HM	Hazardous material(s)
HN	Host Nation
HW	Hazardous Waste
IDA	Institute for Defense Analyses
IPC	Initial Planning Conference
ITAM	integrated training area management
MC	Military Committee
MEL/MIL	Main Events List/Main Incidents List

MOU	Memorandum of Understanding
N/A	Not Applicable
NATO	North Atlantic Treaty Organization
NMEPPPC	NATO Military Environmental Protection, Practices, and Procedures Course
OPORD	Operational Order
PfP	Partnership for Peace
POC	Point of Contact
POL	Petroleum, Oils and Lubricants
PPE	Personal Protective Equipment
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RSOMI	Reception, Staging, Onward Movement, and Integration
SHAPE	Supreme Headquarters Allied Powers Europe
SME	subject matter expert
SN	sending nation
SOP	Standard Operating Procedure
SW	Sweden
TA	Technical Arrangement
UN	United Nations
U.S.	United States

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15. SUBJECT TERMS <p>Environmental tools; environmental field cards; environmental considerations during exercises; environmental checklists; environmental protection officer.</p>					
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