

# Military and civilian information sharing and best practices

Improving the environmental and social performance of military and civilian actors operating in the same area

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## Sammanfattning

Många av NATOs medlemsländer samt länder anslutna via partnerskap för fred (pff) strävar efter en ökad integrering av utrikespolitiska områden såsom utveckling, demokratifrågor och försvar. Förhoppningen är att detta ska bidra till ökad fred, säkerhet och en demokratisk utveckling i världen. Begrepp som *allomfattande ansats* och *civilmilitär samverkan* är vanligt förekommande. I verkligheten sker dock integrerad planering allt för sällan och information tenderar att delas allt för sparsamt och sällan systematiskt. Härutöver orsakas ett socialt och miljörelaterat fotavtryck när flyktingströmmar, lokalbefolkning, militära och humanitära organisationer för samman i olika typer av camper och läger. Resultatet blir att man riskerar bidra till negativa konsekvenser och försämra möjligheter till hållbar säkerhet i en ofta känslig miljö och sårbara samhällen.

FOI anordnade hösten 2014 en aktivitet inom ramen för NATOs partnerskapsprogram (Cykel 2013-2014, SWE-29 33.1) finansierad av anslag 1:9 ap.4. Aktiviteten dedikerades åt att studera interaktionen mellan civila/ humanitära och militära aktörer i insatsområden, med ett särskilt fokus på miljö- och resursrelaterade frågor. För att på bästa sätt kunna adressera dessa ämnen beslutades det att en workshop skulle hållas med ett fokus på kris- och konfliktkontexter.

Målet med genomförd workshop var att förbättra informationsutbytet mellan aktörerna, och att diskutera de bästa tillvägagångssätten när det gäller att verka operativt på ett miljö- och resursvänligt sätt på osäkra platser som har en dynamisk utveckling. Syftet var också att uppmuntra deltagarna att reflektera över den dynamik som finns mellan alla aktörer i en utdragen konfliktzon, och på hur miljörelaterade problem kan uppstå samt hur man kan påverka utvecklingen i en mer eller mindre hållbar riktning.

### Nyckelord:

NATO, partnerskap för fred, civil-militär samverkan, insats, naturresurser, miljö, fotavtryck, klimatförändring

## Summary

Sweden, like many NATO partnership for peace (PfP) and NATO nations, is determined to more closely link foreign policies concerning development, security and defence. The assumption is that prospects of peace, security, democracy and development in the world, will consequently improve. “*Comprehensive approach*” and “*Civilian and military cooperation*” are “buzz words” that are promoted. In reality too little effective coordination takes place and information tends to be shared sparsely and rarely systematically. In addition, there is often an aggregate social and environmental footprint caused, when refugees, local population, humanitarian agencies and peacekeepers are situated with base camps and activities at the same place, causing an unsustainable strain on an often fragile environment (e.g. in water scarce region).

In 2014 FOI hosted a NATP PfP activity within the framework of NATO’s Partnership plan with Sweden (Cycle 2013-2014, SWE-2933.1). The activity was dedicated to address the interface of military and civilian actor’s operating in the same mission area, with an emphasis on environmental and resource issues. In order to approach this issue, it was decided that a participatory workshop on best practices of this topic in the context of crises and conflict should be conducted.

The objective was to improve information exchange and joint best practices of Military and Civilian actors, including business actors, operating in conflict/crises areas. The goal was to encourage participants to think about the dynamics between various stakeholders in protracted crises and how environmental issues can influence the situation to the better or the worse.

### Keywords:

NATO, partnership for peace, comprehensive approach, civilian and military cooperation, environmental footprint, natural resources, climate change

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**LIST OF ACRONYMS**


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AFOR	Anyland Forces
AU	American University
CCCM	Camp Coordination and Camp Management
CEO	Chief Executive Officer
CPA	Comprehensive Peace Agreement
DFID	Department for International Development
ECHO	EU Humanitarian Aid and Civil Protection department
EMMP	Environmental Management and Monitoring Program
ELI	Environmental Law Institute
EU	European Union
EUMS	European Union Military Staff
FBA	Folke Bernadotte Academy
FOI	Swedish Defence Research Agency
HOTO	Hand over/ Take over
ICRC	International Federation of the Red Cross and Red Crescent
IDP	Internally Displaced Persons
MSB	Swedish Civil Contingency Agency
NATO	North Atlantic Treaty Organisation
NGO	Non Governmental Organisation
NRC	Norwegian Refugee Council
PIP	Partnership for Peace
ROE	Rules of Engagament
Sida	Swedish International Development Agency
SGBV	Sexual and Gender Based Violence
SRSA	Swedish Rescue Services Agency
SwAF	Swedish Armed Forces
UN	United Nations
UNDFS	United Nations Department of Field Services
UNDP	United Nations Development Programme
UNDPKO	United Nations Department of Peacekeeping Operations
UNEP	United Nations Environmental Programme
UNHCR	United Nations High Comissioner for Refugees
UNMIA	United Nations MIsssion in Anyland
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs,
USAID	United States Agency for International Development
WFP	World Food Programme

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# 1 Introduction

Peace-support and crisis management operations play a fundamental role in stabilizing conflict-affected regions as well as bringing relief to affected populations. The challenging nature of such operations is constantly changing. It is for instance predicted that military and security forces may be asked to more frequently address the challenges of humanitarian disasters.<sup>1</sup> However, such operations have inevitable environmental and social impacts on the surrounding communities<sup>2,3</sup>. In addition environmental and climate change issues are more frequently acknowledged as contributors to conflict and crises.<sup>4,5,6,7,8</sup>

Furthermore, one can also assume that contemporary conflicts and crises carry an ecosystem dimension, that is, a close connection to environmental issues, ecosystem services, climate change or natural resources. At the NATO- summit in 2014, it was for instance declared that:

*“Key environmental and resource constraints, including health risks, climate change, water scarcity, and increasing energy needs will further shape the future security environment in areas of concern to NATO and have the potential to significantly affect NATO planning and operations”<sup>9</sup>*

As Sweden, like many North Atlantic Treaty Organisation (NATO) member states and partnership for peace (PfP) nations, is determined to improve joint operations overseas, discussing environmental and social footprints is a critical activity. Collaborative forums, pre- deployment, can help to more closely link foreign policies pronouncing development, security and defence policies of nations. The prospects of peace, security, democracy and development in the world, are then assumed to consequently improve. ‘*Comprehensive approach*’ and ‘*Civilian and military cooperation*’ are “buzz words” that are being promoted in this context. In reality, however, too little effective coordination takes place and information tends to be shared sparsely and rarely systematically. In addition, there is often an aggregated social and environmental footprint caused, when refugees, local population, humanitarian agencies and peacekeepers are situated with base camps and activities at the same place, placing an unsustainable strain on an often fragile environment (e.g. in water scarce regions, see Figure 1 ) This issue needs to be addressed effectively and better coordinated in order to enable the missions in general, support the affected people and support the desired mission end state of both military and civilian operations.

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<sup>1</sup> UK Ministry of Defence (2014): Global strategic trends out to 2045

<https://www.gov.uk/government/publications/global-strategic-trends-out-to-2045>

<sup>2</sup> Liljedahl et al (2012): What Swedish support to international crises management can learn from the cholera outbreak in Haiti. In: Strategic Outlook 2012, pp. 93-101. FOI-R--3449--SE, [http://www.foi.se/ReportFiles/foir\\_3449.pdf](http://www.foi.se/ReportFiles/foir_3449.pdf)

<sup>3</sup> Hull et al (2009): Managing Unintended Consequences of Peace Operations. FOI-R--2916--SE., [http://foi.se/ReportFiles/foir\\_2916.pdf](http://foi.se/ReportFiles/foir_2916.pdf)

<sup>4</sup> NATO Strategic Concept (2010), para 15, [http://www.nato.int/strategic-concept/pdf/Strat\\_Concept\\_web\\_en.pdf](http://www.nato.int/strategic-concept/pdf/Strat_Concept_web_en.pdf)

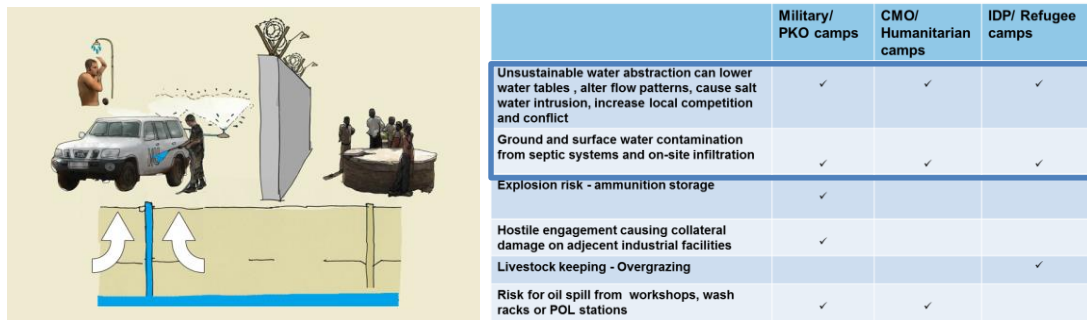
<sup>5</sup> CNA Military Advisory Board (2014) National Security and the Accelerating Risks of Climate Change. Alexandria, VA, USA.

<sup>6</sup> King D., Schrag D., Dadi Z., Ye Q., Ghosh A. (2015) Climate Change A Risk Assessment. Centre for Science and Policy

<sup>7</sup> Peters K., Vivekananda J. (2014) Topic Guide: Conflict, Climate and Environment. Overseas Development Institute and International Alert.

<sup>8</sup> Rüttinger, L., Smith D., Stang G., Tänzler D., Vivekanda J. (2015) A New Climate for Peace. Taking Action on Climate and Fragility Risks. An independent report commissioned by the G7 members. Adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies

<sup>9</sup> Se [http://www.nato.int/cps/en/natohq/official\\_texts\\_112964.htm](http://www.nato.int/cps/en/natohq/official_texts_112964.htm), para 110



**Figure 1a** (left) A visualisation of the impact of competition for water in a mission area, where civilian and military actors are present. **Figure 1b**) Water use, as opposed to environmental issues such as oil spills or risks connected to hostile activities etc., risks causing a negative aggregated impact.

## 1.1 Aim and objective

In 2014 FOI hosted a NATP PfP activity within the framework of NATO's Partnership plan with Sweden (Cycle 2013-2014, SWE-2933.1), funded by the Swedish Ministry of Defence.

The activity was dedicated to address the interface of military and civilian actors' operating in the same mission area, with an emphasis on environmental and natural resource issues. In order to approach this issue, it was decided that a two-day participatory workshop on best practices in a crisis and conflict context should be conducted.

The objective with the performed activity was to improve information exchange and joint best practices of *Military* (e.g. Swedish Armed Forces (SwAF), NATO, and European Union Military Staff (EUMS)), *Peacekeeping* (e.g. UN Department of Peacekeeping Operations/Department of Field Services, DPKO/DFS) and *Civilian and/or humanitarian actors* (e.g. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA); United Nations Development Programme (UNDP), United Nations Environmental Programme (UNEP), Swedish Civil Contingency Agency (MSB), Folke Bernadotte Academy (FBA), Swedish International Development Agency (Sida) etc., ICRC/Red Crescent, United States Agency for International Development (USAID), Department for International Development (DFID) and, EU Humanitarian Aid and Civil Protection department (ECHO) and businesses operating in conflict areas. The idea was to encourage participants to reflect on the dynamics between various stakeholders in protracted crises and how environmental issues and natural resources matters and can influence the situation to the better or the worse.

The first day of the workshop included briefings on issues relevant for the workshop topic to identify key issues and enable sharing of experiences to move the discussions forward. The topics for the different briefings are outlined in Annex 1.

The second day was devoted to a gaming exercise (see section 1.3).

The scenarios were fictive, but all based on realistic events and lessons learned regarding challenges and success stories from the past decade of military and civilian crises management operations. In order to capture experience from military as well as civilian operations, a partnership with SwAF and MSB was formed for the purpose of planning and executing the workshop.

## 2 The workshop

### 2.1 Workshop background and set up

The overarching issue addressed in the workshop exercise is indeed not a novel topic. Activities to look into the environment-health-security-development nexus has been arranged previously in

different contexts and with several stakeholders see Table 1 where some examples with participation from FOI is referenced.

To further develop the actions described below, and within the framework proposed by the 'Green Humanitarian Network for improving military and civilian information sharing and best practice'<sup>10</sup>, the 2014 workshop was conducted.

**Table 1.** Previous events addressing related topics, that is covering environment, health and security

Year	Event/topic	Facilitators	Reference
2007	Operating in Conflict & Disaster Areas: Environmental & Health Hazards, Stockholm, Sweden	FOI, SRV <sup>11</sup> , FBA, Sida	Unpublished
2008	Environmental Security Concerns prior to and during Peace Support and/or Crisis Management Operations, Umeå, Sweden	FOI, SwAF, SRV, FBA, Sida	Waleij et al 2009
2011	Health risks in peace and crises management operations, Stockholm, Sweden	FOI, SwAF, MSB	Waleij et al 2011
2012	Round table discussions with Swedish Government, Stockholm, Sweden	FOI, SwAF, MSB, Sida	Unpublished
2012	High or Low Vulnerability: Environmental Vulnerability Assessment in Conflict and Crises Situations, NYC, USA	FOI	Unpublished
2013	Greening Humanitarian Initiative, Washington DC, USA and Geneva, Switzerland	ProAct, Network, FOI, Joint UNEP OCHA Environment Unit, WWF, AU, ELI,	Kelly et al 2014
2014	Environmental Dimensions of Sustainable Recovery: Learning from Post-conflict and Disaster Response Experience, Washington DC, USA	FOI, Joint UNEP OCHA Environment Unit, WWF, AU, Refugee International, Woodrow Wilson Center for Scholars	See dedicated web page. <sup>12</sup>

## 2.2 Participants

The invitation, included the requirement that participants preferably should have experience from planning or executing military or civilian crises management operations. In total, 17 participants attended the workshop, representing Sweden (SwAF, MSB, Sida, National Defence College, FOI and a Swedish company specialised in efficient water use), USA (ProAct Network), Bangladesh (Bangladesh Institute for Peace and Security Studies BIPSS), NATO Military Engineering Centre of Excellence (MILENGCOE), Joint Environment Unit of United nations Environment Programme (UNEP) and United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).



**Figure 2:** To the left keynote speaker Maj. General Munir (retired), to the right Ms Annica Waleij, organiser of the event.

<sup>10</sup> Kelly et al 2014

<sup>11</sup> SRSA, Swedish Rescue Services Agency. In 2009 SRV was reorganized to become MSB

<sup>12</sup> See <http://edspace.american.edu/greentools/>

## 2.3 Gaming purpose

Gaming is a well-established method to systematically penetrate complex issues, and is routinely used in military training and lessons learned processes. The method has also been used at several occasions addressing sustainable solutions in international operations, such as the Swedish collaboration project with United Nations Peacekeeping (DPKO/DFS)<sup>13</sup>

The overarching purpose of the workshop gaming was to further develop the action framework proposed by the **Green Humanitarian Network** for improving military and civilian information sharing and best practices. In a brief categorization of the subjects this purpose is achieved by establishing a brief oversight and summary over key aspects of:

- A desired ideal situation/execution
- Barriers to optimal execution
- Suggestions of future actions and solutions to be initiated

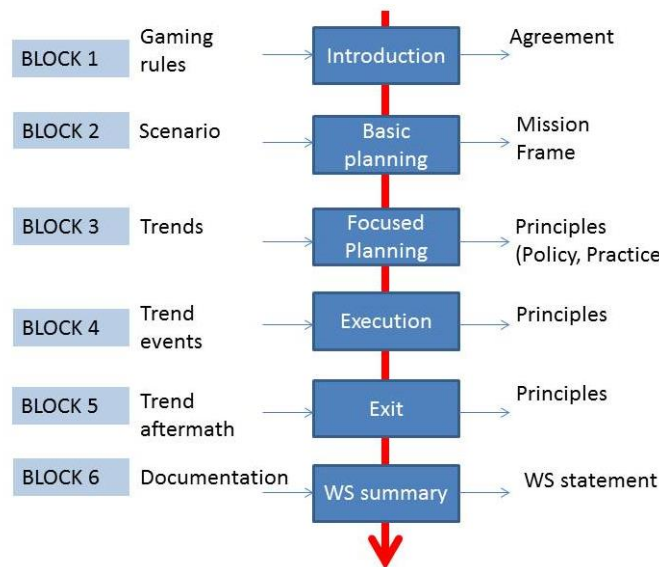
## 2.4 Gaming design

The gaming was conducted as a table top exercise in which participants role-played in the context of a fictional scenario, developed by FOI. The scenario elaborated on and introduced the participants to a realistic mission context, with elements of real events and challenges taking place the past decade in civilian and military operations in conflict and crises settings.

The participants were divided into two groups:

- Military: NATO Forces to “Anyland” (AFOR).
- Civilian: United Nations High Commission for Refugees (UNHCR)

The gaming exercise was executed as a series of blocks as illustrated in Figure 2 below. In addition three perspectives were addressed: (1) international, political and strategic policy; (2) operational and tactical practice, and (3) research and development.



**Figure 2.** Illustration of the gaming design. WS is here short for workshop and R&D refers to research and development.

The first block was the introduction to the gaming. The purpose was to come to an agreement regarding purpose, preconditions and rules for the gaming. The most important rule was the “Chatham house principle” meaning that anyone who comes to the meeting is free to use information from the discussion, but is not allowed to reveal who made any comment.

<sup>13</sup> Liljedahl, 2011

Subsequently, the participants' role-played in a series of cyclical runs or blocks, the groups prepared and executed a joint planning meeting. The goal of each joint meeting was to come up with a joint documentation regarding:

- A desired ideal situation/execution
- Barriers to optimal execution
- Suggestions of future actions and solutions to be taken.

Block 2 and 3 focused on mission planning. Block 2 had a general scope and the primary purpose was to allow participants to familiarize themselves with the scenario. Block 3 focused on three different environmentally related “trends” which has escalated in importance in recent international missions. In essence, recent developments and experiences suggest that there seem to be a more complex and challenging reality to plan for– and deal with– in international operations, military and civilian alike. Furthermore, there are a number of environmentally related trends that accentuates this development in a potential negative manner, among them;

- 1) Water security issues that impacts sustainable development and human security
- 2) The use of natural resources and infrastructure such as oil and hydropower to fund insurgency and conflicts
- 3) Increased prevalence of environmental crime and looting of natural resources for criminal purposes

These trends was presented again as baseline for the gaming on day 2, and further elaborated on in the gaming cards (See Annex 3). The scope of this block hence was to look into a more in detailed planning to handle such issues.

Block 4 concentrated on the management of some specified scenario events related to the trends presented in Block 3. The scope of this block was to study the handling of events during an on-going mission.

Block 5 was dedicated to how to tackle related problems occurring after the mission has ended.

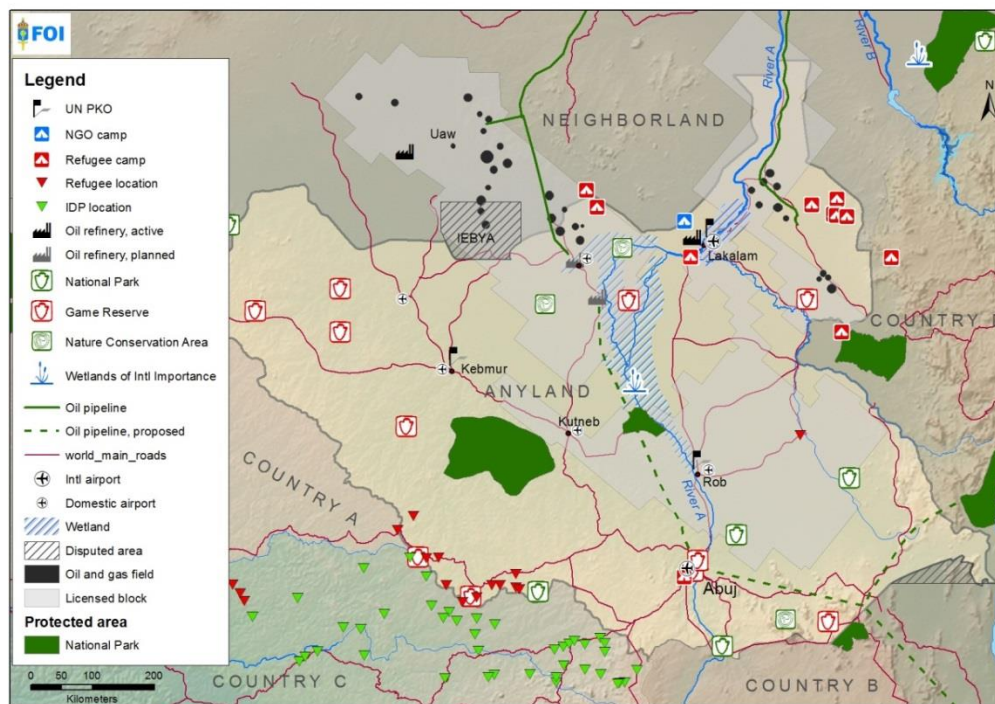
The final block 6 was the concluding workshop-discussion. The aim was to come up with a joint workshop statement and recommendations.

## 2.5 Scenario

The scenario was based on a post-conflict and ongoing humanitarian crisis in the fictional country “Anyland” (see Figure 3 and Annex 2 for a detailed description). The precondition for the scenario assumed that there was already an existing UN-peacekeeping mission in place, as well as humanitarian aid operations. However, due to a deteriorating situation and escalating crisis the international mission expanded into a new area. The new part of the mission became a “stand alone/self-sustained” operation to support the UN mission. The operation includes:

- NATO military engineering resource to be deployed in a new camp in the extended area
- Up scaled humanitarian aid operations

An important aspect of the scenario was that the situation required close cooperation between military, humanitarian aid practitioners, local government and civilian population.



**Figure 3.** Anyland and neighbouring Country A, B, C, D and Neighbour land. The scenarios are not built upon the conflict or other events in any specific country. Rather, Anyland reflects an elaboration of the trends previously described in section 2.1.

### 2.5.1 Roles and gaming actors

The roles intended for the workshop was divided into context actors and gaming actors<sup>14</sup>, as described below and in Annex 2.

- Context actors
  - United Nations Mission in Anyland (UNMIA)
  - Humanitarian actors (e.g. UNOCHA, )
  - Local government and civilian population
- Gaming actors
  - Group 1: NATO forces to Anyland (AFOR)
  - Group 2: United Nations High Commission for Refugees (UNHCR)

## 2.6 Documentation

The purpose of the workshop documentation was to summarize key aspects regarding:

- The desired best practices of the different phases of an operation regarding environmental and social performance
- Current barriers to achieve such an optimal execution of operations
- Suggestions of future actions and solutions to be taken to overcome these barriers

The analysis also considered three framing issues

- International, political and strategic policy
- Operational and tactical practice
- Research and development

<sup>14</sup> Local government and stakeholders were basically excluded; however the initial idea was to include regional and local powerbrokers (e.g. warlords, rebels). With closer reflection this part was excluded due to the short timeframe of the game proceedings.



Documentation was performed in several ways.

**Participants note taking.** Each participant was requested to successively fill in a documentation template. The template was in an A3-format and consisted of a matrix that corresponded to the documentation purpose outlined above. Table 2 below illustrates the principle of the template.

**Table 2:** Template for participants' individual workshop documentation template. The template was printed in an A3-format.

Scope	The "ideal" execution in a world free from frictions and access to unlimited resources	Barriers and restrictions	Potential solutions
Policy, international, strategic, political			
Operational, tactical, execution			
Research and development			

**Joint planning meeting documentation.** Each planning meeting during the table top exercise resulted in a documented joint statement in Power Point-format outlining:

- A desired ideal situation/execution
- Barriers to optimal execution
- Suggestions of future actions and solutions to be taken

**Game management note taking.** During the table top exercise, the workshop facilitators took notes on the discussions. Note taking corresponded to the "Chatham house principles" described in section 2.1.

**Open note taking.** During the final block, in which the workshop statement was outlined, notes were taken in PowerPoint during the discussion. The successive notes were showed on a screen in order for participants to comment, complement or correct the notes.

**Workshop questionnaire.** After completing the table top exercise, participants were asked to fill in a post-workshop questionnaire. The questionnaire included three questions on:

- The relevance of the presentations held on day 1 of the workshop for the Workshop theme
- The relevance and adequacy of the scenario
- The relevance and efficiency of the chosen gaming procedure

In addition, participants had the opportunity to put forward any other comments before the closing of the workshop.

## 2.7 Analysis

The templates (described in Table 2) were used for a structured analysis. In short, all the comments from the participants were put together and compared for each separate scope and topic<sup>15</sup>. In other words, each horizontal and vertical column of answers were compared separately and analysed respectively. By doing so, common denominators as well as clear differences could be visualized and subsequently summarized in an in-depth analysis. The method could thus be labelled as a structured analysis with parts of a comparative design

<sup>15</sup> By topic we refer to the different areas as barriers and restrictions or potential solutions)

### 3 Results

In this section follows the results of the analysis. The findings of the gaming and adherent discussions can be summarized in some key areas, highlighted below, quoted from the discussions and further elaborated on in the following discussion in chapter 4.

• **Environmental situation awareness: Communication and information sharing issues, what is needed:**

- ‘Coordination – high level agreement on principles’
- ‘More “jointness”’
- ‘Joint environmental board (Strategic/Force Commander level)’
- ‘Long term planning – post deployment situation’
- ‘Initially prioritise issues which are of less political sensitivity (e.g. water, waste, energy)’.

• **Issues related to the mandates for military troops**

- ‘Currently too limited – must be in place initially’
- ‘Too broad regarding humanitarian aid’- risk for mission creep
- Engineering has a dual use’
- In order for joint operations to work is to instil respect for respective actor’s roles and mandates – this requires awareness training’
- It is a challenge to rapidly deliver sustainable camps’
- ‘Exit strategies needs to be improved, actors have a desire for an end state- but is it a good one?’
- What to do with camps on exit is often a difficult and wide dilemma’

The workshop members also discussed whether there was a need for further joint work in the field, and agreed on such a need for joint efforts. Suggestions for way ahead included;

**Way ahead for the joint community if a follow up activity were to take place**

- Consider more sustainable alternatives to current water, waste and energy management
- Scope of future work:
  - Produce a peer review publication
  - The global Camp Coordination and Camp Management Cluster (CCCCM) should be included in future discussions
- Consider conducting a joint activity in an actual mission (Mali was mentioned).

Joint case study on Mali (environmental) including a joint environmental baseline assessment, high lightening the accumulated footprint from deploying military, civilian actors as well as expected needs from local society and stakeholders.

### 3.1 The “ideal” execution

The participants discussed the “ideal” execution in a world free from frictions and access to unlimited resources.

#### 3.1.1 Policy, international, strategic, political

Individual evaluations of the workshop did, when put together, show some common views of what constitutes an ideal execution of mission from an environmental standpoint. One issue that several participants touched upon is the mandates that encompass the operation. A wider mandate and no blurring of lines between the actors would be a change for the better. In other words, the ideal execution uses harmonized policies that include agreements on policies of the UN, EU and NATO that share procedures on environmental topics, e.g. water management.

### **3.1.2 Operational, tactical, execution**

At the operational level the participant's sought a unified and joint operation between the camps of the humanitarian and military actors. A co-location or close location of these actors and other stakeholders can be ideal. The execution of tasks should be regularly assessed and properly funded. The execution of tasks should also be preceded by more joint training and planning. Pre- and joint planning is further recognized to concatenate the operational level in different areas.

### **3.1.3 Knowledge gaps, models & methods, R&D**

One opinion was that, in an ideal situation, much more devotion and time needs to be given to research and development (R&D) that could support the actual needs at the operational and tactical levels of operations.

## **3.2 Barriers and restrictions**

The participants discussed barriers and restrictions to the "ideal" execution.

### **3.2.1 Policy, international, strategic, political**

An identified barrier was how to accomplish and keep a holistic approach. The mandate of missions sometimes can limit the command of operation, which also encompasses the issues related to environmental and social performance at a strategic and political level. An unwillingness to plan for long-term operations, is also a barrier. The six to twelve- months planning and funding standard practice becomes a barrier to successfully implement environmental considerations that require a longer return of investment. Better funding modalities could improve this situation.

Different perspectives and approaches to missions influence the guidelines and mandates that are created on the macro-level. Having many different major actors involved can restrict military and humanitarian operations.

### **3.2.2 Operational, tactical, execution**

Policies must also be better implemented in practice, for instance environmental monitoring and management programs (EMMP). In the field, however, EMMPs can seemingly constitute a too heavy work load hence its ambition must be delicately balanced with realistic expectations. An operational barrier can also be constituted by decisions on how many people there should be in a mission, depending on mandates and circumstances. Environmental considerations therefore often, at best, becomes a secondary task for someone without proper environmental background.

Furthermore, different actors can restrict the sharing of intelligence, due to operational security issues, classifications or a general unwillingness to share information (lack of trust). This is a factor that was raised in several areas by the participants, as an issue of policy, operation and knowledge gaps.

### **3.2.3 Knowledge gaps, models and methods, R&D**

A lack of documentation and baseline data was articulated. A common and accessible repository for sharing best practice and lessons learned does not exist. Joint planning and joint task execution also prerequisites the ability and willingness to bridge knowledge gaps. A lack of understanding of each other's' capacities and cultures sometimes occur which hinders cooperation and effectiveness. Increased interaction and information sharing could assist in overcoming some of the barriers by instilling more trust

### 3.3 Potential solutions

Lastly, the participants discussed potential solutions to the identified barriers.

#### 3.3.1 Policy, international, strategic, political

To clarify mandates, its potential and limitations and frames for roles and responsibilities, the need to review the policy sector was further recognized. To adhere to and to follow up on existing standards and regulations, such as the Oslo Guidelines<sup>16</sup> and the Sphere Standards<sup>17</sup>, could improve the clarity of mandates and decrease the blurring of roles that sometimes occurs. A commitment of at least 12 months of funding and a more holistic approach to planning, including collaborative and horizontal planning with finance for decommission was subsequently suggested.

#### 3.3.2 Operational, tactical, execution

Joint operations could be accomplished with environmental teams and joint reconnaissance. A resource pool of competent and flexible personnel to draw from in order to increase cooperation was suggested to improve joint performance. The development and use of similar equipment and technical solutions could be part of improved interoperability. Another example could be to establish permanent environmental liaison officers.

#### 3.3.3 Knowledge gaps, models and methods, R&D

One example of problems that could be resolved rather easily is the differences in water management. The establishment or promotion of common education forums that different actors can attend, in real life or on the web, would unite and advance the view of environmental issues and resource conservation. Joint research and development (R&D) projects could also contribute to an improvement both to advance techniques, knowledge and understanding as well as to increase cooperation and widen perspectives. A sharing of information in the aftermath of missions could in addition improve the knowledge of the above mentioned areas; a joint lesson learned.

### 3.4 Exercise evaluation

The following points are some of the evaluation points that was lifted by the participants of the workshop in the evaluation of the gaming exercise:

- Good design/ format of the workshop
- Large subjects and many scenarios. This gave little time to really find a depth of all the parts of the gaming scenarios. Discussion was long and received more depth but there was little time for evaluation and documentation and finding concrete solutions to the larger operation planning and preparations.
- If this were to be repeated, it was suggested that, more time should be allocated to the parts of the workshop design including:
  - Introduction of participants; exercises; discussions; and gaming tasks.
  - The tasks and the subjects of the gaming was of such complexity that it would have been fruitful with more representation from more decision-makers and representatives of the humanitarian sector, for example the UNHCR or other related organizations.

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<sup>16</sup> UNOCHA (2007) The Oslo Guidelines- Guidelines on The Use of Foreign Military and Civil Defence Assets In Disaster Relief

[https://docs.unocha.org/sites/dms/Documents/Oslo%20Guidelines%20ENGLISH%20\(November%202007\).pdf](https://docs.unocha.org/sites/dms/Documents/Oslo%20Guidelines%20ENGLISH%20(November%202007).pdf)

<sup>17</sup> The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response (2011) <http://www.sphereproject.org/handbook/>

## 4 Discussion

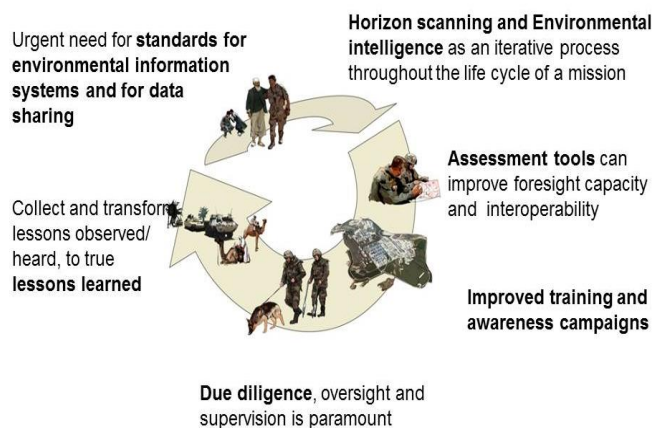
In 2014, FOI arranged a NATO PfP activity within the framework of NATO's Partnership plan with Sweden. FOI decided to co-arrange this activity with MSB and SwAF and furthermore to dedicate the activity to address the interface of military and civilian actors' operating in the same mission area, with an emphasis on environmental and natural resource issues. The rationale for this choice was experiences from a series of missions with challenges for military and civilian actors' regarding unintended consequences of missions on the natural environment and local community's livelihoods. In order to approach the complex issue, it was decided that a two-day participatory workshop on best environmental practices in crisis and conflict operations should be conducted.

The objective of the workshop was to improve information exchange and sharing of best practices of military, peacekeeping and civilian and/or humanitarian actors and businesses operating in crises and conflict areas. The idea was to encourage participants to reflect on the dynamics between various stakeholders in protracted crises and how environmental issues and natural resources matters and can influence the situation to the better or the worse.

The workshop succeeded in facilitating creative discussions on the complex context and events in the fictive mission scenario. However, there was little time for evaluation and documentation and finding concrete solutions to the larger operation planning and preparations. If a workshop like this were to be repeated, it was suggested that, more time should be allocated to all the parts of the workshop design.

There was a general agreement on that there are apparent but complex interrelations between environment, security, development and health in a crisis and conflict context that cannot and should not be ignored. There is hence a need for more joint environmental assessments regarding the aggregated (cumulative) environmental impact from different stakeholders. Such assessments and coordination of subsequent mitigating measures is of importance when stakeholders operate in the same area at the same time, as well as are active in sequel. Insufficient handover/takeover (HOTO) can result in failures of good initiatives and even limited impact from each individual stakeholder can become the tipping point for vulnerable livelihoods and ecosystems. Furthermore, opportunities to "do no harm and to build back better" may be lost.

Experience shows that there are many misperceptions about what the environment means. Figure 6 illustrates some key areas where improvements could be made regarding individual and joint environmental performances. Mainstreaming environmental and natural resources issues into planning cycles, whether military or civilian, facilitates to "de-mystify" the nature of environmental considerations and increases the likelihood for concrete proactive actions to be conducted. Off-setting environmental issues at the operative level are easier if other topics that are perceived as more mission-essential (e.g. force health protection, saving human lives etc.) are leveraged.



**Figure 6:** A generic mission cycle including desired pre- and after deployment activities. Picture credit: Hans Lundholm

The need for coordination is present on the strategical, the operational as well as the tactical level, and should be initiated before any deployment commences, if possible. To facilitate the information flow, platforms and mechanisms need to be identified (preferably by using already existing mechanisms). Moreover, the funding mechanisms, whether private donors or governmental fund, should be informed by and seek routines for, the need for joint, sustainable solutions, that focus beyond each deploying actors mandate.

Joint environmental assessments and/or increased environmental information sharing may be favoured by reoccurring meetings or communication for that purpose. When the prerequisites for joint operations have the design as of today, it is difficult to direct accountability to specific actors for the total (i.e the cumulative environmental footprint). A joint responsibility should be taken and operations have a clear need for more participatory preparations and planning that considers assessment of environmental pressures as operations grow in size when more nations accumulate and join in. To overcome the issues of mandates and sometimes judiciary complexities however still compose a difficult question.

Lastly, trust is needed for actual coordination to take place and there is a need to embrace also the failures and learn from them.

## 5 Further reading

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## Annex 1: Workshop program

### WEDNESDAY 15 OCTOBER

13.00-13.10	<b>Welcome address</b> FOI Deputy Director General , Anna-Lena Österborg
13.10-13.20	<b>Introduction to the workshop:</b> Annica Waleij FOI,
13.20-13.30	<b>Co-Organizers expectations</b> Naznoush Habashian SwAF and Katarina Runeberg MSB
13.30-14.00	<b>GreenHumanitarian- Defining Better Practices in Greening Field Operations. Activities so far</b> Charles Kelly, Proact Network
14.00-14.30	<b>Environmental lessons identified from e.g. South Sudan, Afghanistan and Mali</b> Annica Waleij, FOI
14.30-15.00	<b>A military perspective of environment in peacekeeping and crises management operations</b> Major General A N M Muniruzzaman (Retd) President Bangladesh Institute of Peace and Security Studies (BIPSS) and Chairman Global Military Advisory Council on Climate Change (GMACCC)
15.00-15.30	Coffee/tea
15.30-16.00	<b>Environment in Humanitarian Action</b> Mr. Rene Nijenhuis, Humanitarian Affairs Officer Joint UNEP/OCHA Environment Unit, United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
16.00-17.30	Introduction to the table top exercise (TTE )
17.30	Ica breaker (hosted)
20.30	Joint dinner in Stockholm city (own expense)

### THURSDAY 16 OCTOBER

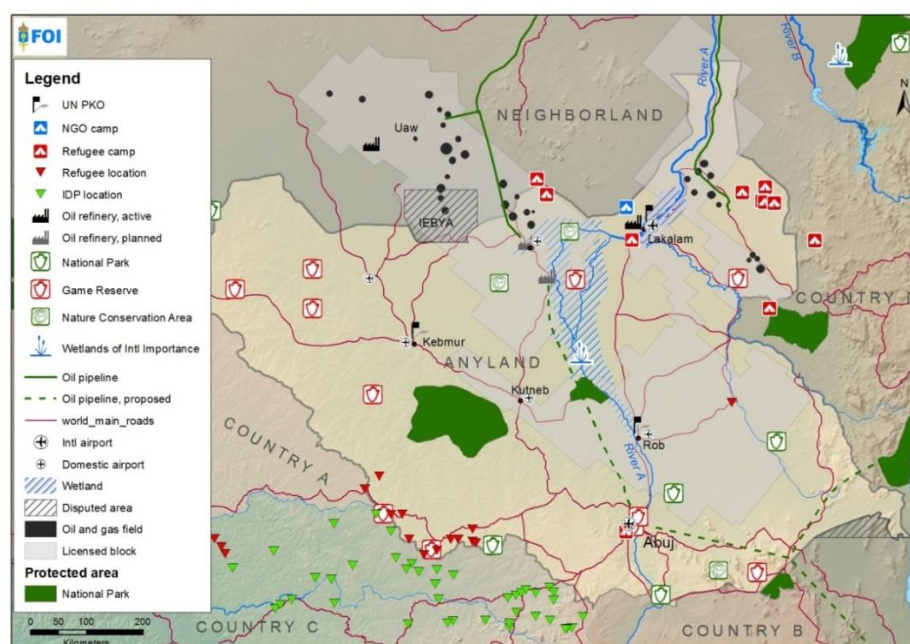
9.00-9.15	<b>Recap day 1</b>
9.15 - 10.45	TTX Part 1
10.45-11.00	Coffee/tea
11.00-12.30	TTX Part 2
12.30-1400	Brown bag lunch
14.00-15.30	TTX Part 2
15.30-15.45	Coffee/tea
15.45-16.45	Summing up, results session
16.45-17.00	Closing remarks, way ahead



## Annex 2: Environmental Health threats and vulnerabilities in Anyland

Anyland (Figure 1) is a fictive country where the overall environmental legal framework is fairly well developed. However, institutional capacity is low. It has been estimated that the costs of environmental degradation and unsustainable use of natural resources to be 21% of the GDP. The area is subjected to frequent natural disasters including flooding's and droughts. Violent disputes between herders and farmers over water and land is frequently occurring.

The international military response to the new crises is taking place in a context already marked by large-scale humanitarian need and the on-going aid-operation is one of the largest in the world, with multiple crises affecting vulnerable communities.



**Figure 1.** Anyland and neighbouring Country A, B, C, D and Neighbourland.

An environmental health and vulnerability assessment has been conducted for Anyland, summarised below.

### Environment conflict, crime and corruption relations

VERY HIGH vulnerability

- Natural resources are historically one of the drivers of the conflict. Wealth sharing of the oil revenues paramount for durable peace.
- Resource scarcity is increasing, caused by a combination of climate change, deforestation, soil erosion and population growth.
- Inter-communal violence over natural resources such as water, grazing areas and cattle

### Institutional capacity and legal framework

HIGH vulnerability

- The overall environmental legal framework and institutional capacity is fairly low
- The Land Act prescribes that environmental impact assessments (EIA) should be performed for investment projects, but no oversight mechanisms are in place
- Water and sanitation coverage and waste management capacity is low

### Natural resources

HIGH vulnerability

- Anyland is rich in oil

- Subsistence resources such as land, water, non-timber forest products and wildlife are the basis for most livelihoods
- Large-scale land-lease deals (“land grab”)
- Seasonal water availability
- Accelerating deforestation

**Biodiversity and wildlife**

HIGH vulnerability

- Areas of natural significance include natural parks, game reserves, and wetlands
- Protected areas in Anyland is under stress due to climate change and increased pressure from a growing population (returning refugees and IDP’s)
- Fast growing interests from corporate organizations, combined with a limited capacity for environmental management.
- Biodiversity and wildlife is threatened by drought, poaching, and environmental degradation

**Cultural/historical resources**

ELEVATED vulnerability

- Anyland has no objects on the UNESCO world heritage list, but locally resources of cultural or historical significance might be present
- Cultural practices include artwork, dancing, music and paintings
- UNESCO’s culture specialist calls for the need for strong government action, and appropriate legislation

**Socio-economy and livelihood issues and food security**

VERY HIGH vulnerability

HIGH vulnerability

- Anyland is one of the world’s poorest countries.
- Livelihoods are closely tied to environmental conditions through agriculture, pastoralism and fishing.
- The livelihoods of millions of people have been grossly disrupted as a result from the insecure situation: crops have not been planted, livestock are dislocated and traders have fled - and with them the lifeline of commodities for local economies.

**Pollution**

ELEVATED threat

LOW

Air pollution in general is considered a **LOW** threat. Rivers, streams and lakes contain pathogenic microbes and parasites and constitute a **HIGH** threat to health. The threat to human health from polluted soil is assessed as **LOW**.

**Industrial chemicals – hot spots**

ELEVATED threat

LOW

The Industrial and chemical threat in Anyland is assessed as **LOW**. Areas with oilfields and/or petroleum storages sites and sites contaminated with obsolete pesticides pose an **ELEVATED** hazard to health.



Figure 2. Lakalam Area.

## Actors

### UNMIA

United Nations Mission in Anyland (UNMIA) is a UN peace enforcement operation set up under Charter VII of the United Nations Charter. It is made up of civilian, military and police components. The UN Security Council authorized the establishment of UNMIA through its adoption of S/RES/2234(2011) on the establishment of the United Nations Mission Anyland on 22 July 2011 following the independence of Anyland.

UNMIA is in Anyland to support the Government of Anyland to implement the Comprehensive Peace Agreement. UNMIA's overall aim is to help the people of Anyland promote national reconciliation, lasting peace and stability and to build a prosperous country, in which human rights are respected and the protection of all citizens is assured.

UNMIA monitors and supports implementation of the various political, military, humanitarian and developmental aspects of the CPA. UNMIA is also tasked with other activities such as facilitating the voluntary return of refugees and displaced persons, providing de-mining assistance; and contributing towards international efforts to protect and promote human rights in Anyland.

### AFOR

Since December 2011, acting under a UN Charter VII mandate, NATO has assisted the UN Mission to Anyland (UNMIA) by providing airlift support for UN peacekeepers. NATO has also been working with the UN to identify further areas where it could support UNMIA.

Following renewed UN requests, the North Atlantic Council has agreed to extend its support through AFOR. The tasks shall be expanded to also include deploying a 500 troop strength mechanised engineering battalion to conduct operations in cooperation with UNMIA, UNHCR and

the local government in Anyland in order to respond to the humanitarian crises and facilitate conditions favourable to a peaceful and democratic development of Anyland.

AFOR rules of engagement gives the NATO commander the inherent authority and obligation to use all necessary means available and to take all appropriate actions in the self-defence of his/her unit and the primary mission objective of protection of the civilian population. AFOR shall be essentially self-sufficient and bed down in the Lakalam area.

## **UNHCR**

The United Nations High Commission for Refugees (UNHCR) is present in Abuj and is planning for a field office also in Lakalam. UNHCR's main focus in Anyland is to upgrade emergency structures in all camps and enhance interventions in the areas of shelter, health, education, water, sanitation and hygiene to reach minimum standards.

Protection priorities will include: maintaining the civilian character of refugee settlements; improving access to and quality of education, as a means of preventing child recruitment and child labour; enhancing the monitoring of sexual and gender-based violence (SGBV) and referral of cases; harmonizing access to assistance for individuals with specific needs; promoting peaceful coexistence among refugees and host communities; and strengthening the Government's capacity to respond to the protection needs of refugees.

Regarding IDPs, UNHCR will co-lead the protection cluster with the Norwegian Refugee Council (NRC) and will undertake assessments, protection monitoring, registration of unaccompanied and separated children, and advocacy -- together with other protection actors, the Government, diplomatic missions and the United Nations Mission in Anyland (UNMIA).

## **Local governance and civilian population**

The local governance and civilian population consists of, among other things;

- The local governor in Lakalam
- The Neighbourland Refugee committee chairman
- The IDP Women's committee chair woman
- The market sellers
- Local priests and Imams (or similar religious figures)
- Hospital staff
- Owner of the local land fill site (for waste management)



## Annex 3: Gaming cards

### Scenario 1: Water Shortage

Anyland Lakalam Water Shortage  
Killing Up to 10 People Daily –  
International community accused



As many as 10 refugees are dying daily as water runs out in Lakalam, hosting an influx of people fleeing fighting in Neighbourland, the aid group Medicines Sans Frontieres said.

Jane Doe, an emergency coordinator with MSF, said people died on the road during a 25-kilometer (16-mile) trek to a camp in North Eastern Anyland after water ran out at another site four days ago, forcing thousands to leave. Also Lakalam faces severe clean water shortages, and the international community is accused of drying out the wells.

"That was quite a horrifying activity being witnessed by us here," Doe said today by satellite telephone from the Kilometer 18 transit camp where MSF has stored water. Rains made roads impassable for trucks, he said.

Neighbourland's military and the rebel Neighbourland People's Liberation Movement-North have been fighting in the Anyland and Lakalam over the past year. There are now at least 152,000 Neighbourland refugees from the conflict in North eastern Anyland, according to the United Nations refugee agency, UNHCR.

Between five to 10 people are dying every day either walking to water sources or in clinics at two camps, MSF Deputy Head of Mission in Anyland said.

## EXIT

Fighting over water erupts in Lakalam.  
14 year old girl is shot dead as water  
shortage increases.



A 14 year old girl was shot today as fighting started at a local well. As Lakalam's sources of water diminish tensions in the area is high. Many blame the international community for the shortage due to its high water consumption and pollution of local water supply.

As NATO forces are withdrawing from the area a number of the wells they have constructed have now fallen into the hands of rebel groups, using water as an income and means of control. Many women say they are forced to either pay the rebels for water or risk being raped by them.

### Scenario 2: Cholera Outbreak

A cholera outbreak in Anyland has claimed 400  
lives and there are fears more people will die with  
collapsing healthcare.



Local refugee camp, flooded by the recent heavy rainfall.

The disease outbreak has now exploded beyond control in the city of Lakalam and into remote areas where it is difficult to get access to health care.

With heavy rainfall hitting Anyland, the outbreak has overwhelmed already overworked health services. Many refugee camps are now flooded, increasing the rate of infection.

The sickness is described as just another symptom of the civil war, as many people live in displacement where the illness spreads quickly.

Local medical services which were overworked before the rainfall are now unable to handle the increase of patients.

There have been reports of symptoms not related to cholera appearing, leading officials to fear there may be an unidentified disease also spreading.

## EXIT

NATO withdrawal leaves Lakalam  
health sector unready.



With the NATO mission in Lakalam ending worries are being raised over the insufficient healthcare remaining. "The NATO resources and labs where essential in the combating of the Cholera outbreak. With them gone we will not be able to prevent an outbreak next rain season" a local doctor said.

### Scenario 3: Oil Explosion

#### Explosion in Oil Depot during fierce fighting



Rebel Leader and former vice president Kier Racham confirmed Friday that his forces had lost control of the oil depot near Lakalam, but vowed his fighters would continue their battle against the government.

"We withdrew from the area, but it was to avoid fighting in the streets and save civilian lives. We fight on, we will continue the battle," Racham told reporters by satellite telephone from an undisclosed location in the country.

During the fighting several of the facilities depot exploded, with nine confirmed deaths, unknown number injured, and with large quantities of oil leaking uncontrolled into the groundwater.

##### Tactical withdrawal

President Avlas Riik has accused his long-term political rival Racham, whom he dismissed in July 2013, of attempting to stage a coup and arrested 11 senior political figures he said were involved in the alleged plot. Speaking to reporters in Country D, a rebel military spokesman described the oilfields as a "temporary setback". "Our forces made a tactical withdrawal to avoid civilian casualties," a local rebel officer said.

"The government does not have the capacity to defeat us militarily," he added, accusing the Anyland government of "bringing in mercenaries" from outside the country.

## EXIT

**The international community accused of groundwater pollution – you leave a waste dump behind!**



As NATO is wrapping up its mission in Lakalam increasing cries of outrage are coming from the people in the area. "What good are new wells if they are poisonous?" says a city official referring to the oil leaking into the groundwater.

While few blame the attack on the oil depot, which has led to the oil leakage, on NATO or UN, many are criticising their efforts in the aftermath of the incident. Many think that UN and NATO should have done more to stop the contamination of the groundwater.

As the NATO mission in Lakalam is ending, new interests are moving in. China, has already secured a partnership with the Anylandian government over their oil production and has stated it will among other things rebuild the oil depot and seek to restore oil exports to Anylands earlier levels.

### Scenario 4 Ivory plundering

#### Ivory funds rebel groups



Rebels are financing weapons purchases with a fast growing ivory trade, according to several sources. Non-confirmed rumors accuses UN and NATO to look the other way.

'Everyone knows them military are as ivory-corrupted as anyone else' says a local shop owner in Lakalam.

## EXIT

**NATO and UN personnel caught in Ivory smuggling**



Two individual's working for UN and NATO were arrested with 21 pieces of ornately carved elephant tusks as they boarded a flight to the United Kingdom, from Lakalam airport, according to customs officials. The two individuals, a Lieutenant Colonel and a diplomat were working with the NATO and UN missions in Lakalam.

Illegal ivory trade is a major issue in Anyland with rapidly diminishing elephant populations. The international community has been accused of looking the other way, and accepting bribes from smugglers and poachers.

FOI, Swedish Defence Research Agency, is a mainly assignment-funded agency under the Ministry of Defence. The core activities are research, method and technology development, as well as studies conducted in the interests of Swedish defence and the safety and security of society. The organisation employs approximately 1000 personnel of whom about 800 are scientists. This makes FOI Sweden's largest research institute. FOI gives its customers access to leading-edge expertise in a large number of fields such as security policy studies, defence and security related analyses, the assessment of various types of threat, systems for control and management of crises, protection against and management of hazardous substances, IT security and the potential offered by new sensors.

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