

# SEA in in defense planning and operations<sup>1</sup>

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## Abstract

This paper deals with a proposed model for Strategic Environmental Assessments (SEA) in the Swedish Armed Forces (SwAF) planning and decision making processes. The work has included establishment of project organisation, method development and testing of the model in two 'pilot processes' within SwAF. The SEA model was assessed as being able to capture most of the strategic issues that emerged in the interviews and reported experience. Nevertheless it should be continuously developed and improved and it is furthermore proposed that SwAF also should evaluate how detailed SEA surveys can be performed. The paper also discusses the adoption of SEA as a mean to reduce the environmental footprint of military and civilian actors operating in conflict and crises situations. We suggest that any new crises or conflict area should benefit from coordinated SEAs, including the needs, vulnerability and resilience of the affected people, society and geographic region, as well as the cumulative (aggregated) impact (positive and negative) from the various actors involved. Otherwise, good intentions risk not only to fail, but to also contradict each other, causing a series of unintended environmental consequences as experiences has shown.

## Introduction

The use of strategic environmental assessments (SEA) is emerging in **military organisations** and is for instance established within the British Ministry of Defence and as discussed below, in the Swedish Armed Forces. In **humanitarian response**, the environment is an issue that is supposed to be mainstreamed in all the sectors (clusters) activities which so far unfortunately mostly has led to confusion and not a whole lot of coordinated activities. However, some improvements have been made recently with the updated SPHERE-standards<sup>2</sup>, some environmental champion clusters such as the shelter cluster, deployment of strategically deployed Environmental Field Advisors. In the best of worlds, the above entities would collaborate and learn from each other's environmental performance including the respective comparative advantages. In reality however, to get an overview of the accumulated environmental footprint in a conflict or crises area is indeed a challenge.

## Challenges and opportunities with SEA policy and increased cooperation in operations

International aid and conflict assistance has grown to involve more actors. At the same time, corporate organizations seek to establish, or re-build, business relations in the very early stages after disasters and conflicts. Considering the fragility of the natural environment and the affected people in many crises and conflict situations, a more coherent approach including environmental considerations is required.<sup>3</sup> In reality, this means that the needs to include SEA's

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<sup>1</sup> An elaborated version of this paper has previously been published in Waleij, A., Tjäder, Z., Liljedahl, B. (2016) Strategic Environmental Assessments (SEA) in in defense planning and decision making, Proceedings from the 2<sup>nd</sup> European Conference of Defence and the Environment 2015, Helsinki 2015-06-09-2015-06-10., see [http://www.defmin.fi/files/3353/ECDE\\_Proceedings\\_2015.pdf](http://www.defmin.fi/files/3353/ECDE_Proceedings_2015.pdf)

<sup>2</sup> SPHERE 2011

<sup>3</sup> Waleij & Lewis, 2012

in planning and coordination, has increased in crises and conflicts.<sup>4</sup> Although a SEA in conflict or crises situations, cannot be as detailed and 'scientific' as a peacetime SEA, the methodology might indeed build upon current SEA best practices<sup>5,6</sup>

*Time constrains and coordination:* Natural disasters and/or escalation of violent conflicts may occur with little previous notion. Disaster response and crises support as well as peace operations generally requires rapid decision making and quick deployment capabilities. The idea often is to stay only for a while, so considering the environment may not always be a priority on the onset of an operation. This also means that the time that would normally be allocated for a SEA, now has to be reduced to weeks, days or hours, if they take place at all. From a host nation perspective, however, the cumulative (aggregated) presence of several organizations may continue over months or even years, and the need for a joint holistic approach regarding potential impacts is even more crucial, than if a single operator is present over time.<sup>7</sup>

The importance of communication and coordination mechanisms to be established in advance, as well as pre-crisis joint multi stakeholder environmental awareness trainings to facilitate expedient SEA based decision making is crucial, in order not to stall environmental consideration. Also, robust tools specially designed for time constraints and multi-organization coordination is in dire need. However, addressing environmental considerations under time constraints requires cross-organizational trust since and will only work if the parties know that they can rely on each other. This is especially important considering that organizations in these situations often compete over the same donor attention. Moreover, where civil and military coordination must take place, trust is an even bigger issue, than "just" military-military and civilian to civilian cooperation.

*The aggregated footprint;* The significant amount of deployed personnel, from different nations and organisations, as well as investor and business presence that work side by side in conflict and crises areas can create a substantial environmental impact on the ecological system and its inhabitants and also lead to security and health implications. The unexpected outbreak of cholera in the aftermath of the 2010 Haiti earthquake can serve as a striking example of the need for advance environmental planning.<sup>8</sup> The earthquake that caused more than 200.000 deaths and displaced 2.3 million Haitians also caused extensive damage to the already limited infrastructure, including water and sanitation infrastructure. Few predicted the outbreak and rapid spread of cholera in Haiti as cholera was not present to the earthquake. The conclusion was that cholera must have been introduced, likely by the international presence. As it turned out however, the blame fell on the UN peacekeeping mission (MINUSTAH). One takeaway is that omitting to include environmental aspects in conflict analysis and pre-mission assessments such as military reconnaissance and the humanitarian MIRA<sup>9</sup> can severely aggravate the situation and counter the very mission itself.

### **SEA in the Swedish Armed Forces**

According to directions from the Swedish Ministry of Defence, the Swedish Armed Forces (SwAF) shall report progress with regards to its work with implementing SEAs in planning

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<sup>4</sup> Liljedahl et al 2014

<sup>5</sup> Sadler & Verheem, 1996

<sup>6</sup> Therivel, 2006

<sup>7</sup> Therivel 2004

<sup>8</sup> Liljedahl et al 2012

<sup>9</sup> Multi-Cluster/Sector Initial Rapid Assessment, see [https://docs.unocha.org/sites/dms/Documents/mira\\_final\\_version2012.pdf](https://docs.unocha.org/sites/dms/Documents/mira_final_version2012.pdf)

and decision making processes. SwAF commissioned the Swedish Defence Research Agency (FOI) to develop a proposal for a customized SEA approach with complementing tools. The work included establishment of project organisation, method development and testing of the model in 'pilot processes' within SwAF. The project also conducted a number of interviews with relevant stakeholders within SwAF. The proposed SEA model developed for SwAF focuses on six main areas which are considered to capture some of the core issues of a strategic nature for SwAF:

- a. Impact on SwAF environmental policy, priority areas in the defence sector, thematic priorities, environmental legislation and other applicable regulations,
- b. Environmental issues that may affect the security situation
- c. Environmental issues affecting health of personnel and the general population
- d. Environmental effects that may impact the confidence in SwAF and Sweden
- e. Resource use from a life cycle and economic perspective, and;
- f. Protection against financial/liability claims.

The main SEA checklist is supported by four additional checklists regarding

- (1) the 16 Swedish national environmental objectives,
- (2) SwAF environmental priority targets,
- (3) a checklist for strategic environmental assessments modified from the British Ministry of Defence (see Figure 2) and
- (4) tentative assessment criteria for 'high' and 'low' environmental impact, developed in the framework of SwAF Medical Intelligence (MedIntel, Figure 3).

Example	
<b>VERY HIGH</b>	Link to conflict, no resilience/ irreversible, very severe stress
<b>HIGH</b>	Link to crime, low resilience, severe stress
<b>ELEVATED</b>	Link to corruption, limited resilience, under stress
<b>LOW</b>	Limited concerns, good management, resilient/ reversible

**Figure 2.** Tentative assessment criteria for 'high' and 'low' environmental impact, developed in the framework of SwAF Medical Intelligence (MedIntel)

The model has been tested against the planning for the SwAF deployment to Mali (Table 2).<sup>10</sup>

## Results

The developed SEA model was assessed as being able to capture most of the strategic issues that emerged during the interviews and reported experiences. The proposed model represents an initial needs assessment (i.e. SEA screening) and is adapted to a time-critical process, where an assessment needs to be carried out within a matter of hours or days. If necessary, the SEA screening can, and should, be followed by a detailed SEA survey. Areas in need of further development in the model include answering the following questions:

- a) How to secure environmental expertise in the assessments?
- b) Is there a need for adapted training and/ or particular environmental support?
- c) How can it be secured that SEA screening will be carried out in practice?

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

d) Is there a need for priorities for the decisions / processes where SEA screening should be implemented?

Furthermore, a definition of indicators and impact levels need to be defined.

**Table 2.** Short version of SEA for the planning for the SwAF deployment to MINUSMA, Mali.

SEA Screening Mali (UN PKO)			Environmental Assessment		Uncertainty in assessment		Need for further assessment?	
Date: 18 March 2014, Sign: INSS J4 / FOI								
SwAF proposed Environmental Core values	Explanation and examples	Reasoning, preconditions, comments	Low/ Medium/Large	Short /Medium/ Long term	Precise/ Moderate / Uncertain	Joint Env Dept been consulted? YES/NO	NO	YES
1. Impact on SwAF and international relevant environmental regulations	SwAF Environmental Policy etc gives direction on prioritised environmental areas	E.g. pre-conditions for environmental considerations on operations and exercises. Environmental Governance and Institutional capacity is very low in Mali. Organic capabilities for e.g. hazardous waste will most likely be needed	Medium	Medium  Long	Precise	NO	NO (SwAF)	YES (UN)
2. Environmental issues impacting security	Environmental issues / natural resources are often one part of the conflict panorama.	Natural resources (e.g. water, land) play a significant role in fuelling and sustaining conflict and crises at the local level	Medium-large	Medium-Long	Moderate		NO	YES
3. Environmental issues impacting health	Hazardous substances, particulate matter or air pollutants and noise are examples.	Bamako: locally assumed high levels of particulate matter and organic volatile pollutants. Timbuktu: sand storms	Bamako: Low, Timbuktu Medium	Bamako Long Timbuktu Short	Moderate		NO	YES (air samples)
4. Environmental issues impacting reputation	Due diligence is critical	The UNSC resolution for (MINUSMA) has a dedicated environmental paragraph. <sup>11</sup> The UN is however currently assessed as unable to implement the environmental considerations warranted.	UN: Large  SwAF unknown	UN: Long  SwAF unknown	Moderate- Certain-		NO	NO
5. Resource consumption from a life cycle perspective	Initially higher costs, can in a life cycle perspective result in considerable savings.	The environmental work in MINUSMA has not reached its full potential.	UN: Medium-High SwAF: Low	UN: Medium-Long  SwAF: Short	Moderate		NO	JA
6. Protection against liability and financial claims	E.g. the "Polluter Pay Principle"	NA. UN is formally responsible	UN: Large SwAF:  Low	UN: Medium  SwAF: Short	Moderate		NO	NO

<sup>11</sup> Security Council resolution 2100, which established United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA); "32. Requests the Secretary-General to consider the environmental impacts of operations of MINUSMA when fulfilling its mandated tasks and, in this context encourages MINUSMA to manage them, as appropriate and in accordance with applicable and relevant General Assembly resolutions and United Nations rules and regulations, and to operate mindfully in the vicinity of cultural and historical sites."

The report<sup>12</sup> presented some recommendations in order to enable effective implementation of SEAs in SwAF planning and decision making processes, namely to:

- Initiate a work to ensure responsibilities, command structure and assessments of the SEA process, where SwAF environmental functions at the HQ level routinely is involved.
- Perform complementary SEA screenings on relevant procurement processes, after which the SEA checklist should be re-evaluated and amended, if necessary.
- Ensure simple and quick access to already existing environmental information in SwAF including point of contacts to facilitate time-critical SEA assessments.
- Promote efforts to enhance strategic environmental approaches through collaboration with EU, NATO and the UN, including that environmental expertise from the Swedish defence sector can be used to fill relevant positions in EU and the UN.
- Determine criteria for 'high' and 'low' environmental impact.

Finally, it was proposed that the Swedish Armed Forces also should evaluate how detailed SEA surveys can be performed, when justified, including how 'positive opportunities' could be caught by strategic planning. Also, by ensuring SEA as an essential part of an the Environmental Management System (EMS) of SwAF activities, the effectiveness of the impact assessments undertaken can be monitored and measured..

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<sup>12</sup> Liljedahl et al 2014