BIG DATA in, on and as the Battlefield

NATO Advances Sustainable Military Camp Concept

Mogelijkheden en beperkingen van Concept Development & Experimentation
WHAT IS A SUSTAINABLE CAMP? WHY IS NATO INTERESTED IN SUCH A CONCEPT? WHAT DOES THE FUTURE HOLD FOR DEPLOYED MILITARY CAMP? HOW DO WE CLOSE OUT A MILITARY CAMP?

These and many other questions have been thrown around NATO and nations for a number of years. In 2011, a small group of individuals decided to move the yardstick forward by proposing the creation of an Advanced Research Workshop under the auspices of the NATO Science for Peace and Security (SPS) programme.

The project was named “Sustainable Military Compounds (Toward a Zero Footprint Compound)” . The project was approved and the results were indeed impressive given the timescale involved and level of ambition of the workshop participants.

This article highlights the achieved results, the international and social dimensions of operations. One of the syndicate groups looked at the environmental norms and standards of the NATO and the NATO agencies and organizations who also participated in the workshops, to include the Military Engineering Center of Excellence (MILENG COE), Energy Security Center of Excellence (ENSEC COE) and the NATO Support and Procurement Agency (NSPA).

The final two objectives were relatively straightforward and hence were handily met with the team of experts in NATO documentation within the workshop. The workshops consisted of plenary and syndicated discussions. One of the syndicate groups looked at best practices to reduce the environmental footprint of NATO operations and camps.

The Sustainable Military Compounds project contributes to priority 1 and 3 in particular to security, and priority 5 to environmental security. Further reading of www.nato.int/cps/en/natohq/culture/natohq_sps/policies/633431.htm#NationalPolicies.

Table 1- Workshop Nations

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Activities funded under the SPS Programme must address the SPS key priorities, which are:

1. Facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet emerging security challenges in the fields of Counter-Terrorism, Energy Security, Cyber Defence, Defence against CBED Agents and Environmental Security.

2. Enhance support for NATO-led operations and missions by providing of civilian support through SPS Key Priorities, provision of access to information through internet connectivity as in the SILK-Afghanistan Programme, attention for cultural and social aspects in military operations and missions and by enhancing cooperation with other international actors.


4. Any project clearly linked to a threat to security not otherwise defined in these priorities will be examined for links to NATO’s Strategic Objectives.

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The revisions were based on lessons observed from recent NATO operations in Afghanistan. Given that the first two objectives were innovative and groundbreaking for NATO, this article will look into these in greater detail.

NATO Sustainable Camp Model

The flagship product of the workshop was the development of a NATO Sustainable Camp Model. It was identified early in the workshop that few NATO nations had an understanding of what their consumption was on operations, specifically in the areas of potable water, waste water, solid waste, and fuel. The collection of such data on operations was new and innovative and as such, few case studies were available. Given this, the workshop team used existing generic consumption rates to develop the Sustainable Camp Model. These numbers exist in NATO Military Engineering doctrine but have never been validated in a theatre of operations. The model will enable the Military Engineering planning staff to input the characteristics of the camp and provide a planning estimate of what environmental and energy needs that camp will require. This will be a valuable planning tool for future NATO operations. However, it was only the first step as the goal of future camps is to reduce their environmental and energy needs through the use of innovative technologies. Using data from commercial technologies, the user is now able to select alternative energy technologies which could potentially be used at the military camp and instantly see the savings in the Sustainable Camp Model. The value of this information cannot be underestimated as nations seek ways to reduce their impact on the environment and to reduce the logistical burden on operations. Figures 2 and 3 are taken from the dashboard within the Sustainable Camp Model and demonstrate its value in graphically demonstrating the savings to military planners as well as tools to convince senior military leaders in investing in new and innovative technologies.

The development of the model was the first step in sustainable camp planning. Since the model has been finalized, the next step has been putting the model into use by those who will require it for planning. As NATO and nations conduct planning for operations and survivors, the goal is to distribute the Sustainable Camp Model to those planners in order to validate the information and determine its effectiveness. The simplicity of the model will enable it to be updated based on user feedback.

Summary

In summary, the future of how NATO conducts camp closeout and the understanding of sustainability in operations has been assisted by the work of a dedicated team of experts. The development of a NATO Camp Closure Handbook and a Sustainable Camp Model will be invaluable tools as NATO and nations look at more efficient and cost-effective ways to conduct operations. The savings in fuel, waste and water will enhance the operational effectiveness of militaries and promote sustainability and stewardship across NATO.

1. The term compound has been replaced by “base” and “camp” in NATO terminology
2. Turkey recognizes the Republic of Macedonia by its constitutional name
3. Turkey recognizes the Republic of Macedonia by its constitutional name
4. Solar Panels, solar shades, waste to energy, grey water re-use
5. Allied Joint Environmental Protection Publication
'Arte pugnatibus adsum' is een Latijnse uitdrukking en kan worden vertaald met: De wetenschap is aanwezig bij de strijdenden,

of (zoals vastgesteld bij Landmachtorder):

Met vakmanschap sta ik de strijdenden bij.