SUMMARY REPORT

INTRODUCTION
The past 15 years the participation of military units in humanitarian, peace keeping and peace enforcing operations has become the core businesses of the Armed Forces. These forces are quartered in military compounds that are generally in use for many years and are handed over from one nation to another as troops are relieved. A few hundred to thousands of military personnel live and work in these compounds and of course the same environmental aspects as in their peacetime barracks are of interest. The preparation of safe drinking water, treatment of waste water, the management of waste, soil protection against petrol and oil spills, the sound storage of dangerous substances and a reliable energy supply are aspects that have to be taken care of. Often the civil power companies, waste collectors and drinking water and sewage companies work poorly or not at all anymore because of the instability in the country. There the troops themselves usually have to make sure these issues are dealt with in an environmentally correct way themselves.

The NATO Standardization Agreement STANAG 7141 EP, fully titled the “Joint NATO guidelines for environmental protection during NATO led operations and exercises” states the necessity and gives the framework for environmental protection during operations. Most of the environmental load of an operation focuses on and comes together in the compounds. The environmental questions while operating abroad are how to prevent health hazards to its own personnel and the surrounding local population, how to prevent damage to the environment and how to prevent legal claims when the site of a compound is supposedly polluted by a sending nation? Each individual sending nation is confronted with these problems and is working on solutions. Interoperability between troops of NATO and Partnership countries and the common practice to hand over the compound to another country when troops are relieved make it useful to find common ground on these topics.

PROPOSAL FOR THE WORKSHOP
Austria and the Netherlands have proposed to organise a workshop on the topic “Environmental aspects of military compounds” with the following objectives:
- establish how the participating countries have covered the environmental aspects of military compounds in procedures and techniques,
- share experiences and successes in this field,
- establish a network of experts so that bilateral contacts can follow and
- determine whether follow-up activities such as a short term project or pilot study are useful and desirable.

The scope of the workshop encompassed the materiel, methods, techniques and procedures used during design, construction, operation, transfer to other nations and dismantling of compounds. The relevant issues are drinking water facilities, wastewater treatment, waste management, storage of dangerous substances, soil protection and energy supply.
SURVEY
In the months before the Workshop a survey was sent to all participants, which focussed on the following items:
- the background of the participants
- the implementation of STANAG 7141 EP
- type of legislation applied during operations
- available procedures and handbooks
- international co-operation in this field and
- available environment related equipment.

Out of the 25 countries present at the workshop, 18 have replied so a fairly good impression of the situation has been obtained.

The implementation of STANAG 7141 EP is already completed or underway in 76% of the countries present at the workshop.

Regarding the type of environmental legislation that is being applied during operations the results were as follows:
- 52% of the sending nations applies its own environmental legislation
- 24% applies the local legislation of the country where the operation takes place
- 19% uses the most stringent of the local or its own legislation

Quite a few countries use additional regulations besides legislation. Some of the regulations mentioned are the Status of Forces Agreement, MoU’s, EU regulations and the Stanag 7141EP.

In 14 of the participating countries there are already 43 handbooks and procedures available; 18 more procedures are being prepared. That means there is already a lot of knowledge and experience on paper. At the same time it became apparent that procedures from other countries are rarely used, which is an indication of the fact that there is little international co-operation on this subject. About half of the countries present indicate co-operation with other countries. On average this co-operation took place with 2 other countries, with a maximum of 5 countries. The countries most co-operated with are Germany, Sweden and USA.

Half of the countries have their own equipment for drinking water, waste water treatment, soil protection, storage of hazardous materials and energy supply. Only 5 countries mention the availability of waste treatment equipment.

The conclusions of the survey have been incorporated in the overall workshop conclusions.

WORKSHOP PROCEEDINGS
The 3-day workshop took place at the National Defence College (Landesverteidigungs–akademie) in Vienna, Austria on May 9–11, 2006 and consisted of plenary sessions with presentations and discussion, syndicate groups to look further into the specific aspects, followed by syndicate and overall conclusions. A fieldtrip to a topic related site was held.
The workshop was visited by 69 participants from 25 different countries:

- 16 NATO countries: Belgium, Canada, Germany, Estonia, France, Great Britain, Greece, Hungary, Lithuania, Latvia, the Netherlands, Norway, Portugal, Romania, Turkey and the United States of America and
- 9 Partner countries: Albania, Armenia, Austria, Azerbaijan, Croatia, Finland, Former Yugoslav Republic of Macedonia, Georgia and Ukraine.

Apart from these national representatives there were participants from 5 NATO organisations: CCMS (Committee on the Challenges of Modern Society), SHAPE (Supreme Allied Headquarters Europe), NATO School Oberammergau, ENTEC (NATO Engineering School Munich) and NAMSA (NATO Maintenance & Supply Agency).

In the opening session presentations were given by representative of the two co-directing countries, Austria and the Netherlands, and of NATO/CCMS. The Austrian BrigGen Secur Cabanac, deputy director of the National Defence College Austria, spoke out a very hearty welcome to all participants.

BrigGen R.J.M. Veger, Director Operational Support of the Royal Netherlands Army, stated in his presentation that interoperability in compounds is very obvious, since much compounds are used by different nations at the same time. Since the NATO military is well accustomed to standardisation in numerous areas and since NATO has provided a framework through MC 469 and STANAG 7141, the logical way ahead is harmonisation and standardisation by harmonising procedures, sharing field experiences through a networks of experts.

Dr. Deniz Beten, Head threats and challenges section NATO, showed that since the early eighties NATO-CCMS has developed an influential programme of defence related environmental studies and conferences and offers a platform for building relations with EAPC countries within the PFP programme. Studies such as “Environmental Management Systems”, “Sustainable Building for Military Infrastructure” and this workshop on environmental issues on compounds fit well in this category.

The following twelve presentations were given by representatives from Albania, Austria, Belgium, Canada, Germany, Rumania, United Kingdom, USA as well as from NAMSA and SHAPE.

The presentations focussed on:

- The NATO regulatory framework on environmental protection
- The implementation policy for Environmental Management Systems on deployed operations in a number of countries
- Design concepts for military field camps from Belgium, Germany. NAMSA, United Kingdom and the USA, which are modular, scalable and where the level of provisions follows the phase of the operation (e.g. the UK “3 tiers”)
- Land quality assessments previous to the choice of a field camp location and at the end of an operation during handover and redeployment
- Technical solutions for the treatment of waste water
- Innovation on the reduction of solid waste in food packaging and on using waste as a source of electrical power supply
Examples of situations where environmental protection failed with pollution as a result
Examples of environmental protection during exercises by NSF and Rumania
Soil protection measures through compound spill plans, pollution control equipment and pollution control absorbents,
Examples of field camps, such as Camp Eaglebase near Tuzla, Bosnia i Herzegovina, the German Provincial Reconstruction Team (PRT) camp at Kunduz, North Afghanistan and the NATO Joint Task Force camp with NAMSA as host nation.

The full text of the workshop proceedings can be found in the NASTO/CCMS Report nr. 276: “NATO/CCMS Workshop Environmental Aspects of Military Compounds”.

SYNDICATE CONCLUSIONS
Four syndicates discussed during the workshop, in three periods of time, the following topics:
- policy and procedures
- soil and storage
- water and wastewater
- waste and energy.

The syndicates conclusions are integrated in the overall workshop conclusions. There where more detail is given in the syndicate conclusions, this is a good starting point for future activities in the next phase of this project.

WORKSHOP CONCLUSIONS
Based on the survey conclusions and on the conclusions reached in the syndicates the overall workshop conclusions were formulated, discussed and amended in the final plenary meeting. The verbatim text of the workshop conclusions is given below:

1. Since 1990 the core business of military forces is peacekeeping operations. Military compounds house large concentrations of troops over a long period of time. Often there will be different nationalities working together and the compounds are handed over from one nation to another as troops are relieved. Environmental aspects such as the availability of safe drinking water, the treatment of waste water, the management of waste, protection of the soil, storage of hazardous materials and energy supply are vital during the complete lifecycle: design; construction; operation, handover and dismantling of these compounds.

2. Operational environmental management is essential for military commanders to create safe living and working conditions for their soldiers, reduce the risks of complaints and claims from the local populations and avoid adverse public opinion and relations.

3. At the NATO workshop “Environmental Aspects of Military Compounds” 65 experts from 24 countries were present. There was a good mix of NATO and Partners countries and NATO institutions and of policy, operational and acquisition experts. The established network will be valuable to make increasing co-operation possible in the future.
4. Considerable knowledge has already been developed in the individual countries, but exchange of this information and cooperation in this field is very limited. To enhance interoperability exchange of knowledge and harmonisation must be intensified.

5. NATO policy and STANAG's form a good basis at the strategic level to incorporate these environmental aspects into the operational planning process. Implementation in an early stage is a condition to be successful. However, NATO does not have an EMS (Environmental Management System) for deployed operations and compliance has been and continues to be an issue.

6. Clarity is required concerning environmental standards (waste water discharge, soil remediation, air emissions, etc.) for NATO-led multinational operations.

7. Training and education at all levels are essential for awareness on this topic and are necessary to be able to handle these issues in the right way to achieve interoperability. Nations must support the NATO School by providing speakers to share their expertise.

8. Vertical and horizontal co-ordination and co-operation between the functional organisations (engineering, logistics, occupational health, medical, environmental, etc) is necessary throughout the entire operational cycle, but it is essential at the commencement of the planning cycle.

9. Way ahead:
   • Within the CCMS framework a Subject Matter Experts group consisting of all relevant functional organisations should develop a "CCMS Guidance Document for the Environmental Best Management Practises for Deployed Camps".
   • National documentation is to be reviewed to develop a repository using the CCMS website.
   • Upon completion, turn over to a Centre of Excellence within the NATO framework for custodianship.
   • Integrate the Guidance Document into NATO School training.
   • NATO and national predeployment training and exercises should include compound issues.

FUTURE ACTIVITIES
The final report of this workshop will be presented at the first NATO SPS Plenary Meeting in October 2006. There a proposal for a follow up will be launched: in (tentatively) two workshops the five actions defined under point 9. of the Workshop Conclusions will be carried out. The Netherlands and the United States of America have agreed to act as co-directors.
POINTS OF CONTACT
The points of contact for the first phase of the project are the two co-directors:

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