

NATO/CCMS Pilot Study  
Forms of Environmental Education in the Armed Forces  
and their Impact on Creation of Pro-environmental  
Attitudes

Final Report



**No. 272**

Pilot Study Co- Directors:

Dr Anna Kalinowska/ Poland  
Michael Dawson/ Canada

2000 – 2004

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## **SUMMARY**

Six meetings/ were conducted during the 3 years of the Pilot Study. They were attended by 56 participants from 16 different countries. This level of participation underscores the interest in this matter. In spite of the above-mentioned figures, only 10 persons took part at 4 or more of the 6 meetings and we can present inputs from only 11 countries. Nevertheless, during the meetings many ideas were generated and we are satisfied that there is significant potential for the continuing development of educational materials and their dissemination among NATO/ CCMS and EAPC members. Thanks to special efforts of the host countries, participants of meetings had the opportunity to learn about environmental education and institutions in Poland, Lithuania, Hungary and Romania. At the same time, the participants from the host countries were able to learn from the experience of the participants from guest countries. Some problems and confusion in the methodology were encountered and resolved successfully.

As a result, the working team collected seventy-one (71) examples of environmental education and awareness instruments from 11 countries. The instruments can be distinguished as Education instruments and Awareness instruments. Educational instruments are defined as those that are provided in a competency based setting (e.g. Formal Course). Awareness instruments are those instruments used to create an increase in general awareness of a wide range of environmental issues or to increase in awareness of a single topic (e.g. energy conservation) In an effort to provide easy access to additional information about the various types of environmental education and awareness instruments submitted for inclusion in this study, the information is catalogued in the CCMS/NATO Template Tool - a database application on this CD. The CD also provides additional insight into creation of the report through an MS PowerPoint slide show. It presents examples of best practices for the environmental education in the armed forces.

The potential for future projects is promising and participants hope that the end of the formal element of this pilot study on the Forms of Environmental Education will be the beginning of new co-operation in this field.

**Michael Dawson**

## **INTRODUCTION**

At its March 2000 plenary meeting, the NATO Committee on the Challenges of Modern Society (CCMS) approved the proposal by the Polish national representative to conduct a Pilot Study on forms of environmental education in the armed forces and their impact on the creation of pro-environmental attitudes. The pilot study was designed to examine the broad issue of environmental education, awareness and training (rather than the narrower competency-based training that had been the subject of an earlier study) with regard to its effectiveness in imparting a broad and lasting appreciation of the impacts of human activity on the environment.

This document is the record of the deliberations of the members of the Pilot Study (see List of Participants, Annex “A”), and the recommendations arising out of those deliberations.

The need for this study is evidenced by the fact that, while there is a wealth of information available on specialist training (including a previously mentioned CCMS Pilot Study that examined the competency-based training of military personnel), there is little understanding of the nature and extent of the tools and techniques available and that have been designed to shape the environmental consciousness of the average member of the armed forces.

Military training has been studied and refined since the first organised forces banded together to protect and expand their territories in a time before written records. It might therefore appear at first glance that there is little to add to the discussion.

Nonetheless, human society has evolved and expanded more in the 100 years of the last century than in the rest of recorded history combined. The unprecedented advances in communications and transportation technology in the closing decades of the 20<sup>th</sup> century have created what Marshal McLuhan called “the global village”. With this

fundamental shift in the human condition (and the correspondingly evolving perception of the role of the military sector in modern society), comes the recognition that the military forms an integral element of the society it serves.

In the face of this new reality, governments have acknowledged the fragile nature of political frontiers, particularly when it comes to such modern day phenomena as the trans-boundary migration of air- and water borne pollutants and toxins. Chernobyl is but a single sobering example.

This fact of life is especially relevant to modern day armed forces around the world. Like never since the inception of the concept of a societal sector dedicated to defence, the military is de facto, an integral element of the society in which it functions and the attitude of its personnel, shaped by their individual awareness of the world around them, influences the way they interact with the environment.

Added to this, the military employs as part of its daily activities, a wide range of unique technologies and operations with significant potential for severe negative environmental impacts. The consequences of these impacts not only on their own but also on surrounding countries could well be said to be incalculable.

Within McLuhan's global village, new technologies are researched, developed and, promulgated at a lightning pace. As a result, the international military sector as a whole is often faced with virtually the same range of challenges and opportunities at the same time. This is particularly true of environmental challenges and opportunities. The acquisition, use, and disposal of hazardous materials, the disposition of unexploded ordnance and energetics with due regard for their carcinogenic potential, the sustained use of land for training are but a few of the environment-related issues for which virtually every military organisation is seeking timely, cost-beneficial, and environmentally sound solutions.

It is true that many of the environmental issues facing military organisations are somewhat esoteric in the larger scheme of things (e.g. the use of depleted uranium in weapons as opposed to such relatively mundane preoccupations for the broader society as solid waste to landfill). Nonetheless, every operational aspect requires not only an appreciation of the technical specifications and considerations but also an appreciation of the environmental impact of that operational aspect. This calls for an educated and informed appreciation of the interconnections among the society, the economy and the environment – the basis of sustainable development.

In this context, a proactive curriculum that seeks to instill in military personnel an individual sense of their place in the society they serve with emphasis on their individual power to affect the environment positively or negatively both on and off duty is key to producing good corporate citizens in the long term. In the short term, a soldier who understands and implements the principle of mitigating negative environmental impacts on training areas contributes to the sustainability of those areas in an era when the availability of such lands is at a premium.

Environmental education, whether competency-based training, administrative development, or general awareness, must contain a reference to the broader issue of the environment to ensure that environmental education is always connected to the concept of society and our place in it. This approach underscores the fact that the environment is irreversibly intertwined with the society and the economy.

In addition to this Final Report with its recommendations for implementing our conclusions, the Pilot Study group has developed a demonstration Compact Disc (the “demo CD”) that contains a wide range of examples of education and awareness tools and techniques to provide users with an appreciation of the range of options for framing their environmental messages in the context of education, training and/or awareness.

We hope that readers of the Final Report, especially education, awareness and training practitioners might wish to select one or more of the tools contained on the demo

CD and adapt them to an educational package that is a priority for them. Trainers should feel free to avail themselves fully of the opportunity to achieve human, financial, and time resource savings using these tools and calling on the Pilot Study participants for guidance and support.

**Anna Kalinowska**  
**Michael Dawson**  
**Pilot Study Co-Directors**

## **HISTORY OF THE CCMS PILOT STUDY- ON FORMS OF ENVIRONMENTAL EDUCATION IN THE ARMED FORCES AND THEIR IMPACT ON CREATION OF PRO-ENVIRONMENTAL ATTITUDES.**

The idea for this pilot study was inspired by the strategy for environmental education contained in “Agenda 21” (chapter 36), a final product of the (United Nations Conference on Environment and Development) “Earth Summit”, held in Rio de Janeiro, 1992.

“Agenda 21” highlighted support for, “education for everybody and striving for common access to primary education...creating social awareness of environmental protection and permanent and sustainable development as soon as possible...and environmental education of all social groups ranging from school children to adults” (United Nations Conference on Environment and Development. Agenda 21. UNESCO 1992. UNESCO Switzerland.)

The notion that investments in environmental education are the most efficient form of environmental protection is gaining growing acceptance in the majority of NATO countries; however, knowledge of the scale, possibilities and forms of environmental education to be applied for various social group is still incomplete.

The armed forces, including both the mandatory (compulsory service) and professional (career) military service, represent the largest homogenous social group through which education and qualifications gained during the time of service can be carried over into the future lives and careers of the service personnel. This carry-over applies both to behaviours in and around training sites and bases, and the home communities of the service personnel. Additionally, for most members in the armed forces, the period spent in the service is their final stage of education. Knowledge and habits gained in the service

stay with them throughout their adult lives. Therefore, shaping pro-environmental attitudes is particularly important during mandatory military service. In the case of professional military service, knowledge transferred has particular importance for the environmental security of states. Environmental education in the armed forces has significant potential for shaping environmental behaviours both directly during the term of service, and indirectly when those attitudes and behavioural patterns are carried over into civil society.

In many countries, an appreciation of this fact is demonstrated by the growing numbers of educational programmes directed towards the armed forces as well as the increasing expenditures being allocated to achieve this outcome. Examining the experiences of armed forces units in various countries will provide valuable examples of current best practices. These best practices can then be compared and analysed with a view to adapting their strengths. An international study to accomplish this comparison/analysis might prove useful.

In fact, a proposal for such an international study was presented to the NATO/CCMS plenary meeting in Brussels, in March 2000 by Dr Anna Kalinowska from Warsaw University, supported by the Polish CCMS national representative - Dr Stanislaw Wilczkowiak.

The proposal was accepted by the Committee at its October 5<sup>th</sup>, 2000 plenary meeting in Berlin. Poland agreed to lead the study and Belgium, the Czech Republic, Denmark, Hungary and Portugal immediately confirmed their participation. In November 2000 the proposal was distributed to EAPC Partner countries together with an invitation to nominate experts.

Before the first meeting, at the suggestion of the U.S. representative, a review of past CCMS studies on similar themes was undertaken. The first similar study was conducted more than 15 years ago (1983- 1989) by Spain with the participation of Germany and the U.K.. That pilot study, (entitled “Training and Education in Environmental Problems”) examined two aspects of the problem; the analysis of theories and notions underlying specific environmental behaviours and the design of a technique to carry out such an

analysis; and, the progress in international co-ordination, which enabled evaluation methodologies to be established allowing international comparisons, resulting eventually in overall conclusions.(NATO CCMS Report No 184).

The next study, (“Promotion of environmental awareness in the Armed Forces”) in which Germany, Belgium, Canada, Italy, the Netherlands, Norway, Portugal, Spain and UK participated, was conducted between 1987 and 1991. This Study ( NATO CCMS Report No. 188) developed techniques for promoting environmental awareness in the Armed Forces of member states and made a proposal for improvement where deemed necessary. A major accomplishment of the Pilot Study was the development of a statement of principles for “Environmental Awareness and Protection in the Armed Forces”.

The world environmental situation has changed since that time. Documents from the United Nations Summit on the Environment and Development, namely the “Rio Declaration” and “Agenda 21”, strongly stressed the need for the environmental education of all social groups including soldiers. The introduction of common environmental education programmes at schools and the increased media focus on environmental issues as well as what might simply be referred to as “ecology as a fashion statement” have all contributed to an increase in environmental awareness. Social expectations of compliance by industry, business and the armed forces with environmental standards continue to increase.

In this context, it was recommended, that the first workshop’s agenda should include a critical review of the content of existing educational materials and the methods, forms, financing of, and general access to environmental education in the armed forces.

### **Meeting Highlights:**

**Pre-meeting: Warsaw University: Warsaw, Poland 14 February 2001**

The representatives from Poland and Hungary attended the pre-meeting. The aim of that meeting was to plan the first meeting of CCMS Pilot Study: agree of the aim of that meeting, place and participants.

**Inaugural Meeting: Warsaw University: Warsaw, Poland:.12-14 September 2001:**

The inaugural meeting gathered 32 participants from 14 countries- Poland, Belgium, Denmark, the Czech Republic, Hungary and Portuga, Canada, Germany, Italy, Turkey, the United Kingdom, Finland, Lithuania, Romania and the Slovak Republic.

The record of proceedings was published under the title, “*Forms of Environmental Education in the Armed Forces and their Impact on Creation of Pro-environmental Attitudes. Presentations from NATO/ CCMS Pilot Study Inaugurating Meeting. Warsaw 2001*”. This publication contains the review of content and structures of environmental education in the armed forces from perspective of participating countries.

Participants also agreed on a work-plan for the activities of the Pilot Study and personal tasks. It was agreed that information about all examples of environmental education and awareness instruments will be catalogued in the Pilot Study Template Tool (unify form to complete with instructions).

During the first meeting Mr Michael Dawson from Canada (DND) agreed to share the responsibility for the project as co-director of Pilot Study. Dr. Anna Kalinowska accepted to this proposal. The progress report was well received by the Plenary.

In the response to the CCMS call for consideration of terrorism issues in work under way as a result of the events of September 11 2001, Dr. Kalinowska accepted the challenge of addressing environmental terrorism As part of the Pilot Study.

**The 2<sup>nd</sup> Meeting: Budapest, Hungary: 9 – 11 May 2002: Zrrinyii Miklos National Defence University**

The 2<sup>nd</sup> Meeting was attended by 16 representatives of 9 countries. During the first part of meeting, participants discussed “terrorism as an environmental impact”, then spent time reviewing the mandate of the Pilot Study, re-affirming its value, and planning some tangible next steps. Members agreed on two products: the Final Report document itself

complete with recommendations; and, an environmental awareness instrument incorporating the best practices identified through an analysis of the templates.

**3rd Meeting: Warsaw, Poland: 8- 9 May 2003: Warsaw University**

This meeting was attended by 17 representatives from 9 countries. The first part of the meeting was devoted to the summary of what had been achieved so far and what was expected from the third meeting. Members presented individual progress reports and presentations of actual environmental education instruments used in their respective armed forces. Subsequently the various chapters of the Final Report were agreed on.

**4<sup>th</sup> Meeting: Vilnius, Lithuania 27- 28 October 2003**

The Vilnius meeting was attended by 16 representatives from 7 countries. It has to be mentioned that the Lithuania meeting was jointly organised by Canada and Lithuania.

The first part of the meeting consisted of topical lectures and a review of progress chapter by chapter. There was considerable discussion on the purpose of the demonstration CD and its theme. In effect, the CD is designed to provide the target audience of the Final Report with practical examples of the type of training tools that can be used for transferring environmental awareness and knowledge through military organisations.

**5<sup>th</sup> Meeting: Bucharest, Romania 5-7 April 2004: Cercul Militar**

The meeting was attended by 13 representatives from 7 countries

Following some topical lectures on environmental education in the superior institutions in Romania and their influence on the formation of Armed Forces environmental specialists, progress on various elements of the Final Report and demonstration CD was reviewed. Then individual work plans and taskings in the form of a Pilot Study Task List was completed in preparation for the final meeting.

**6<sup>th</sup> Meeting: Warsaw, Poland 14-15 October 2004: Warsaw University**

The final meeting was attended by 14 representatives from 7 countries A special guest was Mrs Martine Deweer from the CCMS Secretariat. The final meeting focused on the specific elements of the Final Report document comprising the Introduction, History of

the Pilot Study, Compendium, Glossary of Terms, Conclusions and Recommendations. Special attention was paid to the demonstration CD Rom. Members agreed to continue informal contacts as well as the formal contacts necessary to complete the work.

**Bryan Pellerin**

**ENVIRONMENTAL EDUCATION AND AWARENESS  
INSTRUMENTS  
COMPENDIUM OF THE BEST PRACTICES**

**There are many examples in use of environmental education and awareness instruments that contribute to the increased sensitization of soldiers and civilians towards pro-environmental attitudes. The Working Group collected seventy-four (74) examples from eleven (11) countries. The instruments can be broadly distinguished as Education instruments and Awareness instruments. Education instruments are defined as those that are provided in a competency based setting (e.g. Formal Course). “Awareness instruments” refers to those instruments used to increase general awareness of a wide range of environmental topics or to provide an increase in the general awareness of a single topic (e.g. energy conservation, spill prevention and response).**

**Formal Course:** The Working Group obtained information related to twenty-seven (27) competency-based courses during the study.

The Working Group has further separated the Awareness instruments into the following categories: Awareness Display; Briefing; Publication, Recognition Awards; and Videos, each of which is further described below.

**Awareness Display:** Awareness Display instruments are used to create a link with environmental management. Awareness Display instruments for the purpose of this

report include web site, takeaways (e.g. mugs and playing cards with environmental messages or themes), a logo, flag and banner designed to create a recognition affiliation with the environmental program, and theme week and/or booths set up to promote an environment themed program either on its own or as part of a larger exhibition (e.g. Armed Forces Day).

**Briefings:** Briefings are designed to provide information to a general or specific audience about a general or specific environment program. Three examples are included. Benefits of briefings include their portability and the speaker's flexibility to adjust the message as necessary to reflect the needs of the targeted audience.

**Publications:** There were twenty-three (23) examples of Publications included in this report. Some are standalone publications while others are articles included in unrelated periodicals.

**Recognition Awards:** The participating countries for the report provided three examples of Recognition Awards. Two were competitions that required participants to have a basic level of awareness as part of the competitive process. The other Recognition Award is given out annually to deserving individuals or groups who were nominated for their efforts.

**Videos:** Videos are a popular form of providing education and awareness. Nine (9) examples were submitted for the report by participating countries. Videos can be a flexible instrument since they can complement other formal or informal education and awareness efforts or they can be used as a standalone instrument to increase the level of general or specific awareness. One video (from Portugal) was developed as a means to promote recognition award winners over the previous ten (10) years.

It became apparent during the Study that there were similarities regarding the subject areas that required either a formal course or general awareness thrust. It is therefore, not necessary to create environmental education or awareness instruments from scratch. In

an effort to provide easy access to additional information about the various types of environmental education and awareness instruments submitted for inclusion in this study, the Working Group catalogued the information in the NATO/CCMS Template Tool, an MS Access database application on the CD contained in this report. The CD also provides additional insight into creation of the report through a MS PowerPoint slide show.

The submission of additional templates is welcomed. The Template Tool contains a form that should be completed with the relevant information and a point of contact for submission.

**Hakan Seyirden**

## **GLOSSARY OF TERMS**

**Agenda 21** Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organisations of the United Nations, Governments, and Major Groups in every area in which humans impact on the environment (4).

**Army (Armed Forces)** In certain nations "army" is the land component of the armed forces. In other cases, army ("armée") covers all the armed forces. (1)

**Best practice:** A practice or combination of practices that are determined to be the most effective and practicable (including technological, economic and institutional considerations) means of controlling point and non-point source pollutants at levels compatible with environmental quality goals. *Reference: United States Environmental Protection Agency Terminology Reference System.*

### **Command / Commandant / Commander**

1. The authority vested in an individual of the armed forces for the direction, coordination, and control of military forces.
2. An order given by a commander; that is, the will of the commander expressed for the purpose of bringing about a particular action.
3. A unit, or units, an organisation, or an area under the command of one individual.
4. To dominate by a field of weapon fire or by observation from a superior position.
5. To exercise a command. (1)

### **Contamination / Infection**

The deposit, absorption or adsorption of radioactive material or of biological or chemical agents on or by structures, areas, personnel or objects (2)

**Establishment:** 1. An installation, together with its personnel and equipment, organized as an operating entity.

2. The table setting out the authorized numbers of men and major equipment in a unit/formations; sometimes called table of organisation or table of organisation and equipment. (2)

**Environment:** The surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation. (2)

**Environmental Aspect:** Element of an organisation's activities, products or services that can interact with the environment. (2)

**Environmental Assessment (or Environmental Impact Assessment (EIA)):** A review of the potential impact of a new development, particularly for a new building or road, on e.g. wildlife, people and the landscape. (2)

**Environmental Awareness:** Awareness of the environment and active participation in resolving environmental problems. (This means understanding of the physical world around us or having knowledge of the environment.)(2)

**Environmental Education:** An essential component in comprehensive lifelong education with a problem-solving approach, which plays an important part in understanding the complex problems of the environment and devising solutions to them.

**Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services. (2)

**Environmental Impacts Evaluation:** A documented evaluation of the environmental significance of the environmental impacts of an organisation's activities, products and services (both existing and planned). (2)

**Environmental Management:** The management functions (including planning) that develop, implement and maintain an organisation's environmental policies. (2)

**Environmental Management Programme:** A strategic course of action to enable an organisation to achieve set objectives and targets. (2)

**Environmental Management System (EMS):** The part of the organisation's overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental performance. (2)

**Environmental Management System Audit:** A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organisation's environmental management system conforms to the audit criteria set by the organisation, and for communication of the results of this process to management. (2)

**Environmental Objective:** An overall environmental goal, arising from the environmental policy and evaluation of environmental impacts, that an organisation sets itself to achieve and which is quantified where practicable. (2)

**Environmental Performance:** Results of an organisation's achievements in protecting the environment by reducing the environmental impacts of its activities in accordance with its environmental policy, objectives and targets. (2)

**Environmental Policy:** A publicly available statement by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets. (2)

**Environmental Target:** A detailed performance requirement, quantified where practicable, applicable to the organisation or parts thereof, that arises from the

environmental objectives and that needs to be set and met in order to achieve those objectives. (2)

**Environmental Tools and Working Instruments:** Environmental teaching instruments held in hand used by people for environmental education purpose (3)

**Environmental Training:** A training program in environment, which should give teaching and practice to a child, a soldier, a worker etc. in order to bring to a desired standard of behaviour. (2)

**Goals, Objectives and Targets:** Goals establish an overall sense of direction and set the parameters for action for the department. Objectives are the overall aims arising under each sustainable development goal. Targets are the detailed performance requirements that the department sets out to achieve.

**ISO 14001:** an International Organisation for Standardisation (ISO) standard, which is applicable to any organisation to:

- a) Implement, maintain and improve an environmental management system;
- b) Assure itself of its conformance with its stated environmental policy;
- c) Demonstrate such conformance to others and
- d) Either seek certification/ registration of its environmental management system by an external organisation or
- e) Make a self-determination and self-declaration of conformance with the International Standard. (2)

**NATO:** North Atlantic Treaty Organisation (1)

**Organisation:** A company, corporation, firm, enterprise, military or civil authority or institution, in part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration. (2)

**Rio Declaration on Environment and Development:** document adopted during The United Nations Conference on Environment and Development at Rio de Janeiro in 1992, is a set of 27 principles covering environmental protection and responsible development. These legally non-binding principles define the rights of people to development, and their responsibilities to safeguard the common environment.

**STANAG:** (NATO) Standardisation Agreement, The record of an agreement among several or all the member nations to adopt like or similar military equipment, ammunition, supplies, and stores; and operational, logistic, and administrative procedures. National acceptance of a NATO Allied publication issued by the Military Agency for Standardization may be recorded as a Standardization Agreement. Also called "STANAG". (1)

**Sustainable Development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (2)

**Template:** Pattern, which serves as a model. (3)

**Unit:**

1. A military element whose structure is prescribed by a competent authority.
  2. A standard or basic quantity into which an item of supply is divided, issued, or used.
- (1)

**Prevention of Pollution (pollution prevention)**

Use of processes, practices, materials, or products that avoid, reduce or control pollution, and which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

**NOTE** – The potential benefits of prevention of pollution include the reduction of adverse environmental impacts, improved efficiency and reduced costs.

**NOTE**-All definitions are taken from AAP- 6 (2003) NATO GLOSSARY OF TERMS (1), ISO 14001 INTERNATIONAL STANDARD (2), OXFORD DICTIONARY (3), RIO declaration (4), and OFFICIAL declaration in other meetings (5).

**Anna Kalinowska**  
**Johan Laire**

## **CONCLUSIONS AND RECOMMENDATIONS**

Those involved in the pilot study on Forms of Environmental Education in the Armed Forces and their Impact on Creation of Pro-environmental Attitudes gathered together on 6 separate occasions during the course of the study that began in September 2001. A total of 56 delegates from 16 different countries have participated in the various meetings and workshops thereby demonstrating a very high level of interest amongst member states in this important subject.

An account of the standard of environmental training and education in different NATO countries was presented in the report of the inaugural meeting. This and subsequent meetings demonstrated that a great deal of work has been undertaken by member countries and that a vast amount of material already exists. This material, if made available to all, could provide an invaluable resource for those wishing to carry out further research in this area. It could also provide those member states that have yet to develop comprehensive policies on environmental protection and education with a source of inspiration, ideas and materials. Finally it could help to overcome duplication of effort and the expenditure of increasingly scarce human and financial resources.

The pilot study noted that, to be effective, environmental protection and awareness training must be taken seriously at all levels. It must be seen as a function of command and must be fully integrated into military training. The importance of environmental protection and education must also be reflected in standing orders and standard operating procedures. It was also noted that delegates gleaned much useful information during the course of the meetings and that this knowledge has since been applied to the development of their own environmental policies and procedures. The pilot study concluded that NATO should build on the knowledge and interest that currently exists in a number of member countries. It should seek to develop avenues by which knowledge can be

developed and exported to those that require it and provide forums for the exchange of ideas and best practice.

**The pilot study acknowledged that, in this rapidly changing technological world, the best way of making existing environmental information available to all is via the Internet.** Accordingly the pilot study recommends the creation of a dedicated environmental website linked to the CCMS site. **The environmental website would contain information on environmental policy, procedures, publications, educational courses and the contact details of subject matter experts.** In order to demonstrate the utility of this website the pilot study has produced a number of templates for inclusion on a CD-Rom which is included with this Final Report. This CD gives information about a wide range of environmental material and seeks to demonstrate the utility of a dedicated environmental website. It is hoped that the CD will also demonstrate that this approach and the use of templates can be adapted easily to suit different requirements and needs. Finally, **in order to ensure that NATO and PfP members continue to participate in and support this initiative it is suggested that a standing committee be established in order to oversee the proposed website. It is suggested that the committee meet on a regular basis** (twice a year) in order to exchange information and to update the proposed website.

## **Annex “A”**

### **LIST OF PERSONS WHO PARTICIPATED AND ATTENDED IN THE MEETINGS OF THE CCMS PILOT STUDY FORMS OF ENVIRONMENTAL EDUCATION IN THE ARMED FORCES AND THEIR IMPACT ON CREATION OF PRO-ENVIRONMENTAL ATTITUDES**

The information of the list are related to the situation during the particular meetings and are **not** up-to dated

#### **BELGIUM**

**Johan Laire**, Environmental Specialist

**Martine Deweer**, Head Quater of NATO CCMS

**Johan Theetaert**, General Staff Environmental Department, Environmental Coordinator

**Bruno Renders**, BE Environmental Education Centre

**Christiaan Coemelck**, Environmental Specialist

#### **CANADA**

**Michael Dawson Co-director of CCMS Pilot Study**, Head of Sustainable Development Strategy and Environmental Management Systems, Department of National Defence CANADA

**Bryan Pellerin** representing the office of the Assistant Deputy Minister, Human Resources (Military) Department of National Defence  
CANADA

#### **CZECH REPUBLIC**

**Ales Komar**, Military University

**Frantisek Bozek**, Military University

#### **DENMARK**

**Jens Bøiehøj** Infrastructure and Environment Branch,  
Defence Command (Retired)

#### **FINLAND**

**Antti Kivipelto**, Environmental Director Ministry of Defence

#### **GERMANY**

**Manfred Hagen** The NATO School (SHAPE), Course Director Environmental & NBC Department,

### **GEORGIA**

**Gocha Ratiani** Environmental Specialist, Ministry of Defence

### **HUNGARY**

**Jaczo Zoltan**, Expert of Environmental Protection in Army

**Peter Olah**, Specialist for Environmental Auditing

**Arpad Vincze**, Military University

### **ITALY**

**Salvatore Mannino**, Aeronautica Militare, Comando Logistico

**Giacomo Trenta**, Aeronautica Militare, Comando Logistico

### **LITHUANIA**

**Algimantas Kutanovas**, Advanced Training Centre for the Military

**Irma Jakimaviciute**, Ministry of National Defence

**Regina Kersiene**, Gen. A./Ramanauskas Warfare Training Centre

**Nerijus Lesickas**, Gen. A./Ramanauskas Warfare Training Centre

**Jelena Sliachtic**, Gen. A./Ramanauskas Warfare Training Centre

### **POLAND**

**Anna Kalinowska** – **Co-director of CCMS Pilot Study**, Director of the University Centre for Environmental Studies at Warsaw University

**Anna Batorczak**, the Centre for Environmental Studies at Warsaw University

**Stanisław Wilczkowiak** – National Co-ordinator of CCMS/NATO, the Ministry of the Environment

**Edyta Kołodziejska**, Ministry of National Defence

**Monika Bernaś**, Ministry of National Defence

**Krzysztof Barczewski**, Military University of Technology,

**Grzegorz Grabowski**, the Academy of National Defence, the Institute of Economic Sciences

**Krzysztof Loranty**, the Academy of National Defence, the Institute of Economic Sciences

**Witold Lenart**, Deputy Director of the University Centre for Environmental Study at Warsaw University;

**Tadeusz Burger**, Advisor to the Minister at the Ministry of the Environment

**Iwona Grunt-Mejer**, The Main School of Fire Service, Chemical Rescue Division

### **PORTUGAL**

**Fernando Ribeiro da Silva**, Ministry of National Defence Environmental Studies Division

### **ROMANIA**

**Dănuț Iliana**, Environmental Specialist Ministry of Defence Inspectorate Institutul Medio-Monitor

**Cezar Cristian Cojocaru** safety specialist –Ministry of Defence

**Paulina Iancu**, Proffesor doctor eng. – USAMV (University)Bucharest

**Constantin Avram** - Director AEROQ S.A. (AEROQ is like TUV)

**Aurora Curelea**, Senior Adviser Env. Experts Group

### **SLOVAK REPUBLIK**

**Lubomir Kusnir**, Ministry of Defence

### **TURKEY**

**Hakan Seyirden**, Environmenytal Specialist, 2<sup>nd</sup> Main Maintenance Center Command

### **UNITED KINGDOM**

**John Cole**, UK MODD SEF Pol

**Allison Cullen**, RAF Halton Aylesbury Bucks

**William A. Jones**, RAF Halton Aylesbury Bucks

**Paul Norrington-Davies**, Headquarters , Army Training Estate, The Land Warfare Centre

**CCMS PILOT STUDY ON FORMS OF ENVIRONMENTAL  
EDUCATION AND THEIR IMPACT ON CREATION OF PRO-  
ENVIRONMENTAL ATTITUDES  
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