

Ten Years On

*The US – SA Environmental Security Working Group
1997 - 2007:
10 years of International Military Environmental Cooperation*

**A joint United States of America – Republic of South Africa
Environmental Security Working Group report**

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Foreword

The relationship between the United States of America (US) and the Republic of South Africa (SA), which has taken shape under the US-SA Defense Committee (DefCom), is a critical one to both countries. The cooperative relationship that we have forged in recent years has strengthened our mutual understanding and serves as a model for other nations to jointly address common interests and identify solutions to problems.

Over several decades, we have repeatedly witnessed confirmation of the basic premise that bilateral and multilateral cooperation on topics of mutual concern and interest reaps great rewards, including the saving of time, money and other resources, as well as learning from experiences of others. This has proven to be especially true in the area of international defense-related environmental cooperation.

The US-SA Environmental Security Working Group (ESWG) has been one of the most active and productive of the working groups under the auspices of the US-SA Defense Committee. Its outputs as described in this report are impressive, and have not only served our respective countries, but other countries as well.

We are proud that these results were obtained during a period that both of us were co-chairing the US-SA Defense Committee for several years, and that we could be witness to these achievements. We wish the ESWG good luck on its way forward and trust that it will maintain the same high standards that were exemplarily shown during the first ten years of its existence.

Ms Theresa Whelan
United States Co-chair of
US-SA Defense Committee

Mr Tsepe Motumi
South African Co-chair of
US-SA Defense Committee

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Executive Summary

In December 1997 the SA-US Environmental Security Working Group was established as one of the working groups of the Defense Committee under the auspices of the Bi-National Commission. This report describes the activities and achievements of the ESWG during its first ten years of existence. The purpose of the ESWG is to enhance cooperation between the two respective defense departments in matters relating to military environmental management. Early in 1999, a Memorandum of Agreement was concluded, which further detailed the work of the ESWG. The ESWG has since become one of the most productive of the bilateral working groups. Following a programmatic approach, several main areas of cooperation have been addressed, with a focus on enduring and exportable products rather than short-term one-off efforts. The activities of the ESWG have included, among other things, the production of several topical guidebooks, workshops, exchange visits, attendance at conferences, training seminars, and exchanges of information.

Seven guidebooks have to date been published covering the following topics:

- ✓ Base conversion
- ✓ Integrated range management
- ✓ Web site development for facilities management
- ✓ Environmental education and training in the military
- ✓ Environmental impact assessment in the military
- ✓ Environmental considerations in military operations
- ✓ Integrated waste management in the military

Two major international events have been hosted under the auspices of the ESWG:

- An international workshop on Integrated Range Management, held in Savannah, Georgia, US, in December 1999. Representatives of militaries of ten nations attended this workshop.
- The first global conference on Military Integrated Environmental Management, held in Pretoria, South Africa, in August 2003 (MIEM 2003). Representatives of 26 countries from five continents attended this hugely successful conference.

In addition, three awareness-training events on Sustainable Range Management were presented to more than 150 South African soldiers. Several of the activities and outputs of the ESWG have been used to form the basis for policy development by the South African DOD. The US DOD has encouraged use of the ESWG's products by all the Services, making them accessible by posting them on the main defense environmental website, for both US and broader international use. Indeed, several other militaries, including the Baltic countries, Finland and Sweden, have made good use of the guidebooks produced by the ESWG. It is trusted that the first ten years of the ESWG's existence will form the basis for a sustained collaborative relationship between South Africa's and the US's militaries.

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Establishment of the ESWG

Discussions between the Vice President of the United States of America (US), Mr Al Gore, and the Deputy President of the Republic of South Africa (SA), Mr Thabo Mbeki, in February and April 1997, led to a decision to establish a Defense Committee between the US and SA, under the auspices of the government-wide Bi-National Commission. The first meeting of the Defense Committee was held in Washington over 28-29 July 1997. The meeting was co-chaired by the SA Minister of Defence, the late Mr Joe Modise, and the US Secretary of Defense, Mr William Cohen. Among other matters, they agreed that an Environmental Security Working Group (ESWG) would be established between the two countries.

The US and the SA departments of defense have two of the longest existing formal environmental management programs. The US DOD's environmental program was formally established in 1970, whilst the SA DOD's environmental program was formalised in 1977. It was, therefore, natural for these two forces to join hands in building on their shared experiences in this field.



How to integrate military training requirements and the need for conserving biodiversity is a challenge on many military training areas throughout the world. Military integrated environmental management addresses this question.



The First Step: Determining the Areas of Cooperation

Once the decision to establish the ESWG had been taken, the first priority was to introduce each partner in this bilateral to the environmental program of the other and to then determine areas for cooperation. These were the objectives of the first environmental visit to South Africa by a delegation of the US DOD from 8-12 December 1997. The delegation was led by the appointed US ESWG co-chair, the Principal Assistant Deputy Under Secretary of Defense for Environmental Security, Mr Gary Vest, whilst the South African delegation was headed by the appointed SA ESWG co-chair, the Senior Staff Officer Environmental Services, Col Seakle Godschalk.

After introductory briefings by both parties on their respective environmental programs, the delegation visited the former Pietersburg AFB (a classical example of conversion of an air force base to the Gateway International airport aimed at promoting import/export into and from Africa), the Madimbo Corridor (used for training and border control operations), the Kruger Park Military Unit and the Army Battle School, South Africa's largest integrated conventional training establishment.

On the last day of the visit, which also marked the first meeting of the ESWG, areas for cooperative programs were identified. Prior to the meeting both parties had identified their own priorities based on internal consultative processes. From these priorities, supplemented by the information gathered from the introductory briefings and the visit to the various bases, a consolidated list of areas for potential cooperation was adopted to include:

- ✓ base conversion *
- ✓ integrated training area management *
- ✓ environmental information technology *
- ✓ environmental impact management
- ✓ environmental education and training
- ✓ cleanup of training areas
- ✓ environmental inputs for joint exercises
- ✓ environmentally sound ships
- ✓ southern African regional cooperation vis-à-vis military environmental management

These areas for cooperation and the projects executed within each are documented in a mid-term plan, which is regularly reviewed. The areas of cooperation marked by "*" were those for which the first three projects were initiated simultaneously.

A Collaborative Approach

The cooperative nature of this partnership has been a major contributor to its success. From the start it was agreed that, despite the respective partners having access to disparate levels of resources, the collaboration would be carried out on an equal footing with both partners contributing to each project. For each project a project team with co-project leaders as well as other subject matter experts from each of the partners are appointed. (A list of co-project leaders for each initiative is provided in Annex B.) A project management approach is followed for each project. Equally important is the involvement of project members representing areas of subject matter expertise from outside the environmental management domain. The applicable line functions that are affected by a certain project are intimately involved in its development.

A programmatic rather than a piecemeal approach is followed. Broad areas of cooperation are agreed to within which specific projects are identified. Although once-off exchanges of information and attendance at conferences are some of the mechanisms used, the ESWG's emphasis is on products of a more enduring nature such as the development and publication of guidebooks. Exportability of these products to other defense forces is considered important so that more countries can benefit from this collaboration. To this end, the guidebooks are also made available on the Internet. The guidebooks are published in a series of ESWG publications (see the list of ESWG publications at the end of this report). Minor initial deviations from the exportability approach included the development of the web site for Facilities Management in the SA DOD (although the guidebook is of universal application) and the guidebook on base conversion of SA bases, both being South African-specific.

Examples of the Exportability of the ESWG's Products

- Some of the Baltic countries have been using the Guidebook on Military Integrated Training Range Management in their own programs.
- Sweden and Finland have used the Guidebook on Environmental Considerations during Military Operations as an important reference tool in the development of possible environmental procedures for the European Union's Battle Groups.

A phased approach to the development of guidebooks is followed. The commissioning of the project is issued by the ESWG. An initial workshop is then convened at which the project team shares information on the matter at hand and a framework for the guidebook is developed. During this workshop a broad range of personnel working in that particular field is involved to assist in

identifying the issues. This is followed by exchange visits to familiarize project team members on prevailing best practice models. The guidebook is further developed using electronic means of sharing information. The final guidebook is compiled during a dedicated workshop of the project team. Where appropriate, educational and awareness opportunities are created to share the information in the guidebook with a broader range of departmental personnel. Printed and electronic copies of the guidebooks are made available to relevant environmental and other personnel for use and implementation.

A basic premise is that projects should be of mutual benefit to both partners. Furthermore, the work undertaken should as far as possible be related to and contribute to the core mission of both partners, in some instances also serving as precursor and framework for policy development. The joint ESWG projects are commissioned on the premise that environmental management is not a “*nice-to-have*”, but rather is an integral part of rendering effective defense services. Ignoring basic environmental principles can hamper execution of the military mission. Proper environmental management that is integrated in the core business of a defense department enhances the achievement of objectives in a sustainable way.

Existing institutions and programs are used as far as possible to facilitate the work of the ESWG. For example, under the IMET (International Military Education and Training) program, an initial orientation visit to the US took place in 1998. Training programs for South African personnel on Sustainable Range Management by Mobile Training Teams were also funded by IMET. Since 2004, the ESWG has integrated and leveraged the resources of the newly established EUCOM (European Command) Mil2Mil program, which includes the State-to-State Partnership program. South Africa’s state partner is the New York National Guard. This collaboration has enabled the establishment of Traveling Contact Teams (TCTs) from the US to South Africa and Familiarization Visits (FAMs) by South African members to the US. During the course of the past ten years, the ESWG was competently assisted by the Office of Defense Cooperation at the US Embassy in Pretoria, as well as the environmental office of EUCOM in Stuttgart, Germany.

Apart from formal cooperative projects, information on related work elsewhere has also been exchanged, for example the work of the US-Canada-Australia-UK Trilateral+1 cooperation program, clean-up of military training ranges, demilitarization of ammunition, environmentally-sound ships and water-based conflict in Africa.

Formal Agreement and Management

One of the first priorities was to develop a formal agreement to further detail the activities of the ESWG. This agreement was signed at the historic Castle of Good Hope in Cape Town on 10 February 1999 by the two co-chairs of the Defense Committee, the then SA Minister of Defence, the late Mr Joe Modise, and the US Secretary of Defense, Mr William Cohen.



Mr Cohen and Mr Modise answer questions from the press after signing the agreement on military environmental cooperation.

The ESWG is one of six working groups of the Defense Committee (DefCom). Its co-chairs are *ex officio* members of and report back to the DefCom. ESWG meetings, therefore, normally coincide with DefCom meetings, although interim meetings of the ESWG are convened between scheduled DefCom meetings as well. Meetings of the DefCom and coinciding ESWG meetings normally alternate between venues in the US and SA. During DefCom meetings interaction between the ESWG and other working groups takes place regarding matters of common concern. ESWG meetings coinciding with DefCom meetings are normally of a more formal nature where progress is reported, liaison with other working groups takes place, the mid-term plan is updated and official feedback to the DefCom is given. The interim meetings assume the form of more informal and subject-specific working-level meetings.

ESWG meetings are co-chaired by US and SA appointees, led by the co-chair from the country hosting the meeting. Co-project leaders appointed for each project are responsible for reporting to the ESWG on the progress that is being made. Once jointly produced guidebooks are ready for use, a complimentary copy is presented to both co-chairs of the DefCom. During each meeting the mid-term plan is reviewed and, if necessary, updated to reflect changing requirements and new opportunities. This plan covers a three-year period – the current as well as the ensuing two years. Co-chairship of the ESWG has remained fairly stable. From the South African side Col Seakle Godschalk served as co-chair since inception of the ESWG in 1997 until the end of 2006. During 2007, Brig Gen Eric Navratil became the South African co-chair. Mr Gary Vest was the US co-chair until 2000 when the Director for Environmental Readiness and Safety, Mr Curtis Bowling, succeeded.

No	Dates	Venue	Co-chairs
1	12 December 1997	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Gary Vest
2	21 May 1998*	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Gary Vest
3	23-25 June 1998	Pretoria, SA	SA – Col Seakle Godschalk US – Col Mark Hamilton
4	22 January 1999	Pretoria, SA	SA – Col Seakle Godschalk US – Col Mark Hamilton
5	12-14 July 1999*	Garmisch-Partenkirchen, Germany	US – Mr Gary Vest SA – Col Seakle Godschalk
6	10 December 1999	Savannah, Georgia, US	US – Mr Gary Vest SA – Col Seakle Godschalk
7	21-22 June 2000*	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Gary Vest
8	18-20 April 2001	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
9	12-14 June 2001*	Williamsburg, US	US – Mr Curtis Bowling SA – Col Seakle Godschalk
10	13 May 2002	Brussels, Belgium	US – Mr Curtis Bowling SA – Col Seakle Godschalk
11	25-28 June 2002*	Mabalingwe Nature Reserve, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
12	31 March – 4 April 2003	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
13	3-6 June 2003*	Annapolis, US	US – Mr Curtis Bowling SA – Col Seakle Godschalk
14	11-11 February 2004	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
15	17-21 May 2004*	Spier Estate, Stellenbosch, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
16	16-17 February 2005	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
17	14-15 November 2005	Pretoria, SA	SA – Col Seakle Godschalk US – Mr Bill Nicholls ¹
18	13-15 June 2006*	West Point, US	US – Mr Bill Nicholls ¹ SA – Col Seakle Godschalk
19	6-7 December 2006	Pretoria, SA	SA – Col Buzani Madikane US – Mr Bill Nicholls ¹
20	1-2 October 2007	Pretoria, SA	SA – Brig Gen Eric Navratil US – Mr Bill Nicholls ¹

Table 1. Overview of ESWG meetings held over the period 1997-2007.
[Meetings marked “*” coincided with DefCom meetings.]

¹ Acting on behalf of Mr Curtis Bowling

Base Conversion

The initial impetus for the establishment of the ESWG in July 1997 included issues related to the reuse of closed military bases. This led to base conversion being identified as one of the priority areas for cooperation. A large team of SA and US experts were involved in this assignment. The first workshop to identify the issues and develop a framework was held in May 1998. In August 1998 one of the project team members participated in an orientation visit to the US and obtained first-hand extensive information on base conversion practices at several bases. Extensive consultation ensued between project team members resulting ultimately in a draft guidebook by the end of 1999, which was published in November 2000 as publication ESWG/001. The publication of this first guidebook was a milestone in the proceedings of the ESWG.



Remarkable was the involvement of quite a number of subject matter experts from outside the defense establishment, including government departments and other stakeholders, in the development of the base conversion guidebook. A novel 23-step integrated process for the management of the conversion of military bases right from the initial identification of bases to be closed until final hand-over to prospective new users was developed. This process has subsequently been incorporated into South African defence policy on base conversion.

Whereas the first guidebook covered the base conversion process in general, the need to specifically address sustainability issues in addition has been identified as a possible follow-up project under this area for cooperation and some preliminary work has been done.



Project team meetings formed an important component of the development of each guidebook

Integrated Training Area Management

The second, and until recently most extensive, area of cooperation was Integrated Training Area Management (ITAM), a domain in which both countries have extensive experience. The US had developed and implemented the ITAM approach by 1984, whilst SA had implemented Military Integrated Ecological Management plans by 1987. This proved to be an ideal platform for synergy. The first workshop to brief project team members and develop a design for this project was held in May 1998 in Pretoria, South Africa. In January 1999, this was followed by a site visit to the Gen De Wet Training Area near Bloemfontein, South Africa during which a framework for the guidebook was developed.

By July 1999 a draft guidebook was tabled. This draft was subject to intense scrutiny and discussion during an *International Workshop on Integrated Range Management* held in Savannah, Georgia, US. This workshop, sponsored by the ESWG, was attended by representatives of ten countries: Argentina, Australia, Canada, Denmark, the Netherlands, Norway, Republic of Georgia, South Africa, the UK and the US. It marked the first of two major international events held under the auspices of the ESWG. The workshop was preceded by a 10-day working visit by a three-person South African delegation to a variety of US bases to study the implementation of ITAM. These bases included Fort AP Hill, Nellis AFB, Fort Irwin, Camp Pendleton and Fort Stewart. The lessons learnt from the site visits and the inputs generated during the international workshop were incorporated into the final draft of the range management guidebook that was ultimately published in 2000. The guidebook includes an 8-step generic process for the development of integrated management plans for military training areas, incorporating military training needs, environmental resource constraints and legal compliance. The program for the development of this guidebook was quite extensive, and valuable lessons were learned that could be used in the other guidebook projects.

The team responsible for the drafting of the Guidebook on Military Integrated Training Range Management was nominated for the Conservamus award. The Conservamus program gives recognition to exceptional contributions to Environmental Services in the SA DOD.

The US co-chair received the certificates of commendation for the US members during the plenary of the DefCom on 21 June 2000. This was the first time that members of foreign forces received awards under the SA DOD Environmental Awards Program.

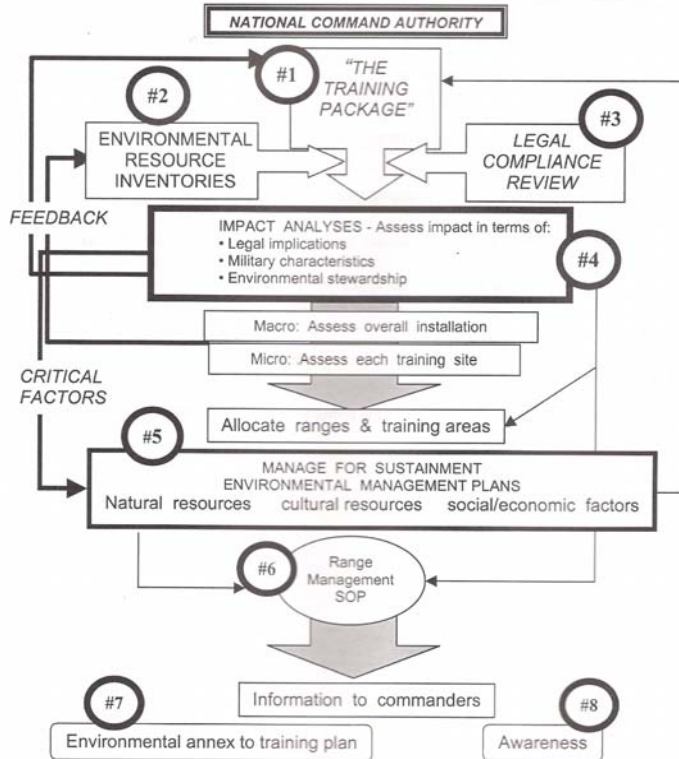
In May 2002, the South African co-chair presented a paper on the “*South African experience regarding sustainable management of its training areas and ranges at the 10th European Command Partnership for Peace Environmental Conference*” in Brussels, Belgium. During the conference copies of the guidebook were made available to the representatives of approximately 40 participating countries and its content was introduced during the discussion sessions. The experiences and the benefits derived from the development of the range management guidebook were especially useful for delegates from the eastern European Partnership for Peace countries. Indeed, some of the Baltic countries started to use this guidebook in developing their own policies and procedures on this topic.

In August 2002, one of the South African project members attended the 11th *annual ITAM Conference* in Savannah, Georgia, US where she reinforced the principles and application of ITAM, and which further equipped her for assignment as co-project leader of the guidebook on environmental impact assessment. At the conference she presented a paper on “*Innovative, cost effective environmental education and training in the SA Army*”. She also presented another South African paper on “*Training Land Management in the South African Army*”.

This guidebook formed the basis for a training program on range management in South Africa. Upon completion of the guidebook, the need for empowering South African personnel involved in utilizing and managing training areas was identified. During two training sessions in 2001 presented by US and SA subject matter experts in Pretoria and Bloemfontein, respectively, a total of 110 members were exposed to the principles and application of sustainable range management. During August 2003 another training event for 55 members was held in Pretoria. Both Mobile Training Teams were funded by the IMET program.

The next phase under this program was the development of another guidebook, this one on environmental impact assessment. Although already agreed to in principle during the June 2000 meeting, it took some time to activate this project. The first workshop for the development of the framework for this guidebook was held in Pretoria in May 2003, and was ensued by extensive communication and development work. The guidebook was published in May 2004. The guidebook provides useful examples of typical environmental impacts of a wide range of military activities. In addition, the potential environmental impacts and possible mitigation measures of a sample project (building barracks at an installation) is analyzed in more detail to illustrate the application of these guidelines in the military.

Figure 1 MILITARY INTEGRATED TRAINING AREA MANAGEMENT PROCESS



A generic 8-step process for the development of integrated training area management plans was designed for the ITAM guidebook. This process incorporates military training needs, environmental constraints and legal compliance.

Web Site Development

The third initial ESWG project was the development of a web site for Facilities Management in the SA DOD. Although specifically aimed at the South African DOD, the guidebook documents a generic process that can be used by any military that wants to develop such a web site. The guidebook addresses defining the requirements of a web site, planning and developing the web site, and finally deploying and maintaining the web site. The importance of continual maintenance of such a web site to ensure its usefulness is highlighted.

The first workshop on this topic took place in Pretoria during May 1998, resulting in a guidebook being finalised by the end of 1999 in time for publication during 2000. Simultaneously, the web site resulting from this project was activated as part of the South African DOD's web site.

The US and SA ESWG co-chairs handed the first three guidebooks developed under this program to the co-chairs of the DefCom in Williamsburg on 14 June 2001, the South African Deputy Minister of Defence, Ms Nozizwe Madlala-Routledge, and the Principal Deputy Under Secretary of Defense for Policy, Mr Peter Verga.

Environmental Education and Training

Environmental education and training was identified as an initial area for cooperation but had to wait for the first three projects to yield results. The first activity was an orientation visit, funded by the IMET program, by two South African representatives during August 1998. The aim of the visit was to obtain an insight into environmental training programs administered by the US DOD and the possible use and benchmarking by South Africa. After paying a courtesy visit to the Deputy Under Secretary of Defense for Environmental Security, the delegation visited a range of training and other institutions including the Army War College, the Air Force Base Conversion Agency, the Defense Security Assistance Agency, the US Army Environmental Center and the US Army Center for Health Promotion and Preventative Medicine (both at Aberdeen Proving Ground, Maryland), Wright Patterson AFB and the Air Force Institute of Technology, Ft Sill (Oklahoma), Ft Hood (Texas), Brooks AFB and the Air Force Center of Environmental Excellence and Kelly AFB, all in San Antonio, Texas. Their visit later resulted in the utilisation of the IMET program for several training events, specifically the three training opportunities on sustainable range management during 2001 and 2003, as mentioned earlier.

During the April 2001 meeting of the ESWG, steps were taken to initiate the development of the guidebook on environmental education and training. The first workshop to develop the framework for this guidebook took place in Pretoria during June 2002. The guidebook was published in March 2003. A generic 8-step process for the development of environmental programs in the military, based on sound educational principles, was developed in this guidebook, including the identification of various levels of target groups for such programs. The process developed for this guidebook has subsequently been used in the development of environmental education and training programs for South Africa's DOD.

As early as July 1999 it was agreed that the ESWG coordinate with the Africa Centre for Strategic Studies (ACSS) to investigate the possibility of developing an environmental training module to be incorporated in the training program of the ACSS, a virtual program aimed at training African leadership, both military and non-military. During an ACSS training session in Botswana in July 2000, a South African defence environmental representative addressed the participants on the intention to develop such module. As of late 2006, the ESWG was unsuccessful with this project mainly because ACSS procedures require that the request for such training be submitted by several African countries in order for the development of such a new module to be considered. However, beginning in late 2006, ACSS representatives in the US indicated a growing interest in offering some type of environmental module in at least one of its course offerings. Thus, cooperation with the ACSS on defense environmental matters remains on the agenda as an objective for the ESWG.

International Conference on Military Integrated Environmental Management

One of the most significant accomplishments of the ESWG was facilitating the joint SA-US hosting of the first global *Conference on Military Integrated Environmental Management (MIEM)* in South Africa in August 2003. During the December 1999 workshop in Savannah, participants expressed the need for more regular interaction between military forces worldwide regarding environmental management issues. Although opportunities for such interaction are prevalent among NATO countries and within the US DOD, forces from other continents have limited access to such interactions. South Africa offered the venue for the first such conference under the auspices of the ESWG. This conference posed major challenges in terms of organization and networking, but was very successfully executed thanks to the efforts of an extensive Integrated Project Team. MIEM has developed into a trademark phrase for environmental work in the military in South Africa. The conference was quickly labeled *MIEM 2003* and a dedicated logo was adopted.



Symbolism of the MIEM 2003 logo

- The Excalibur sword symbolizes military strength.
- Envelopment of the Excalibur by natural elements symbolizes the integrated manner in which MIEM achieves harmony between military activities and the natural environment in which it takes place.
- The fact that the Excalibur is drawn for battle, through pointing upwards, symbolizes the commitment to pursue military preparedness as well as custody over the natural environment entrusted to militaries.
- The green insert on the left symbolizes the plant kingdom
- The brown on the right symbolizes soil as well as the animal kingdom through its resemblance to an antler, tusk or horn.
- The circle resting on the hilt of the Excalibur represents the planet earth. The fact that planet earth rests in the hilt of the Excalibur symbolizes the role that the military, through capabilities inherent to it, can play to protect natural resources, as well as its ability to act in the case of natural disasters.
- The blue area in the circle symbolizes water.
- The white area to the left of the blade symbolizes the atmosphere (air), which we breathe.
- The exterior blue line symbolizes the life supporting troposphere surrounding our planet.



























The purpose of MIEM 2003 was to bring together expertise on the topic of military integrated environmental management from around the world in order to

- ❑ broadly examine the integration of environmental considerations into military practices and training
- ❑ exchange ideas on policies, practices and technology that would benefit both established and emerging national environmental and training programs
- ❑ create opportunities for networking among environmental professionals of different countries
- ❑ address MIEM issues from the strategic level to the tactical level

MIEM 2003 was hosted in the beautiful setting of the Kwalata Game Lodge in the savanna lands north of Pretoria. It brought together 120 experts from 26 countries. Participation by delegates from several Partnership for Peace (eastern European) countries were sponsored by the US DOD. The conference comprised seven plenary sessions with speakers from five continents, three poster sessions at three parallel venues with 43 poster presentations, and five workshops.



Countries Represented

EUROPE		ASIA	SOUTH AMERICA	
Albania 	Moldova 	People's Republic of China 	Argentina 	
Bulgaria 	Norway 	Qatar 		
Croatia 	Romania 			
Denmark 	Russia 	NORTH AMERICA		
Estonia 	Slovakia 	Canada 	AFRICA	
Germany 	Sweden 	United States 	Botswana 	
Greece 	Ukraine 		Kenya 	
Latvia 	United Kingdom 		South Africa 	
Lithuania 			Zambia 	

Pre-conference activities for the non-SA delegates showed real-life examples of SA DOD MIEM initiatives to

- ❑ enhance environmental awareness at military facilities;
- ❑ establish public outreach programs; and
- ❑ protect species and habitats while maintaining military preparedness.



The opening plenary was attended by a large number of South African civilian office bearers, and the opening address was given by the South African Minister of Defence, Mr Mosiuoa Lekota, MP. Guest speakers who set the scene for the conference, included

- ✓ Dr Crispian Olver (Director General, South African Department of Environmental Affairs and Tourism) on *“The World Beyond the 2002 Summit on Sustainable Development”*
- ✓ Prof Gerhard Verdoorn (Director, Endangered Wildlife Trust, South Africa) on *“The Impact of Regional Instability on the Environment”*
- ✓ Brig Gen Ian McLeod (Rtd) (Regional Delegate to the Armed and Security Forces, International Committee of the Red Cross) on *“Environmental Considerations in the Law of Armed Conflict”*
- ✓ Dr Dumisani Magadlela (Director, EKHAYA Consulting) on *“Poverty Relief and the Environment”*

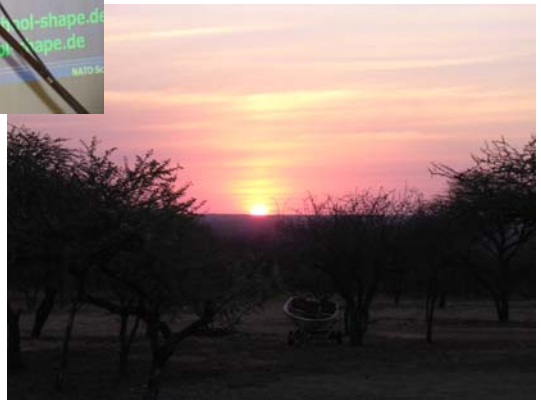
The key themes covered during the conference included:

- Environmental education, training and outreach
- Training area management
- Environmental planning tools (e.g. EMS)
- Environmental considerations in planning and executing multinational exercises or deployments
- Pollution prevention and waste management
- Cultural and natural resource management
- Invasive species
- Intra-governmental cooperation on MIEM



The conference provided a platform for intense interaction and exchange of information among defense environmental personnel from across the world. It also created the opportunity for future networking amongst participants. Several bilateral contacts were established or reinforced. Many new friendships were forged. During the feedback on this conference at the May 2004 DefCom in Stellenbosch, SA, the ESWG received much acclaim for this pioneering effort.

MIEM 2003 in a nutshell



The Mil2Mil Program and Partnering with the New York National Guard

The year 2004 saw the dawn of a new phase in the resources available for the ESWG's work – partnering with the New York National Guard (NYNG). Under the umbrella of the EUCOM Mil2Mil Program, the State Partnership Program (SPP) links US states with specific partner countries for the purpose of improving bilateral relations with the US. The possibility of participating in this program was already raised as early as 2002. After a briefing to the DefCom on 10 February 2004 the ESWG became the first DefCom working group to actively utilize the SPP program.

In August 2004, a workshop was held in Bloemfontein, South Africa, between a delegation of the NYNG and the core of the SA DOD's environmental management staff. Opportunities for cooperative projects were explored which resulted in a revised program of projects for the ESWG. Since then, the NYNG has been a major partner in many joint projects carried out under the auspices of the ESWG.

Apart from specific projects, the Mil2Mil program also sponsored attendance at conferences as well as general orientation visits. In May 2005, two South African representatives attended the *EUCOM Joint Environmental Conference* in Sonthofen, Germany.

In order to familiarize themselves with environmental programs and activities of the NYNG, Col Seakle Godschalk and Lt Col Buzani Madikane paid a working visit to several NYNG bases, following their attendance at the DefCom meeting at US Military Academy in June 2006. They were able to assess a diversity of environmental programs at Camp Smith, Newburgh Air National Guard Base, Fort Drum, Joint Forces HQ Latham, the Saratoga Military Museum and Kingston Armory.

In May 2007, the newly appointed Senior Staff Officer Environmental Services participated in a FAM to the US. This FAM consisted of policy-level briefings from all the US Services on their environmental programs as well as a meeting at the ACSS in Washington, DC. This was followed by attendance at the annual *Joint Services Environmental Management (JSEM) conference* in Columbus, Ohio, which showcases a full range of technical environmental issues being addressed within the US defense environmental community.

Environmental Considerations during Military Operations

During the July 1999 ESWG meeting, both parties agreed to initiate a project on Environmental Considerations in Military Operations (ECOps), with a focus on peacekeeping operations and joint exercises. This would initially include incorporating an environmental annex into the next joint US-SA military exercise. During the initial phase, South Africa was invited to participate in a trilateral cooperation effort on a similar subject among the US, Canada and Australia, which it accomplished by means of providing inputs on discussion documents.

Initial efforts to institutionalize the incorporation of environmental considerations into the operational planning process proved cumbersome. However, during the May 2004 DefCom meeting, the ESWG met with the Military Relations Working Group in order to accelerate the process. This led to internal SA DOD discussions in August 2004 that paved the way for including environmental staffs in the operational planning process. This resulted in environmental staffs being deployed as observers during Ex WATC (a joint US-SA exercise off the West Coast of South Africa) in 2005, and during Ex INDLOVU (annual integrated joint exercises between various services of the SA DOD) from 2004 onwards.

In February 2005, the ESWG decided to continue with the development of a guidebook on Environmental Considerations during Military Operations, with the emphasis on peace support operations. The first workshop of an extended project team was held in August 2005. Attendees included representatives from a variety of disciplines, including operations, logistics, training and the various services. During this workshop, a comprehensive life cycle model was adopted for the planning of military operations at strategic, operational and tactical levels. This innovative approach links the various levels of planning for operations and indicates which environmental inputs are required at the various levels of operation. Integration of the process to ensure the consideration of environmental factors during all stages of the operational planning is achieved in this way. Alignment with draft environmental guidelines for UN field missions was considered throughout the process of developing the guidebook. This extensive project required another workshop in March 2006 to finalize the guidebook and identify needs and opportunities for further work. The guidebook was published later in 2006.

“In the military environment there are ample opportunities to influence the mindset of soldiers – right from the start of their careers (during basic training) one must sensitize and train them to become aware of the impact of all their activities on the environment”.

Col Fritz Thirion of the SA Operations Division during a presentation on ECOps at the annual SA DOD environmental seminar in September 2006

The development of this guidebook has had a profound effect on environmental-operational interactions in the South African DOD. The environmental component is now an established member of every team responsible for planning a specific military operation or joint exercise. During the deployment of South African troops to support the democratic elections in the Comoros Islands from March to June 2006, an environmental staff officer was deployed for the first time ever for the full duration of a South African military operation. In terms of support to the primary mission of the DOD, this program is considered to be a significant milestone.

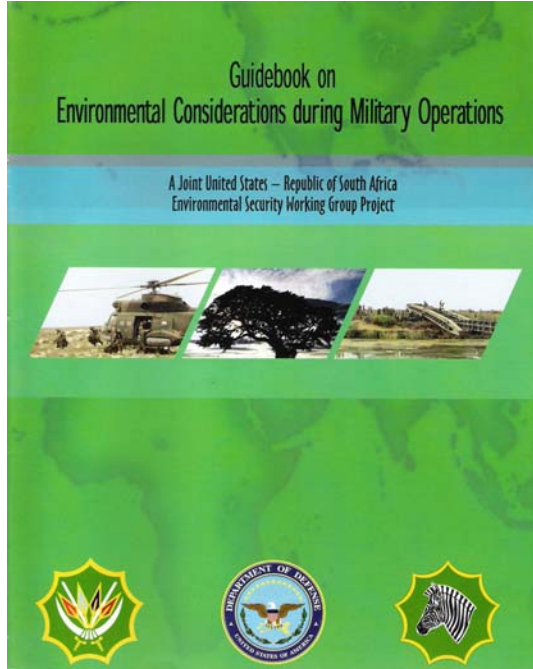
Whereas the guidebook was aimed at military commanders and planners, the need to educate soldiers in executing their mission in a sustainable manner was also identified in the early stages of the process. This resulted in a follow-up project: the development of educational material that could be handed to soldiers before embarking on a deployment. Another equally important result of the ECOps guidebook was the development of environmental training modules for use by the African Contingency Operations Training Assistance (ACOTA) program. This program provides training to African countries to equip soldiers for peace support operations. During a workshop in March 2007, three training modules were developed – aimed at soldiers on the ground, environmental planners/officers and commanders, respectively. ACOTA has since begun the process of incorporating these training modules into its overall training program.

“.....the mission-focused structure developed in the US-RSA guidebook is very useful.

We had many references from which to choose for our future work and the US-RSA guidebook was the best, handiest, and easiest to understand. This US-RSA guidebook certainly is a great value for us and for environmental officers in the field now and in the future.”

Hanna Uusitalo, Senior Advisor for Environmental Affairs,
Ministry of Defence of Finland

The US has shared both the ECOps guidebook and the training materials with Finland and Sweden in the context of their cooperation on this topic for use within European deployment scenarios. The guidebook has been an important foundation for the development of a similar product, which may be suggested for use within a European Union context. The materials are also being considered as part of the Riga Initiative cooperative program among the Baltic and Northern European nations and the US.



During the South African peace mission to support democratic elections in the Comoros Islands in 2006, for the first time in the history of the SA DOD, an environmental officer was deployed as integral part of the mission.



Integrated Waste Management

During the development of its formal Environmental Management System policy, the South African DOD identified waste management as its number one environmental issue. Early visits to Wright-Patterson AFB in 1998 and Ft Detrick in 2004 provided some insights into the way in which hazardous waste is being managed by the US DOD. Early in 2006, the co-project leaders were appointed to more thoroughly explore these issues, and during the first workshop in May 2006, a life cycle model for integrated waste management and a framework for a guidebook were developed. This workshop included an extended project team from all walks of military life - waste streams being associated with virtually every military function. Two South African members of the project team visited Norfolk during December 2006 to assess waste management best practices at a variety of military bases in that region, including Fort Eustis, Langley Air Force Base and Norfolk Naval Station, Virginia. During the visit, the first draft of the guidebook was discussed with several role players. The waste management guidebook was finalized during a follow-up workshop in April 2007 in Pretoria, and published towards the end of 2007. A seminar is being planned for 2008 to transfer the knowledge contained in this guidebook to members of the SA DOD and other African forces. The process of developing this guidebook also served as a basis for policy development on waste management in the SA DOD.

Regional Outreach

From the outset, dating back to the July 1999 meeting where the decision was taken to establish the ESWG, the vision was expressed to reach out to and cooperate with other African countries, southern Africa in particular, in the field of military environmental management. Progress in this regard has unfortunately been extremely slow. In July 2000, a South African officer addressed participants of an ACSS training event in Gaborone, Botswana, on the possible development of an environmental module for the ACSS. During the MIEM 2003 Conference a special effort was made to invite delegates from other African countries. This resulted in members from Kenya, Botswana and Zambia attending the conference. In June 2005, a South African officer attended a combined French-SADC (Southern African Development Community) exercise (Ex THOKGAMO) in Botswana to provide environmental inputs. These efforts have not yet resulted in the development of sustainable ties between South Africa and other African countries regarding military environmental management. This remains one of the ESWG's challenges.



The development of environmental training modules for ACOTA (referred to in the section on ECOPs) also falls in the domain of outreach to Africa, and is likely to be one of the most fruitful of the ESWG's outreach efforts. In addition, the US, through its Defense Environmental International Cooperation (DEIC) program joined with the resources of the EUCOM Mil2Mil program to conduct a southern Africa regional ITAM workshop in Botswana in July 2007, which was attended by five African countries (Botswana, Malawi, Mozambique, South Africa, and Tanzania). Two participants from the SA Department of Defence attended this workshop, providing information on ECOPs and a number of related topics. They also shared experiences from their implementation of similar training in SA, based in part on the ITAM training received during the two MTTs in 2001 and 2003. A common thread throughout the presentations by the participating countries was the need for qualified environmental staff and an increasing



challenge of encroachment by neighbouring communities. The ITAM workshop in Botswana afforded another important opportunity for South Africa to develop and strengthen regional relationships on defense environmental matters.

Lessons Learned

The experiences of the past ten years have offered many valuable lessons. Linking ESWG projects to the core business of our respective defense departments and involving subject matter experts from relevant military disciplines outside the environmental realm proved to be critical in developing relevant products. The emphasis on enduring products and capacity building proved very successful. Following a programmatic approach, whereby several projects contribute to the same overall goal and reinforce each other, helped to build robust programs that can be easily expanded.

Developing this program based on the concept of an equal partnership, even where large differences in available physical and human resources exist between partners, resulted in the best outputs from the staffs involved. Another crucial factor was maintaining continuity in project team leaders and other members throughout the duration of a project. The large degree of continuity of ESWG co-chairs and their dedication has helped develop the ESWG into one of the most successful working groups under the Defense Committee.

Benefits Derived

Both partners have experienced tremendous benefits from this cooperative program. It has naturally enhanced relationships between the two countries. But, at the same time, it has also assisted in building relationships with other countries. The guidebooks developed by the ESWG are being used for training and reference purposes, not only by the authoring nations, but also by third parties throughout the world. The activities of the ESWG have created many opportunities for networking and have contributed greatly to empowerment and capacity building among defense personnel at lower levels in the respective organizations. Environmental officers have been exposed to the military implications of their work and gained tremendous experience. Several guidebooks served as the basis for further policy development. However, the most tangible benefit is the integration of environmental considerations into the core business of defense that was achieved and expanded during this program.

The Way Forward

Both partners have the intention and commitment to continue with this cooperative effort for as long as we feel we can derive mutual benefit from it. Building on the successes of the past, we will continue to identify areas of mutual interest that could benefit from cooperative projects. We will continue doing this in such a way that other militaries may also benefit from this work. In addition to continuing existing programs, additional areas that may be considered for future cooperative work include maritime issues, cultural resource management, sustainment, environmental auditing, the economic impact of the presence of military bases, and encroachment on military bases.

Publications of the SA-US ESWG

- ESWG/001 Conversion of Military Bases in South Africa (2000)
- ESWG/002 Military Integrated Training Range Management Guidebook (2000)
- ESWG/003 Developing a Defence Facilities Management Website (2000)
- ESWG/004 Guidebook on Development and Implementation of Environmental Education and Training in the Military (2003)
- ESWG/005 Guidebook on Environmental Impact Assessment in the Military (2004)
- ESWG/006 Guidebook on Environmental Considerations during Military Operations (2006)
- ESWG/007 Integrated Waste Management in the Military (2007)
- ESWG/008 Ten Years On. The US – SA Africa Environmental Security Working Group 1997 - 2007: 10 Years of International Military Environmental Cooperation (2007)

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Annex A: List of Abbreviations

ACOTA	African Contingency Operations Training Assistance program
ACSS	African Centre for Strategic Studies
AFB	Air Force Base
DefCom	Defense Committee
DEIC	Defense Environmental International Cooperation program
DOD	Department of Defense or Defence
ECOps	Environmental Considerations in Military Operations
EMS	Environmental Management System
ESWG	Environmental Security Working Group
EUCOM	European Command
FAM	Familiarization Visit
IMET	International Military Education and Training program
ITAM	Integrated Training Area Management
IWM	Integrated Waste Management
MIEM	Military Integrated Environmental Management
Mil2Mil	Military-to-Military program
MP	Member of Parliament
NATO	North Atlantic Treaty Organization
NYNG	New York National Guard
SA	South Africa
SADC	Southern African Development Community
SPP	State Partnership Program
TCT	Traveling Contact Team
US	United States of America

Annex B: Co-Project Leaders for ESWG Initiatives

Initiative	SA Co-leader	US Co-leader
Guidebook on Base Conversion	Maj Piet Jordaan	Mr David MacKinnon
Guidebook on Integrated Range Management	Lt Col Hannes Potgieter	Col Mark Hamilton
Guidebook on Web Site Development	Mr Herman le Roux	Mr Warren Meekins
MTT's on Sustainable Range Management (2001 and 2003)	Lt Col Hannes Potgieter	Mr Brian Ondrick
Guidebook on Environmental Education and Training	Lt Col Etienne van Blerk	Ms Jennifer Leonard
MIEM 2003 Conference	Lt Col Hannes Potgieter	Ms Susan Clark-Sestak
Guidebook on Environmental Impact Assessment	Maj Leoni Baird	Ms Jennifer Leonard
Guidebook on Environmental Considerations in Military Operations	Ms Adré Aggenbach	Lt Col Mark Warnecke
Environmental Training Modules for ACOTA	Lt Col Marius Laubscher	Ms Susan Clark-Sestak
Guidebook on Integrated Waste Management	Cdr Adri Liebenberg	Ms Nina Johnson