# Introduction

The Office of the Deputy Under Secretary of Defense (Installations and Environment) (ODUSD(I&E)), in partnership with the Office of the Under Secretary of Defense (Policy) and regional Combatant Commanders, engages in military-to-military cooperation with the ministries of Defense of more than 15 nations. These efforts further the security cooperation goals of the United States.

Defense Environmental International Cooperation activities and partnering efforts maintain access to resources, including air, land, and sea, for training and readiness; contribute to interoperability; and foster a global military environmental ethic. The United States partners with foreign militaries to—

- Better understand how to evaluate, prioritize, and more effectively meet military environmental needs
- Enhance force health protection
- Reduce potential U.S. liability
- Promote compliance with international environmental treaty obligations.

The Department of Defense's (DoD's) environmental activities also assist militaries in newly democratic states with adjusting to concepts such as civilian oversight, public accountability, openness, and cooperation with civilian agencies.

## Overseas Operations and Environmental Activities

DoD conducts operations worldwide to support U.S. national security interests. Overseas operations have the potential to affect the natural environment of the host nation and the health and safety of DoD personnel, local national employees, and dependent families. Environmental issues can have a significant impact on readiness and continued access to new equipment testing and training areas overseas. Environmental stewardship at DoD installations overseas has a direct impact on DoD's ability to support national security interests.

# Environmental International Cooperation Supports DoD's Mission

Through military-to-military cooperation, DoD seeks to foster regional stability, democratization, and strong alliances. Defense Environmental International Cooperation activities encourage militaries to discuss regional environmental issues in a neutral forum that helps build trust among militaries. These information exchanges also demonstrate that DoD is a trusted ally, a responsible force, and is committed to protecting the environmental resources entrusted to the Department by overseas host nations. These efforts help maintain international access to air, land, and sea resources necessary for bases, training, and operations.

DoD's Environmental International Cooperation activities provide opportunities for United States government agencies and industries to better understand the needs and issues impacting foreign militaries and allow access to foreign environmental research data, technologies, and processes.

Environmental threats often expand beyond political borders, and in some cases have global impacts that require international cooperation. Collecting, analyzing, and sharing environmental information can help identify what threats exist, assist policy makers in developing informed policies, and improve global operations.

## Raising Standards by Working Together

Environmental protection and conservation of resources are global concerns. Citizens around the world are increasingly demanding improvements in their government's environmental practices. Concerned environmental groups often single out militaries. In response to this movement, Defense organizations from foreign nations are requesting environmental cooperation exchanges and partnering activities as an important part of their bilateral and multilateral agreements with DoD.

### Force Health Protection

Environment, safety, and occupational health (ESOH) are important elements in overall force protection. By minimizing losses due to ESOH-related issues, commanders protect people, facilities, equipment, and access to testing and training facilities and areas.

Keeping forces healthy, reducing equipment losses from accidents, and having adequate training and support facilities help maximize the quantity and quality of forces available for operations. By maintaining and

improving the environment, health, and safety of personnel and surrounding communities, defense ministries can improve mission support, force readiness, and cost effectiveness.

Force health protection efforts support the development of competent coalition partners who are better able to operate with DoD forces in multinational scenarios and protect their troops, DoD troops, the local population, and the environment. Cooperation on common ESOH issues allows DoD access to international health-related environmental data. This information enhances the strategic preventive medicine and health knowledge that keep DoD forces healthy and able to support the Department's mission. Examples of cooperation activities include—

- Delegation exchanges
- Joint analyses of environmental data
- Information sharing
- Bilateral or multilateral development of ESOH products, such as handbooks, which can be used in promoting ESOH concepts to militaries worldwide
- Hosting or attending conferences that address military ESOH issues in a regional or multilateral context.

## HIGHLIGHTS OF ACTIVITIES IN FISCAL YEAR 2002

DoD's Environmental International Cooperation activities provide tools for theater security cooperation activities in a non-threatening low-cost manner. DoD is responding to the stated needs and cooperation opportunities of foreign militaries that recognize the importance of environmental stewardship in conducting their activities. DoD helps build trust, openness, and a global environmental ethic though the Defense Environmental International Cooperation Program.

## EUROPEAN UNION ENVIRONMENTAL COOPERATION

The United States stations nearly 100,000 troops and a variety of weapons systems in Europe, in addition to ship visits and deployments for operational necessity. The European Union (EU) has issued and will continue to issue regulations in various environmental areas that have the potential to adversely impact DoD's military mission.

Historically, the structure of the EU has not included a defense component in its rulemaking process. Ministries of Defense (MODs) of the member nations are often neither involved in the EU rule-making process, nor cognizant of the potential impacts of these rules.

In Fiscal Year (FY) 2002, a coalition of EU member nation MODs was formed to address specific EU environmental issues that could have adverse effects on military readiness. The United States was invited to participate as an observer. The group met three times in FY 2002, in Belgium, Germany, and Denmark.

Through this forum, the United States delegation was able to successfully engage the European Commission in considering of a defense exemption for halon for fuel tank inerting in U.S. F-16s. DoD participated in a special committee established by the Department of State to address U.S. issues with the EU. Mr. Raymond F. DuBois, Deputy Under Secretary of Defense (Installations and Environment), provided a keynote speech to the European Command 10th Annual Partnership for Peace Environmental Conference in Brussels. A number of key European military environmental leaders as well as representatives of the European Commission attended this conference. Similar efforts will continue in FY 2003.

### REPUBLIC OF SOUTH AFRICA

In FY 2002, the Environmental Security Working Group, which constitutes a portion of the Republic of South Africa—United States Defense Committee, jointly authorized the fourth in a series of handbooks titled "Military Environmental Training." Other security cooperation programs around the world continue to use this series of handbooks.

In FY 2003, the committee plans to publish the fifth handbook, "Environmental Assessment of Military Operations." The committee will also conduct an International Military Education and Training course on environmental management of training lands, and will co-sponsor an international conference on military integrated environmental management.

# Environmental Security Planning and Disaster Response in the Arabian Gulf Region

U.S. Central Command (USCENTCOM), ODUSD(I&E), the Department of State, the U.S. Army War College, the National Defense University, and the Armed Forces of Qatar co-hosted a conference on

# FOCUS ON THE FIELD

#### ARTIC MILITARY ENVIRONMENTAL COOPERATION

The Arctic Military Environmental Cooperation (AMEC) Program is a tri-lateral program that shares technology and information to improve environmental quality at military sites in the Arctic. The United States, Russia, and Norway participate in the program. Arctic regions, with their short growing seasons and severe climatic conditions, contain some of the most fragile ecosystems on Earth.

During the Cold War, the geographically strategic Arctic region was an intense theater for military operations. This region now has a large number of inactive naval vessels and military bases. Over its six-year history, AMEC initiatives have resulted in the development of spent nuclear fuel transport and storage casks, low-level radioactive waste transport containers, and radiological monitoring technology.

In April 2002, the three newest AMEC Principals met in Bodo, Norway. The gathering of Principals and their delegations in the northern Norwegian fishing port and administrative center was the first time AMEC Principals met north of the Arctic Circle.

The primary objective for the Principals at this meeting was to discuss the future of AMEC. All three nations are working to develop a new legal agreement that will enable AMEC to extend beyond FY 2002, and expand the program to address other environmental issues in Arctic regions and in the western Pacific Ocean. As in the European Arctic, the Russian Pacific coast has a number of naval installations, decommissioned vessels, and associated environmental issues that can be addressed using technologies and processes developed under the AMEC Program. All three AMEC Principals also endorsed the future participation of the United Kingdom in AMEC.

Other discussions included planning and mitigation to protect natural resources during national and North Atlantic Treaty Organization military exercises in northern Norway. In addition to careful planning, staff will monitor the impact of mechanized and infantry units conducting winter exercises. Unlike in the United States where military training is generally confined to Federal lands, major exercises in Norway often make use of privately-owned land. Access to private lands stems from the 1,000-year-old Norwegian tradition of allemannstretten, or the right of public access to private lands. However, right of access brings liability if there is damage to the property, including damage to vegetation, soil, and water, so Norwegian environmental staff officers keep a close watch on troops in the field.

AMEC continues to be a productive forum for information exchange and environmental quality initiatives in the fragile arctic ecosystem.

preventing and responding to environmental disasters, including chemical, biological, radiological, or nuclear events, in the Arabian Gulf region. This conference was held in Doha, Qatar, in September 2002.

Participants included delegates from the Gulf Cooperation Council countries (Qatar, Bahrain, Kuwait, Oman, Saudi Arabia, and the United Arab Emirates), as well as observers from Egypt and Jordan.

The objectives of the conference were to build on the April 2000 Muscat, Oman Environmental Security Conference. The conference provided a framework for a regional approach to environmental disaster prevention and response, and put in place a long-term sustainable process for achieving the regional capability to deal with these disasters.

## MEETING ENVIRONMENTAL SECURITY CHALLENGES IN INDIA

In coordination with the Tata Energy and Resources Institute, DoD cosponsored a conference on environmental security issues connected with the fragile Himalayan environment. During the conference, at which Indian Defense Secretary Yogendra Narain gave the closing address, the nations discussed the role of the military in preventing and correcting environmental degradation and preempting conflict through the timely mitigation of environmental security challenges.

Based on the success of the conference, the countries agreed to begin a military-to-military environmental contacts program at the May Defense Policy Group meeting. Implementation of this program will begin in FY 2003.

# Environmental Security Partnering in Central Asia and the Caspian Basin

The second USCENTCOM Environmental Security Conference for Central Asia and the Caspian Basin, "Partnering for Environmental Security in Central Asia and the Caspian Basin," was conducted in April 2002 in Chiemsee, Germany. ODUSD(I&E) and the Department of State co-sponsored this event.

The conference brought together regional military and civilian leaders from Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Armenia, Azerbaijan, and Georgia; U.S. National Guard State Partnership Program representatives; the Department of State; the Department of Energy National Laboratories; USCENTCOM; international academics; and governmental, military, and non-governmental subject matter experts.

Several achievements during the conference included—

- Identification of national resources available for regional disaster response and consequence management
- Enhancement of military support to civil authorities

- Examination of opportunities for multilateral and interagency cooperation, including nongovernmental and international organizations
- Promotion of information exchange and management tools
- Strengthening of working relationships between regional government agencies.

# Enhancing Defense Environmental International Cooperation in South America

ODUSD(I&E) supported U.S. Southern Command (SOUTHCOM) and the Department of State by co-hosting the "Enhancing Defense Environmental International Cooperation in South America" conference. This conference was held in Paraguay in May 2002.

The gathering was the first regional conference for the area and the first that brought together Ministers of Defense with Ministers of Environment. Delegates included the President of Paraguay, the U.S. Ambassador, and the U.S. Southern Command Deputy Commander. Ministers and Vice Ministers of Defense and Environment participated from Paraguay, Argentina, Chile, Uruguay, Bolivia, and Brazil.

Conference participants supported the OSD's Security Cooperation Guidance. This guidance supports the goal of promoting increased interoperability of Argentina, Brazil, Canada, and Chile to participate actively in limited multinational operations, such as disaster response. Participants also supported SOUTHCOM's Theater Security Cooperation Plans. The intent of the plans is to strengthen democracy, continue to counter other influences in the area and promote stability, enhance professionalism of the military, and reinforce civil control.

## Building Environmental Capabilities in the Philippines

In July 2002, Philippine Secretary of Defense Reyes invited Mr. Raymond F. DuBois, DUSD(I&E) to lead an interagency delegation to the Philippines. The visit was conducted under the Joint Statement and Terms of Reference between the governments of the Philippines and the United States. Delegation participants discussed how both civilian and military organizations can cooperate to build environmental capacity in the Philippines.

Some of the specific projects discussed for implementation in FY 2003 include a collaboration with the U.S. Environmental Protection Agency and the University of the Philippines to initiate a hazardous waste certificate program; workshops to introduce Philippine Department of National Defense personnel to U.S.

military environmental practices; and a program to implement the concepts of environmental management systems and environmental auditing to a Philippine military base. Immediately following the meetings, parties held the first U.S./Philippine environmental workshop on topics such as environmental budgeting, range management, and pollution prevention.

### **FUNDING**

During FY 2002, DoD invested \$2.2 million for travel, information exchanges, conference support, guidebooks, and studies as part of the Defense Environmental International Cooperation Program. The regional Unified Commands, as well as the DoD Components and ODUSD(I&E), expended these and other funds to support environmental cooperation efforts. Additional funding sources include Defense-Wide and Military Departments' Operation and Maintenance Funds, Warsaw Initiative Funds, Traditional Commander in Chief Activities Funds, and Office of the Secretary of Defense Studies Funds. These organizations plan to invest almost \$3.1 million in FY 2004 (Figures 32and 33) for similar activities. Of this amount, \$1.9 million will come from the Defense Environmental International Cooperation request in the President's FY 2004 budget.

### FUTURE DIRECTIONS

DoD's Environmental International Cooperation activities support U.S. and DoD policy objectives and provide tools for OSD and theater security cooperation activities in a non-threatening, low-cost manner. DoD is responding to the stated needs and cooperation opportunities of foreign militaries that recognize the importance of environmental stewardship in conducting their activities. DoD will continue to build trust, openness, and a global environmental ethic through the Defense Environmental International Cooperation Program.

Figure 32
Summary of International Travel, Pilot Studies, and Conferences/Meetings
(Current \$000)

TYPE OF EXPENDITURE	FY 1999 Actual	FY 2000 Actual	FY 2001 Actual	FY 2002 Actual	FY 2003 Approp.	FY 2004 Request
Conferences/Meetings	\$1,011	\$1,045	\$1,042	\$1,745	\$2,437	\$2,403
Pilot Studies	\$454	\$480	\$711	\$50	\$90	\$100
Travel	\$164	\$305	\$667	\$424	\$510	\$549
Subtotal	\$1,629	\$1,830	\$2,420	\$2,219	\$3,037	\$3,052

Figure 33
International Travel, Pilot Studies, and Conferences/Meetings:
International Environmental Cooperation
(Current \$000)

(Current \$000)										
COMPONENT	TYPE OF EXPENDITURE	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004			
Aissile Defense	Agency (formerly Ballistic Missi	Actual	Actual	Actual	Actual	Approp.	Reques			
missine Delense	Conferences/Meetings	—	\$0	\$0	\$0	\$0	\$0			
	Pilot Studies	_	\$0	\$0	\$0	\$0	\$0			
	Travel	_	\$0	\$0	\$0	\$0	\$0			
	Subtotal	\$0	\$0	\$0	\$0	\$0	\$0			
efense Health	Program									
	Conferences/Meetings	_	\$0	\$0	\$0	\$0	\$0			
	Pilot Studies	_	\$0	\$0	\$0	\$0	\$0			
	Travel	_	\$0	\$0	\$0	\$0	\$0			
	Subtotal	\$0	\$0	\$0	\$0	\$0	\$0			
efense Logistic										
	Conferences/Meetings	_	\$5	\$0	\$2	\$7	\$4			
	Pilot Studies	_	\$75	\$0	\$0	\$0	\$0			
	Travel		\$98	\$389	\$37	\$48	\$40			
	Subtotal	\$0	\$178	\$389	\$39	\$55	\$44			
lational Securit			0.0	0.0	0.0	Φ.0	•			
	Conferences/Meetings	_	\$0	\$0	\$0	\$0	\$0			
	Pilot Studies	_	\$0	\$0	\$0	\$0	\$0			
	Travel	-	\$0	\$0	\$0	\$0	\$0			
DUED/ISENO	Subtotal	\$0	\$0	\$0	\$0	\$0	\$0			
บบรบ(I&E)/Sai	fety and Occupational Health	\$867	\$515	\$450	\$1.024	\$1,630	\$1,554			
	Conferences/Meetings Pilot Studies	\$867 \$204	\$515 \$180	\$450 \$661	\$1,024 \$50	\$1,630 \$90	\$1,554 \$100			
	Travel	\$204 \$85	\$180 \$82	\$43	\$117	\$203	\$250			
	Subtotal	\$1,156	\$777	\$1,154	\$1,191	\$1,923	\$1,904			
J.S. Air Force	Gustotal	ψ1,100	Ψτττ	ψ1,104	Ψ1,101	ψ1,520	Ψ1,504			
7.0. All 1 0100	Conferences/Meetings	\$51	\$205	\$4	\$5	\$5	\$5			
	Pilot Studies	\$250	\$76	\$50	\$0	\$0	\$0			
	Travel	\$20	\$49	\$61	\$9	\$8	\$8			
	Subtotal	\$321	\$330	\$115	\$14	\$13	\$13			
J.S. Army			·			•				
•	Conferences/Meetings	_	\$0	\$0	\$0	\$0	\$0			
	Pilot Studies	_	\$149	\$0	\$0	\$0	\$0			
	Travel	_	\$10	\$4	\$0	\$0	\$0			
	Subtotal	\$0	\$159	\$4	\$0	\$0	\$0			
J.S. Central Cor	nmand									
	Conferences/Meetings	_	_	\$250	\$400	\$400	\$400			
	Pilot Studies	_	_	\$0	\$0	\$0	\$0			
	Travel			\$0	\$200	\$200	\$200			
	Subtotal	\$0	\$0	\$250	\$600	\$600	\$600			
J.S. European C										
	Conferences/Meetings	\$71	\$270	\$270	\$300	\$380	\$425			
	Pilot Studies	\$0	\$0	\$0	\$0	\$0	\$0			
	Travel Subtotal	\$0	\$5 *075	\$5 *075	\$0	\$0	\$0			
10 1::		\$71	\$275	\$275	\$300	\$380	\$425			
J.S. Joint Force		**	60	60	0.0	0.0	60			
	Conferences/Meetings Pilot Studies	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0			
	Travel	\$0 \$9	\$0 \$3	\$0 \$12	\$0 \$5	\$0 \$7	\$0 \$7			
	Subtotal	\$9 \$9	\$3 \$3	\$12	\$5 \$5	\$7 \$7	\$7 \$7			
J.S. Navy	Subtotal	ΨΘ	ΨΟ	ΨIZ	ΨΟ	Ψ1	ι ψ			
Hury	Conferences/Meetings	\$2	\$0	\$0	\$14	\$15	\$15			
	Pilot Studies	\$0	\$0	\$0	\$0	\$0	\$0			
	Travel	\$50	\$58	\$120	\$56	\$44	\$44			
	Subtotal	\$52	\$58	\$120	\$70	\$59	\$59			
J.S. Pacific Com										
	Conferences/Meetings	_	_	\$0	\$0	\$0	\$0			
	Pilot Studies	_	_	\$0	\$0	\$0	\$0			
	Travel	_	_	\$3	\$0	\$0	\$0			
	Subtotal	\$0	\$0	\$3	\$0	\$0	\$0			
.S. Southern C	ommand									
	Conferences/Meetings	\$20	\$50	\$68	\$0	\$0	\$0			
	Pilot Studies	\$0	\$0	\$0	\$0	\$0	\$0			
	Travel	\$0	\$0	\$30	\$0	\$0	\$0			
	Subtotal	\$20	\$50	\$98	\$0	\$0	\$0			
OoD Total										
	Conferences/Meetings	\$1,011	\$1,045	\$1,042	\$1,745	\$2,437	\$2,403			
	Pilot Studies	\$454	\$480	\$711	\$50	\$90	\$100			
	Travel	\$164 <b>\$1,629</b>	\$305 <b>\$1,830</b>	\$667 <b>\$2,420</b>	\$424 <b>\$2,219</b>	\$510 <b>\$3,037</b>	\$549 <b>\$3,052</b>			