

IPOA QUARTERLY

JULY 2005

INTERNATIONAL PEACE OPERATIONS ASSOCIATION

INSIDE THIS ISSUE

Technology: Changing the Way We Deal with Landmines	1
Security Sector Reform and the Role of Private Contractors	1
IPOA Member Profile: Demining Enterprises International	2
Message from the President: Protecting People through Technology	2
Armoring Vehicles: An Interview with Security Support Solutions	5
Upcoming Events	8

QUICK FACTS

- There are approximately 110 million landmines in the ground worldwide with an additional 2.5 million new landmines laid every year.†
- One million people have been killed or maimed by anti-personnel mines since 1975.†

† Source: One World International and the International Campaign to Ban Landmines.

TECHNOLOGY: CHANGING THE WAY WE DEAL WITH LANDMINES

Derek Wright
IPOA
Washington DC, USA

The anti-personnel landmine continues to be one of the most devastating weapons of war used today. Its effectiveness derives, however, not in its ability to channel enemy forces and protect turf, as was originally intended, but in its capacity to induce terror and incapacitate civilian populations that are unfortunate enough to be caught in the middle of a conflict.

Landmines are indiscriminate killers, capable of killing or injuring a child just as easily as a soldier, and continue to be

dangerous long after hostilities have ceased and their location has been discovered. Although they can cost as little as US\$3 to make, the effort required to find and excavate mines can translate into costs as high as US\$1000 per landmine.

Estimates vary about the number of landmines scattered around the world today, but some place the number as high as 110 million, with nearly 2.5 million new landmines planted every year.

Currently, landmines in over 80 different countries cause between 15,000 and 20,000 casualties per year – a rate of nearly one casualty every thirty minutes, a dispro-



A Cambodian deminer disables a landmine.

Photo courtesy of Adopt-a-Minefield (www.landmines.org).

portionate number of whom are women and children.

Continued on page 3

SECURITY SECTOR REFORM AND THE ROLE OF PRIVATE CONTRACTORS

Eric Scheye with Gordon Peake and Francesco Mancini
New York NY, USA

Security Sector Reform (SSR) has grown exponentially in both importance and scope over the last decade with increasing involvement from an ever-wider circle of government agencies and international organizations. The growth in SSR activity has been matched by the outsour-

ing of SSR programming to the private sector. From Ghana to Argentina, Pakistan to the Caribbean, national governments and donor countries use the services of contractors to design and implement military, police, judicial, and penal reforms.

The increase in the outsourcing of SSR can be expected to continue and accelerate in the coming decade, which calls for a dispassionate

analysis and debate on the role of contractors and the benefits and risks outsourcing entails. The debate concerning the role of contractors in SSR has been highly political and polemic. Misunderstandings have proliferating on all sides with SSR being conflated to the 'privatization of security.'

SSR seeks to restructure the institutions of the security

Continued on page 6

IPOA MEMBER PROFILE

Company: Demining Enterprises International

Year Founded: 2000

Location: Pretoria, South Africa and Luanda, Angola

Key Services: Landmine detection, clearance, and surveying as well as personnel and K-9 training

Background: Although originally started as a Mine Detection Dog (MDD) company, Demining Enterprises International (DEI) now provides all key demining services, including landmine detection, manual clearance and training of manual clearance personnel, K-9 and doghandler training, mechanical landmine clearance with Caspir armored vehicles, and Level-1 and Level-2 technical landmine surveys. In addition, DEI runs Mine Risk Education programs to schools and rural communities. Accredited in Angola, Mozambique, and Sudan, DEI has been working in Sudan's Nuba Mountains and in the Cuando Cubango Province of Angola since 2002. In addition, DEI has supplied several MDD teams to NGOs in Sudan. DEI hopes to expand its landmine clearance and explosive ordinance device operations to Mozambique as well as Iraq.

Website: www.idemining.com

Contact Information:

Johan van den Heever, Managing Director

Tel: +27 12 660 3563

Fax: +27 12 654 3401

Email: johan@idemining.org

MESSAGE FROM THE PRESIDENT: PROTECTING PEOPLE THROUGH TECHNOLOGY

Whether conducting commercial projects, security operations, or humanitarian relief work, operating in conflict/post-conflict (CPC) environments requires organizations to send their personnel into inherently dangerous places. CPC environments present threats ranging from landmines and improvised explosive devices to bandits or even coordinated insurgent attacks. More than 300 international aid workers were killed between 1997 and 2003 while providing critical services in these hazardous environments. Hundreds more sustained serious injuries.

One of the great strengths of the private sector is its ability to stay at the cutting edge of technology that can address or mitigate such threats. The demining industry has long had a vast technological advantage over state militaries, enabling them to operate faster, more effectively, and at reduced expense compared to traditional military demining efforts. Vehicle armoring companies too have made great strides in protecting the personnel who traverse CPC environments in the course of their duties, and the violent realities of Afghanistan and Iraq have vastly speeded technological improvements in this area.

These privately provided capabilities give NGOs and companies greater control over their security environments and bring down the costs while lowering the risks inherent to CPC operations.

We have often highlighted the reality that in CPC environments "security is 90% of the problem but only 10% of the solution," meaning that unless there is enough safety for non-security personnel to do their jobs in reconstruction, rehabilitation and reintegration, there can be no long term solution to the conflict. Effective demining and explosive ordinance disposal (EOD) and well-

armored vehicles can do quite a bit to make the risk to personnel manageable. IPOA has always included member companies who provide these vital services, and in this issue we look at both demining and vehicle armoring from a technological perspective.

We also take a look at Security Sector Reform (SSR), which may soon become the fastest growing specialty of the peace and stability industry. While companies have been training militaries, police, and peacekeepers for decades, we are seeing a new international recognition of the need for SSR to be implemented simultaneously with peace operations. Haiti, Liberia, and other peace operations clearly indicate the need for peace operations that improve the capacity of governments to maintain order and provide professional and reliable security for their citizens. There is a growing demand for companies to not just train security personnel, but also judges, prison guards, and court administrators. With the private sector's ability to tap into a truly international market and talent pool, there is no reason that the private sector cannot provide better programs, better personnel and better continuity than we have seen in past state-run SSR projects.

The private sector can be an extremely useful partner that brings advanced technologies and critical skills and efficiencies to peace and stability operations. And, for all but the most vehemently anti-capitalist pundits, the private sector's resources are too obvious to ignore. The triumph of future peace operations significantly depends on the international community's willingness and ability to effectively take advantage of the private sector's capabilities.

-Doug Brooks, IPOA President

TECHNOLOGY: CHANGING THE WAY WE DEAL WITH LANDMINES

Continued from page 1

The countries most affected by landmines are Afghanistan, Angola, Bosnia-Herzegovina, Burundi, Cambodia, Chechnya, Colombia, Iraq, Nepal and Sri Lanka. These countries alone account for nearly 50% of all active landmines in the world.

Landmine detection and removal has been necessary since mines were first introduced into combat during World War II. Although never an easy task, detecting and disposing of mines has become increasingly difficult over time, due in part to the increased diversity in materials used to manufacture mines and the complexity of the triggers used for detonation.

Even if a detection and removal method has proved effective for one minefield, adjacent minefields could have countermeasures in place that allow the mines to elude detection. As an unfortunate result, many conventional methods for mine detection and removal, such as metal detectors and mechanized mine removers, have become outdated, making the process of detection and removal more dangerous than ever before.

Although the situation is discouraging, new technologies are being developed around the world to improve mine detection and removal. Some of these technologies are rather unconventional, while others are improvements on existing detection and removal platforms.

One of the more unconventional technologies being developed is a genetically altered plant that changes color when planted near landmines. According to the March 2005 issue of *National Geographic*, the Danish biotechnology firm Aresa Biodetection and the University of Copenhagen have teamed up to create a variation of thale cress that turns from green to red when its roots sense the presence of nitrogen dioxide—a chemical compound which seeps from landmines

into the surrounding soil.

Researchers are still trying to work out some problems associated with the use of the plant, such as the costs of defoliating mine fields before introducing the thale cress and watering fields resting in arid areas, but the potential utility of the plant is garnering significant attention by experts searching for new methods of landmine detection.

Another unconventional method for landmine detection being pursued by researchers is the training of animals to use their keen sense of smell to locate buried landmines. Dogs have been used for quite some time to detect mines because of their extremely sensitive sense of smell and relative ease of training. A new animal, however, is making headlines as a possible replacement for dogs, especially in Africa.

This animal, the giant African pouched rat, is easier to breed, train, house, and transport than dogs, and is smaller, cheaper to feed, and already lives naturally in much of Africa. Light enough that they do not trigger landmines by stepping on them (a major concern when using dogs to detect landmines), these rats offer a safe and effective alternative to using dogs as mine detectors. Already being prepped and trained in Tanzania, the giant rat is planned for use in Mozambique and other sub-Saharan countries in the near future.

More conventional mine detection and removal methods such as metal detectors, rakes, plows, and flails, which have been in use for many years, have come under heavy scrutiny because of their inability to work in some terrains or under certain circumstances. The metal detector, for example, used by almost all mine detection agencies, is limited in its utility by the fact that nearly 30% of all landmines are plastic, and thus invisible to metal detectors. Also, the mineral

make-up of the soil can sometimes prevent an accurate reading by metal detectors.

In addition to manual mine detecting devices, there are several types of mine-clearing machines. These machines typically use one of two techniques, either detonating the mine in the ground by flailing chains or pushing heavy rollers, or by raking and plowing through the minefields, pushing the mines to the side to be defused later by hand. Although these techniques are highly effective on flat, open surfaces, they become increasingly difficult to use in mountainous or rocky terrain.

In response to these shortcomings, many conventional landmine detection and removal systems have undergone significant upgrades. Manual rake excavation and detection systems (REDS) have been made safer and more effective by increasing their sensitivity and flexibility in the field.

Dual-sensor detectors combine ground-penetrating radar with metal detectors to provide a complementary detecting capability that makes finding buried landmines easier than when either device is used alone. Large tank-like mine-removers are being made more sensitive and more durable to handle difficult terrain. Manufacturers have also produced unmanned, remote-controlled mine removers which keep the deminers a safe distance away from harm.

The continued use of anti-personnel landmines is a humanitarian concern that touches all corners of the globe. Unfortunately, landmines continue to be placed in the ground at a faster rate than they are extracted. However, much hope remains that landmines will one day be eradicated through improved detection and removal technologies, combined with the continued support of the international community. ■

Defining True Security™



Accountable. Ethical. Disciplined. Reliable. Dedicated. Professional.



At Triple Canopy, a global security solutions provider, we believe that security is much more than pure analysis, planning, protection and training.

Security is reflected in our reputation. It's indicative of our culture and manifested in the attitude of our people and the way we conduct business.

As our customer, you can rest assured that the security of your people, infrastructure and assets are safeguarded by the very best.

Only Triple Canopy delivers True Security.

Don't settle for anything less.

triplecanopy.com

Copyright © 2005 Triple Canopy, Inc. All rights reserved.



ARMORING VEHICLES: AN INTERVIEW WITH SECURITY SUPPORT SOLUTIONS

Security Support Solutions (3S) provides armoring services to companies, governments, and NGOs requiring sedans, limousines, 4x4 SUVs, and other such vehicles offering high levels of ballistic protection and operational reliability, as well as practical advice and information on the latest armoring technologies.

IPOA: What are the key features of a well-armored vehicle? How do these features differ for companies, NGOs, and the military?

3S: The key features that buyers need to consider begin with the selection of armorers who know their trade and have a strong track record in armoring the types of vehicles that they want to buy.

One must ensure that independently certified materials are used to meet the threat and that the base vehicle has been strengthened to support the additional weight of the armor, which can represent 30% to 40% of the weight of the base vehicle.

Buyers should also consider terrain, fuel, availability of spare parts, and maintenance support, as well as features such as blast flooring, run flat tires and escape hatches. In short, vehicles must perform as required on operations and stop bullets and blast fragments if attacked.

As to the differences, a B6 vehicle supplied to an NGO will have the same ballistic integrity as one supplied to a security contractor or any other client. The armoring levels remain the same, but purchasers may specify that they want a particular detail within a vehicle. For example, in our preliminary discussions with potential clients, they may specify an escape hatch or a gun port in a particular

place within the vehicle.

IPOA: How does one balance armor weight with vehicle performance in different threat environments?

3S: Protecting people is the primary aim of these vehicles, but they also have to do the work that is required and may have to get

3S: The real issue is to ensure that any kit is made specifically for the type of vehicle. This may seem surprising, but we have seen examples where kits designed for one vehicle type have been “shoe-horned” into another. This results in gaps in the armor, increasing the risk to those inside the vehicle.

Generally, all-steel armor that is pro-

fessionally applied to a stripped vehicle will have proper ballistic overlaps, greater overall integrity, and will perform better under attack.











IPOA: If every threat is unique to each armor material, how do you design an integrated vehicle for an environment such as Iraq where there are numerous threats?

3S: Meeting every threat is not practically possible. The base unit and the increase in weight after armoring limit the protection levels that can be applied. The threat in Iraq is the same for both the military and private or-

ganizations. For instance, if a Bradley Armoured Personal Carrier (APC) can be disabled by an insurgent attack in Iraq, an SUV is at even greater risk.

Rocket-Propelled Grenades (RPGs) and similar weapon systems cannot be defeated by SUVs if the strike is at right angles. Protection against large Improvised Explosive Devices (IEDs) or Vehicle-Born IEDs (VBIEDs) is limited and depends on size, proximity and type of explosive.

Remember that SUVs are intended to survive the initial attack and to provide a means of escape from the killing zone while offering protection against small arms fire, some armor-piercing rounds, and

	Threat	Class	Type of weapon	
Light Armored Vehicles		B2	hand gun	PM UZI
		B3	hand gun	357 S/W
		B4	hand gun	44 S/W
Fully Armored Vehicles		B4+	rifle	AK 47
		B5	rifle	M16A2/FamasG2
		B6	rifle	M60/M14/FALFN
			rifle	AK74
		B6+	rifle	M60/M14/FALFN
Armor Piercing		B7	rifle	M60/M14/FALFN
			rifle	AK 47

The table above shows the relationship between the class of armoring and the type of weapon it is designed to defeat.

out of an ambush. Increasing the weight of the vehicle by 30% to 40% obviously alters the handling characteristics. Professional mechanical and structural upgrading will ensure that vehicle performance is safeguarded. Large diesel and petrol engines can deliver significant power to cope with the additional weight. Driver training is an option, and we recommend that anyone who is to drive an armored Sport Utility Vehicle (SUV) or limousine be provided training.

IPOA: What is the difference between a Peel-and-Stick Instant Armoring System vs. the All-Steel Armor Kits? Which is more efficacious?

SECURITY SECTOR REFORM AND THE ROLE OF PRIVATE CONTRACTORS

Continued from page 1

sector (military, police, courts, prisons) their policies and operations, so that they provide effective, efficient, and rights-respecting public services to citizens. Privatizing security, on the other hand, refers to private businesses providing defensive and support services that a state's armed forces and police personnel customarily perform and/or offering security services to protect individuals and property.

There are a number of reasons why SSR is increasingly being outsourced. First, SSR is a highly complex activity, calling for the application of multi-disciplinary skills and knowledge (technical, operational, managerial) that are typically beyond the capacity of governments and international and regional organizations to provide in a timely manner and in the numbers needed. Contractors can swiftly assemble and deploy teams of skilled consultants with a speed that public entities can only envy given their bureaucratic rules and regulations.

These teams may also possess the most up-to-date managerial, operational, and problem-solving methodologies and techniques that national governments and other public organizations may not have due to their limited training and development budgets. Finally, the contractors may prove to be deft and nimble project managers, orchestrating the many diverse elements of an SSR program, given their experiences across a range of activities.

Contractors currently provide a range of SSR activities. Training security sector staff (judges, border guards, crime investigators, military units, etc.) ranks high on the list, but it should be noted that stand alone training programs in SSR have been shown to be highly ineffective, unproductive, and unsustainable if not coupled with longer term, systematic managerial reform

initiatives. One without the other is a recipe for failure.

Change management and managerial reform is, perhaps, the second area of high intensity SSR support. Occasionally, this entails the contractor's provision of advisors or mentors who work within the institutions of the sector for extended periods of time.

Other times, contractors offer a range of services that are intended to reform and strengthen financial and human resources managerial processes, judicial case management, budgets, pay and grading systems, promotion and disciplinary regimes, civil management bodies, and logistics and procurement systems.

The third and last set of services provided by contractors is assistance in diagnosing and evaluating the needs and performance of a recipient country's security sector. Analysis may encompass the entire sector, individual institutions within the sector, and/or strategic, policy, operational, and organizational reviews of discrete elements of the individual institutions.

The role of contractors in SSR is a new area of research with virtually no studies yet commissioned to analyze its contribution and effect on SSR programming. Since it is a nascent field, it is far too early to make definitive conclusions. Nonetheless, a number of potential risks can be readily identified, few of which are particular to contractors, as they are reflective of SSR activity in general and applicable to the work of governmental agencies, multi-lateral organizations, and NGOs as well.

One of the principal risks is the need for contractors to balance the interests of its 'two' clients, the recipient state and the donor organization, if and when such a donor organization is footing the bill for the contractor's services. The interests of the recipient state/institution to be reformed and those of the donor country/

organization may not always coincide.

Given the political realities of SSR, contractors may need continually to adjust and revise the projects for which they are responsible, particularly if the original design is deficient. Although there is no easy resolution to this question, it is important to recognize and acknowledge the triangular relationship and that its management needs to be directly addressed.

A recurrent criticism of contractors in SSR relates to the quality and suitability of their personnel, but is equally pertinent to all governments and international organizations. A common issue, for instance, is a consultant who, albeit highly skilled technically, may have difficulty attuning to local cultures.

Finally, there is the question of contractors being perceived by the recipient state as being "vehicles for the perpetuation of national politics of the donor country by other means." While contractors do not officially represent any country, they are often perceived as de facto extensions of their national governments by local communities.

The private sector's involvement in SSR is growing and will continue to burgeon. SSR is an intricate activity performed in a highly complex and political environment. Contractors have a decided comparative advantage in SSR over governments and international organizations. Nevertheless, questions still persist how best to access their value for the mutual benefit of all.

Eric Scheye is an independent SSR consultant, currently working for the Brazilian Ministry of Justice and co-editing a book on security sector reform.

Questions for Mr. Scheye should be directed to: aldomoro@mindspring.com. ■

ARMORING VEHICLES: AN INTERVIEW WITH SECURITY SUPPORT SOLUTIONS

Continued from page 5

limited grenade and blast attacks. They are not designed as fighting platforms.

Users should conduct risk assessments, analyze attack trends, and use available intelligence to identify a suitable vehicle platform that, when used with good Standard Operation Procedures (SOPs) and training, can mitigate the risk as far as practically possible.

The threat in Iraq is evolving. Insurgent attacks are becoming more sophisticated and better planned. Risk assessments should be equally rigorous and solutions adapted to combat the threat. In the early days of the Iraq situation, the use of B6 armor was considered appropriate, but this armor has later defeated by some attacks.

In short, an SUV cannot be guaranteed to defeat all threats in Iraq, but a well-armored SUV in conjunction with strong SOPs can mitigate the risk.

IPOA: What are the newest innovations in the armor technology industries?

3S: Research and Development (R&D)

programs are ongoing to find a lighter, less expensive material that can be molded to fit the shape of vehicles. Research is also continuing into ceramics, plastics and ever-stronger armored glass. Militaries are at the forefront of this research with the technology eventually "pulling through" into the private security and civilian areas. In addition to performance, cost is an issue with these newer technologies. At present only government buyers are prepared to spend the large sums that are required.

IPOA: For a smaller company or NGO operating in a conflict/post-conflict environment, what are the top three considerations in purchasing an armored vehicle?

3S: First, understand the risks and threats, the operational requirement, and the environment in which the vehicle will operate. In short, identify the mission profile.

Second, choose a vehicle manufacturer with a strong track record of investing in R&D, and one who will let you see its op-

eration and show you independent certification of the steel and glass materials used in its vehicles.

Finally, be clear that a professionally armored vehicle may save your life and those of your colleagues: buy the best you can.

Inquires for Security Support Solutions should be directed to:

Laura Engelbrecht

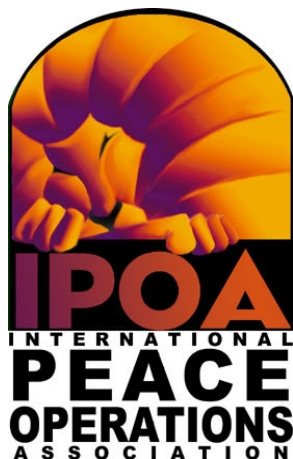
*Director of Business Development - USA
Washington, DC*

Phone: +1 202-518-2431

Mobile: +1 202-550-8852

Email: lauraengelbrecht@verizon.net

Website: www.sss3.co.uk . ■



JOIN IPOA TODAY

The International Peace Operations Association is the world's only advocacy organization for private sector service companies engaged in international peace and stability operations.

IPOA member companies provide critical conflict and post-conflict services that cover all sectors of peace and stability operations, including logistics, transportation, aerial surveillance, training, medical services, security, demining, and armoring.

For information on membership, please contact us at IPOA@IPOAonline.org or visit us online at www.IPOAonline.org.

GULF CAPITAL LIMITED INSURANCE

LONDON — AMMAN — KUWAIT
BAGHDAD — TOKYO

Gulf Capital offers complete turnkey solutions to developing business in challenging environments such as Iraq.

Our services include complete insurance and risk management solutions through specialist Lloyds of London insurance brokers in the following areas:

- Tailored policies for Iraq and other conflict zones.
- Personnel Accident and Repatriation Insurance (including post-repatriation medicare cover).
- Kidnap and Ransom Insurance.
- Key Man Insurance.
- Group Policies.
- Asset Protection (goods in transit, marine hull and war risks, aviation war risks, cargo cover).
- Corporate Policies (Defense Base Act, Employers' Liability, Professional Indemnity).

4-5 Park Place
London SW1A 1LP, UK

Tel: +44(0)207 083 0190

Email: insurance@gulfcapital.co.uk

You've tried the rest
now check out the best at:
www.gulfcapital.co.uk

UPCOMING EVENTS

**“Private Military Companies and Global Civil Society”
July 14-16, 2005
KwaZulu-Natal, South Africa**

This interdisciplinary conference will examine the ethics, theory, and practice of using private military companies. Conference papers include “The Private Protection of Human Rights: Ethical Issues,” “Ruthless Humanitarianism: Why Marginalizing PMCs Kills People,” “PMCs in the Current World Order: The Challenges of Regulation,” et al.

All enquiries should be forwarded to Deane-Peter Baker:
E-mail: BakerDP@ukzn.ac.za
Telephone: (2733) 260-5582

**“Contract Administration Challenges of
Battlefield Contractors”
August 3, 2005
Alexandria, Virginia, USA**

This meeting, sponsored by the Professional Services Council and McKenna Long & Aldridge LLP, will guide participants through the contractual risks confronting U.S. government contractors of the peace and stability industry and provide practical steps for companies to protect themselves. This meeting will be held at the Crystal Gateway Marriott in Alexandria, Virginia from 8:30 - 11:45 AM.

For questions and to RSVP, please contact Melissa Browning:
E-mail: browning@pscouncil.org.

ACKNOWLEDGEMENTS AND ADDITIONAL INFORMATION

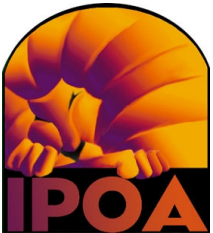
Editor: Garrett Mason

Many thanks to all who contributed to this publication, especially Derek Wright for his article on demining technologies, Eric Scheye, Gordon Peake, and Francesco Mancini for their article on security sector reform, and Security Support Solutions for their interview on vehicle armoring. Thanks also to Adopt-a-Minefield for the photograph of the Cambodian deminer (page 1).

To receive an electronic copy or hardcopy of this publication, please contact us at IPOA@IPOAonline.org or +1 202-464-0721.

To submit an article or advertise for an upcoming newsletter, please email the editor at CLemaitre@IPOAonline.org.

The opinions expressed herein do not necessarily represent the opinions of IPOA, its officers, board of directors, members, or affiliates.



**International Peace
Operations Association
1900 L Street, NW
Suite 320
Washington, D.C. 20036**