

The Mine Action Technology Workshop

Sponsored by the United Nations Mine Action Service and the Geneva International Centre for Humanitarian Demining, the Mine Action Technology Workshop is a biannual event held in Geneva, Switzerland, in early September. The 2010 event featured theoretical and practical discussions, as well as a newly added opportunity to see technology in action. This article highlights the events and outcomes of the workshop.

by Nicole Neitzey [Center for International Stabilization and Recovery]



Participants saw live demonstrations of several types of machinery available to demining programs, a new feature added to the agenda for the 2010 Workshop. Photo courtesy of Erik Tollefsen/GICHD.

In September 2010, 75 participants from more than 30 countries attended the United Nations Mine Action Service/Geneva International Centre for Humanitarian Demining's Mine Action Technology Workshop. The third workshop of its kind, the 2010 workshop's theme was "Merging Mine Action Technology and Methodology." The proceedings involved more than two days of densely packed presentations and demonstrations from scientists, manufacturers and operational staff, presided over by facilitators

Christopher Clark of UNMAS and Erik Tollefsen of GICHD.

The workshop's discussion started with an aerial view of technology—quite literally, with presenters from the European Space Agency and a manufacturer of unmanned aerial vehicles—and became more practical on Day Two, with discussions of actual testing and trials of different technologies. Day Three brought things closer to ground with field demonstrations of different equipment types. As one of the presenters described it, the workshop

began discussing "the man on the moon" and progressed to "the deminer on the ground."

Workshop Highlights

Day One covered Remote Sensing and Information Management, giving participants an idea of technology that could be used for remote detection of mines. Day One also included presentations on a current study to determine how space assets could be used in demining^{1,2} and on how aerial systems are used or are tested for mine-action applications.^{3,4} Afterward, participants broke into three groups to discuss the presentations and raise questions for the presenters in a session dubbed "hard talk," which was designed to allow the community to ask the manufacturers concrete questions about their technologies in order to better understand their feasibility and applicability in mine action. The day concluded by transitioning to more practical kinds of briefings that would characterize Day Two, featuring presentations on how soils affect metal-detector performance^{5,6} and results from recent testing on blast-resistant wheels.^{7,8}

As mentioned, Day Two presenters discussed more practice than theory, talking about personal expe-

riences, lessons learned from the field and innovative projects that are under way. Presentations covered specific mechanical-demining equipment⁹ and planning tools.^{10,11,12} Country-specific case studies were also presented, such as Phase 1 of the Falkland Islands clearance project^{13,14} and South Sudan's land-release procedures.¹⁵ The afternoon session focused on technology related to explosive-ordnance disposal and stockpile destruction, including discussions of environmentally safe stockpile-destruction technologies¹⁶ and the Moldova stockpile-destruction project.¹⁷ A report on an initiative by Golden West Humanitarian Foundation in Cambodia to break down unexploded ordnance and reuse the filler explosive in clearance operations was also presented.^{18,19} Another presenter highlighted a subject of growing concern in the community: improvised explosive devices and related security issues.^{20,21,22,23}

The workshop's third and final day let participants get hands-on with technology in field demonstrations. The group traveled by bus to the grounds of the nearby Swiss Army/Civil Defence Training Centre, where manufacturers of different tools displayed their equipment. Exhibits included deminers' vests and visors, deflagration technology, large machinery, geographic-information-system technologies and handheld detection systems. Participants were given the opportunity to test some of the equipment themselves or see the demonstrators put the tools to use. Day Three was a unique opportunity to see and hear about the capabilities of different technologies as well as ask the different organizational representatives questions.

Outcomes and Conclusions

This third Mine Action Technology workshop brought a number of new topics to the foreground for discussion, along with several recurring concerns mentioned in the past. It was clear many advancements have been made in recent years in terms of mine-action equipment and methodologies—including land release and innovative solutions, such as the explosives-harvesting program—but some participants remained frustrated with the technology's slow pace moving from concept to field use. Although some were skeptical that certain technologies could be effectively used in mine-action operations (at least anytime soon), most everyone in attendance realized the benefit of uniting in such a forum to link together the "men on the moon"—the innovators and scientists—with the "deminers on the ground"—the operational field personnel who will ultimately put their ideas to the test, and hopefully use these new technologies for the benefit of mine-affected populations.

Overall, the workshop was a success. In addition to positive responses to the 2010 proceedings, most participant feedback indicated continued interest in attending such events. Attendees welcomed the new workshop features, including the "hard talk" session and the exhibition day. The workshop's chairs hope to build on the 2010 workshop's success and continue providing this unique opportunity for the community to network and convene around technology issues on a regular basis. ♦

see endnotes page 82

For more information, visit the GICHD site at <http://bit.ly/eA5Nm4>.



Nicole Neitzey is the Technical Editor for *The Journal of ERW and Mine Action* and serves as Grants Officer for the Center for International Stabilization and Recovery/Mine Action Information Center. She has worked for CISR/MAIC since 2001. Neitzey graduated from James Madison University in 2002 with a Bachelor of Arts in technical and scientific communication, and an online publications specialization.

Nicole Neitzey
Technical Editor/Grants Officer
The Journal of ERW and Mine Action
Center for International
Stabilization and Recovery
James Madison University
800 South Main Street, MSC 4902
Harrisonburg, VA 22807 / USA
Tel: + 1 540 568 3356
Fax: + 1 540 568 8176
E-mail: neitzenx@jmu.edu
Website: <http://cISR.jmu.edu>

Erik Tollefsen
Project Manager - EOD, Stockpile
Destruction and Technology
Geneva International Centre
for Humanitarian Demining
7bis, avenue de la Paix
P.O. Box 1300
1211 Geneva 1 / Switzerland
Tel: + 41 22 906 16 95
Fax: + 41 22 906 16 90
E-mail: e.tollefsen@gichd.org
Website: <http://gichd.org>

Chris Clark, MBE MC
Senior Liaison Officer
Team Leader - Standing Capacity
UNMAS/Geneva
Tel: +41 22 917 2262
Mobile: +41 794 298640
Website: <http://www.mineaction.org>