Interoperability: Sharing Information

The Interoperability workshop held at James Madison University (JMU) featured slide shows on the various database systems used by mine action centers and other nonprofit organizations. The workshop addressed lessons learned, challenges and solutions.

by Mary Ruberry, *MAIC*

Introduction

This year's conference was held as a follow-up to the first Global Mine Action Information Coordination Workshop that also took place on JMU's campus last year from April 19 to 21. The issues discussed in 2000 are largely the same today, though some participants indicated that progress has been made since the first gathering.

One fact is clear: mine action centers around the world, though faced by unique scenarios and challenges, all gather the same kinds of information (i.e., type of accident, explosive(s) used, injuries, activity, etc.). Could exchanging information and database structures help mine action centers,

Tom Bollinger of GICHD and Patrick Gordon of UNOPS relax during a break.

especially during start-up? Would the work of mine action fit with a unified information system such as IMSMA (Information Management System for Mine Action)? How would security concerns figure in to the openness? These and other issues were addressed with slide presentations, question/answer periods and amicable discussions.

Background of Interoperability

"Having to create data from scratch …seems to be a problem for many of these countries. Also the problem with finding maps…for planning is a common [problem] for both an under-resourced situation like Laos and a relatively well-resourced situation like in Kosovo. We still had the same problems. NIMA had [the maps], KFOR had them, but they were never released. They were classified as secret. We need to break down the barriers to sharing that type of information." *Shawn Messick, Global Mine Action Information Coordination Workshop, JMU, April 2000*

At present, the mine action community maintains numerous information systems containing uniform types of data and impacted by overall basic needs for systemizing quality information. Obtaining accurate geographic data has been mentioned repeatedly by mine action professionals as a constant problem in constructing reliable information. Knowledge of the physical characteristics of the land to be demined is critical for effective clear-

ance. Yet acquiring the often abundant maps produced during conflicts can be impossible when governments consider the geographic aids a potential security threat.

The Issues

Following is a brief overview of the discussions surrounding six main conference issues.

Issue #1: Managing Mine Action Information

As Dennis Barlow (MAIC) stated in his introduction, having many systems in the mine action community hinders the process of gathering information, and he queried, "What is the technology needed to solve the problem?" Iain Shepherd of the European Commission acknowledged that mine action has "come a little way" over the past year towards achieving a standard information system. Yet Zoran Grujic, Assistant Director of Information for the Bosnia/Herzegovina Mine Action Center, asserted that having the "same system for all countries would mean that all countries have the same needs, which is not reasonable." And Daniel Eriksson, Chief of the IT Department for the U.N. Mine Action Coordination Centre in Kosovo, alluded to the continuing difficulties of transferring data in Southeast Europe due to lack of conformity in the systems.

Issue #2: Creation of a Spatial Data Clearinghouse for Mine Action

As Dave Armitt of the United Nations in Ethiopia and Eritrea stated, "Data doesn't mean a lot if you don't have a map to put it on." Attempts to obtain current geographical information are often frustrated by a lack of resources. Participants in the 2000

conference agreed that a site providing information on spatial data would be beneficial. JMU offered to develop an inventory and complete a mine action GIS users' survey to identify gaps in the available mapping products and services. UNMAS has pledged its support of JMU's efforts to develop a spatial data clearinghouse that has been designed to include a multi-language tutorial about the kinds of GIS systems available. (Please see "Development of the Spatial Information Clearinghouse in Support of Humanitarian Demining" on page 88.)

Issue #3: Information Standards

Information standards enable the transfer of data. If data fields and terminology are too disparate, information systems cannot communicate. Also, as Zoran Grujic pointed out, functioning with standards creates a "benchmark." "If you can't compare your program with others, you're going to run into problems." Daniel Eriksson told the group that, "At the first meeting in Southeast Europe, we realized we could not talk about the issues because we're not speaking the same language, what's a victim, what's an accident, etc." And Alan Arnold of GICHD responded: "It has always been in the international standards, but the problem is the outside agencies that don't use the standards."

Issue #4: Information Management Training

Ensuring adequate training for system managers and keeping employees once trained were mentioned as major challenges. Daniel Eriksson said he has tried contracting system managers to get the invested "money out of them for that year." However, Zoran Grujic added "We tried to implement that in Bosnia with a contract. The company wanted [our staff] to pay to break the contract." The discussion on training also touched on the need to target all levels of mine action centers

because, as Shawn Messick put it, "Usually managers don't like change. They would rather live with a problem they can't solve than apply a solution they don't understand."

Issue #5: R&D Technology Information Exchange

Participants discussed a new online venue for exchanging R&D information created by the Canadian Mine Action Center (CCMAC). Reportedly CCMAC's site includes a forum where developers and users can discuss the technology used in mine action. Gaps have previously existed between developers and users of technology, and the site has been launched as an effort to bridge the divide and encourage need-based development.

Issue #6: Information Sharing

Information sharing is a two-way street. On the one hand, passing on lessons learned and other gathered information helps a mine action program get up on its feet. On the other hand, an "open" system enables users to provide feedback for greater refinements. Iain Shepherd of the European Commission believes that, "…we have made some progress on information sharing—quite good progress." And Shawn Messick reported that UNMAS has released a general document of standards for information sharing, and that an IMAS (International Mine Action Standards) framework document "is sitting in New York." Making information available to the public was also mentioned as an integral part of data exchange in mine action.

Conclusion

Sharing information would help the work of mine action centers, and conserve funds that would otherwise be expended reproducing efforts. However, while a shared data system may work well among some organiza-

Ray Worner of Handicap International addresses the workshop.

tions and groups, many countries would not welcome such a system preferring instead to guard proprietary information. Use of IMSMA and XML can help mine action professionals solve some problems with data systems, but not all. Nevertheless, forum gatherings such as the Interoperability workshop, and other efforts by CCMAC, MAIC and UNMAS are bringing information system issues to light and towards many viable solutions. ∎

All photos courtesy of MAIC.

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