
U.S. DEFENSE DEPARTMENT: SHARING TRAINING AND TECHNOLOGY WITH THE INTERNATIONAL COMMUNITY

Beginning in May 1996, the U.S. Department of Defense was directed to significantly expand its humanitarian demining program, to develop improved mine detection and clearing technology, and to share this new technology with the international community. The assistant secretary of defense for special operations and low intensity conflict oversees the DOD Humanitarian Demining Program.

The U.S. Department of Defense (DOD) trains countries in the procedures of landmine clearance, mine awareness, and victims' assistance, as well as in the development of leadership and organizational skills necessary to sustain these programs after the departure of U.S. military trainers. In addition, a DOD research and development program creates new technologies to deal with landmine issues.

Landmine policy in the United States is made through an interagency process. The National Security Council evaluates concerns put forth by various departments and agencies and gives recommendations to the president for a decision. The Department of State, Department of Defense, and Joint Chiefs of Staff are the primary agencies charged with implementing that decision.

The DOD's Humanitarian Demining Program seeks to reduce civilian casualties, create conditions for the return of refugees and internally displaced persons to their homes, reinforce national stability, and encourage international cooperation and participation. The program helps to establish and support sustainable mine action capabilities by providing the resources and skills with which affected countries can achieve a mine-safe status.

DOD established the Humanitarian Demining Research & Development (R&D) Program to develop equipment for immediate use in various international humanitarian demining missions and environments.

The goal is to provide equipment to the international demining community that reduces the time and cost associated with demining while improving operator safety.

This is accomplished through:

- Utilizing commercial-off-the-shelf equipment;
- Integrating mature technologies; and
- Leveraging existing technologies of countermining technology programs used for military purposes.

The program aims to improve technologies for mine and minefield detection, area clearance, vegetation clearance, mechanical mine clearance, mine neutralization, individual deminer protection, and individual deminer tools.

PROGRAM EXECUTION

The Countermining Division of the U.S. Army Research, Development, and Engineering Command's (RDECOM) Night Vision and Electronic Sensors Directorate (NVESD) executes the Humanitarian Demining Research & Development Program. The NVESD Countermining Division has many years of experience with military countermining research and development. The extensive countermining engineering expertise, coupled with a world-class fabrication facility and organic test facilities, make the Countermining Division uniquely qualified to conduct this important Humanitarian Demining R&D mission.

Each year the Humanitarian Demining R&D Program Office invites representatives from mine-affected nations to an Annual Requirements Workshop to identify and update their most critical needs.

STRUCTURE THE PROGRAM

Once a program plan is approved, design and development of new prototype technology begins. This is primarily accomplished by one of two methods. The first is by awarding prototype contracts to various U.S. and foreign companies specializing in demining equipment development. The second is by designing and building prototypes in NVESD's one-of-a-kind fabrication facility. International market surveys help to identify commercially available items for landmine detection, landmine and vegetation clearance, neutralization, and individual protection. Once built, the prototypes undergo developmental testing to ensure that all design requirements are met. If test results identify further engineering modifications that will improve the system's performance, changes are made and the system is re-tested.

PERFORM IN-COUNTRY ASSESSMENTS

A Site Assessment Team, which includes representation from the R&D Program Office, will assist the requesting nation in determining the most appropriate prototype equipment for its mine problem. Many factors, including terrain, weather, and type and variety of landmines, are considered. The assessment process ends with a recommendation of the most suitable prototype, which then undergoes evaluations that typically last for six months to one year.

CONDUCT IN-COUNTRY FIELD EVALUATIONS

Once the assistant secretary of defense for special operations and low intensity SO/LIC approves deployment, the R&D Program Office contacts the

appropriate U.S. Embassy representative, combatant command headquarters, and host nation representatives to begin the deployment process. The first order of business is completion of a Memorandum of Understanding, a Logistics Support Agreement, and an evaluation plan spelling out everyone's responsibilities. Once these are completed, the R&D Program Office transports the equipment along with multi-lingual instructional materials to the host country and conducts training. After the training team departs, the R&D Program Office will typically conduct periodic assistance visits.

TRANSITION TO OPERATIONAL USE

The host country may be part of the development team, participating in meetings and observing testing. In return, the host country agrees to conduct an operational field evaluation of the prototype. The country benefits by being part of a technology development designed specifically for its problem, and the R&D Program benefits from the information and experience gained in the evaluation.

INFORM THE DEMINING COMMUNITY

The Humanitarian Demining R&D Program is responsible for keeping the military countermine and humanitarian mine action communities informed of its technology developments. The R&D Program Office does this in several ways. Technologies developed are listed in the Developmental Technologies Equipment Catalog available on the Internet, in hard copy, and on CD. The Catalog is updated approximately every two years. Test results are sent to organizations and individuals in the international demining community for use in making equipment investment decisions. The program has also developed a newsletter that will be available to everyone on its website, which is regularly updated. ●