Bosnia and Herzegovina **Demining 15 Years Later**

This article outlines the demining steps taken by the United Nations and national authorities following the war in Bosnia and Herzegovina in the 1990s. The author further explores the shortcomings and successes of the demining projects and laws, with attention to preparations for the state's next decade of mine action.

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n 1995, the Dayton Agreement put an end to three-and-a-half years of war in Bosnia der with Croatia in the north. At that time, the United Nations Protection Force1 was deploying in the country. Later, with a U.N.-instituted no-fly zone,2 the Implementation Force3 helped significantly reduce pollution from air- Getting into the Game craft submunitions.

According to the Dayton Agreement (Annex 1-a), former warring factions were obliged to submit war documentation to the Implementation Force under the code name Operation Joint Endeavour. Initial information to begin clearance.

As it was too complicated, logistically and politically, to involve the existing three armies and Herzegovina (BiH) following the dis- ABiH (Bosniac), HVO (Bosnian Croat Army) solution of Yugoslavia. The first minefields in and VRS (Bosnian Serb Army)—in demining, BiH were placed in late 1991 across the bor- the Dayton Agreement tasked local armies to remove all of the minefields within their area of responsibility, but results failed to assure that the land could be used safely afterward.

Following the conflict's end, BiH had no resources to begin the arduous task of clearance. In January 1996, the Council of Ministers of BiH requested the assistance of the United Nations to start demining activities. As a result, during the same year, the United Nations Mine Action reported 16,500 minefields and enabled IFOR Centre was founded. The BiH demining project started in 1996 with the center taking responsi-



A deminer begins activities in a new lane.

bility for mine-action coordination in July 1998. The following three "chapters" detail the U.N.-, international community- and state-led projects in BiH demining.

Chapter One: U.N.-led Project

The United Nations Mine Action Center was established in Sarajevo in May 1996. RONCO, an American contracting company, was awarded a bid to equip, staff, train and start demining activities. Its first task was to assess the problem.

Some 16,600 minefield records were entered into a database. At that time, mine-action centers in Cambodia and Afghanistan had database systems, but they were custom-tailored to suit their own needs. BiH's situation was different: a small area dense with contamination.

In the early days, the BiH demining effort was a U.N. Department of Peacekeeping Operations program, and all activities were targeted toward establishing a mine-action-center structure. Nevertheless, the need for action was pressing as the landmine incident rate reached nearly 50 per month. Reporting procedures were still in their development phase, and demining reports from this time had to be resurveyed.

Another part of the initial demining efforts was instituting mine awareness. Risk education started as a joint venture between the International Committee of the Red Cross, UNMAC and UNICEF.

The initial programs' results were significant. The rate of more than 50 mine accidents per month in 1995 was reduced to fewer than 30 in 1998. BiH's problem was that all of the available procedures at the time had been developed for sandy areas such as Afghanistan and the Persian Gulf. In response to its unique situation, BiH modified procedures, shifting from a "retrace your footsteps" to a seven-step procedure, with the primary aim to avoid entering a dangerous zone. This procedure was later used worldwide.

Close to the end of the U.N. demining period (August 1996-July 1998) in BiH, UNMAC had five regional offices in Tuzla, Banja Luka, Mostar, Pale and Bihac, and was employing close to 40 trained, local mine-action center staff to conduct mine-action activities on their own. UNMAC also had four fully equipped teams capable of demining approximately six square kilometers (2.3 square miles) per year.



A deminer uses a metal detector in preparation for Technical Survey.

Information systems successfully followed activities, and maps were produced accurately depicting minefields. The program was slowly moving toward chapter two.

Chapter Two: State/International **Community-led Project**

On 31 July 1998, UNMAC was transferred to BiH authorities. To achieve this, structural changes had to be made. Project financing for demining operations was conducted mostly through the International Trust Fund for Demining and Mine Victim Assistance and the United Nations Development Programme. The staff was increased to 63 local staff members and approximately 20 international advisors and consultants.

The tripartite structure required strong coordination, which was lacking because resources were not sufficient to support all demining activities. With a changed mandate, it was illogical for the MAC to maintain its own demining team, so these teams were reassigned to survey and quality-control tasks. A number of the deminers, wishing to remain active with clearance, joined one of the three nongovernmental organizations that were established during this time—Pale's Stop Mines, Sarajevo's BH Demining and Mostar's Pro Vita. Further, to improve better territorial coverage, the regional offices in Sarajevo and Travnik opened.

Information systems were refined and mapping standards were established, increasing the MAC's effectiveness. An emphasis was placed on planning and coordination among the members of the Mine Awareness Working Group.

As time passed, it became increasingly obvious that the tripartite structure could not achieve the maximum efficiency. In February 2002, the state parliament adopted the first demining law, moving BiH demining to chapter three.

Chapter Three: State-led Project

demining law and appointed the Ministry of Civil Affairs and the Demining Commission to be the national authority responsible for instituting the law. BHMAC's role was to coordinate and plan BiH mine-action activities, including establishing a mine-detection dog center and conducting systematic landmine impact surveys. With the new demining law, the former tripartite structure unified and former entity offices became operational offices within their territories. While UNDP originally covered BHMAC's operational costs, BiH eventually assumed responsibility for the costs, and donor countries continued to send funds through ITF.

BHMAC decided to use Technical Survey to release demined areas rather than focusing solely on the complete clearance of demined areas; this resulted in an increase in productivity. Rather than clearing 10 square kilometers (3.9 square miles) per year, figures went up to 150 square kilometers (57.9 square miles) cleared in 2009. Also, with the exception of 2008, there has been a decrease in landmine accidents. Estimated annual productivity has grown to 35-40 square kilometers (13.5-15.4 square miles) for area clearance and Technical Survey and 80 square kilometers (30.9 square miles) for General Survey area.

The Way Forward

BHMAC has begun to revise the current demining law and create new legal documents that would enable greater involvement of local authorities in mine action. Having recognized the need to plan the next decade of mine action, the Council of Ministers evaluated the mineaction strategies employed from 2005-09 and

drafted a new strategic document for 2009-19. With the new strategy, at the 9th Meeting of the States Parties of the Mine Ban Treaty, BiH submitted an application for an extension to clear landmines; the extension was approved.

With the adoption of the first demining law, BiH accepted responsibility for mine action and developed standard operating procedures and quality assurance procedures for mine-risk BiH took responsibility for enacting the education. These actions enabled strict quality control and allowed MRE field work to be evaluated. The law's creation also resulted in an increase in mine-safe areas and a continual reduction (with the exception of 2008) in landmine incidents.

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