



Explosive Situation:

Qaddafi's Abandoned Weapons and the Threat to Libya's Civilians

IHRC

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HUMAN RIGHTS PROGRAM AT HARVARD LAW SCHOOL



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TABLE OF ACRONYMS

ASA	Ammunition storage area
CAP	Center for American Progress
CCW	Convention on Conventional Weapons
CIVIC	Campaign for Innocent Victims in Conflict
DDG	Danish Demining Group
DTRA	Defense Threat Reduction Agency
ERW	Explosive remnants of war
FSD	Swiss Foundation for Mine Action
IATG	International Ammunition Technical Guidelines
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICRC	International Committee of the Red Cross
iMMAP	Information Management and Mine Action Programs
IMAS	International Mine Action Standards
IHRC	International Human Rights Clinic at Harvard Law School
JMACT	Joint Mine Action Coordination Team–Libya
LMAC	Libyan Mine Action Center
MAG	Mines Advisory Group
MANPADS	Man-portable air defense systems
NAMSA	NATO's Maintenance and Supply Agency
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
NTC	National Transitional Council
OSCE	Organization for Security and Co-operation in Europe
RECSA	Regional Center on Small Arms and Light Weapons
SALW	Small arms and light weapons
SEESAC	South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons
SSR	Security sector reform
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Service
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNODA	United Nations Office of Disarmament Affairs

GLOSSARY OF KEY TERMS

Abandoned ordnance - Explosive ordnance that has not been used during an armed conflict, that has been left behind or dumped by a party to an armed conflict, and which is no longer under control of the party that left it behind or dumped it. Abandoned ordnance may or may not have been primed, fused, armed or otherwise prepared for use.¹

Ammunition storage area (ASA) - A designated area in which a number of bunkers and/or other permanent storage facilities are located.

Explosive ordnance - Conventional munitions containing explosives.

Explosive remnants of war (ERW) - Abandoned ordnance and unexploded ordnance.

Joint Mine Action Coordination Team (JMACT) - The partnership of the United Nations Mine Action Service (UNMAS) and several nongovernmental organizations (NGOs) “working together with the Libyan Mine Action Centre and Ministry of Education to present a coordinated response to the explosive remnants of war threat in Libya.”²

Katiba - A local militia or irregular force formed during the 2011 armed conflict, which may vary significantly in size.

National Transitional Council (NTC) - The de facto parliament of Libya, established by anti-Qaddafi forces during the conflict and also called the Libyan Transitional National Council. In August 2011, the NTC issued a declaration that set out a plan for the transition of Libya to a constitutional democracy with an elected government. The NTC ceased to exist with the general elections of a national congress on July 7, 2012.

Stockpile

A large, accumulated stock of explosive ordnance.³

Unexploded ordnance (UXO)

Explosive ordnance that has been primed, fused, armed, or otherwise prepared for use and used in an armed conflict. It may have been fired, dropped, launched, or projected and should have exploded but failed to do so.

¹ This definition and those for explosive ordnance, explosive remnants of war, and unexploded ordnance, draw from: Protocol on Explosive Remnants of War (Protocol V) to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (CCW), adopted November 28, 2003, U.N. Doc. CCW/MSP/2003/2, entered into force November 12, 2006, art. 2.

² “Operations in Sirte remain suspended and Sirte-based partners are examining the possibility of operations in other regions,” Joint Mine Action Coordination Team – Libya (JMACT) newsletter, July 2, 2012, <http://reliefweb.int/organization/jmact> (accessed on July 20, 2012).

³ UN Office for Disarmament Affairs (UNODA), “International Ammunition Technical Guideline: Glossary of Terms, Definitions and Abbreviations,” IATG 01.40:2011(E), October 1, 2011, www.un.org/disarmament/convarms/Ammunition/IATG/ (accessed July 23, 2012), para. 3.262.

SUMMARY AND RECOMMENDATIONS

Libya is awash in weapons, ranging from bullets and mortars to torpedoes and surface-to-air missiles.⁴ Over the course of more than four decades, Muammar Qaddafi's regime acquired a stockpile of munitions worth billions of dollars (US) and contained in dozens of storage facilities spread across Libya. Due to the chaos and fighting of the 2011 armed conflict in Libya, some of these weapons proliferated across national borders; however, vast quantities remained within Libya. Many of these weapons made their way into the hands of those who opposed Qaddafi; others were destroyed or damaged in NATO's bombing campaign; still others entered civilian homes as scrap metal or souvenirs for display. Libya faces the unfortunate reality of being a post-conflict country saturated with weapons and with a weak central government. The combination



leaves civilians at risk of death and injury and demands an urgent response at the national and international level.

This report focuses on the impact on civilians of weapons that were once part of Qaddafi's arsenal, but were not used in the conflict and are now held by various parties. It finds that this "abandoned ordnance," often unsecured and unstable, presents significant risks to the population of Libya. During a field mission to the country, a team from Harvard Law School's International Human Rights Clinic (IHRC) identified five major humanitarian threats

associated with abandoned ordnance: stockpiles located in or near populated areas that are at risk of explosion; people's curiosity about weapons, which may lead them to access contaminated sites or handle munitions; the harvesting of materials from abandoned weapons for sale or personal use; clearance by local communities who lack professional training; and the collection and display of weapons as mementos of the war.

After providing some background and detailing the humanitarian threats, this report examines the key activities that must be pursued to minimize future harm from abandoned ordnance, i.e., stockpile management, clearance, risk education, and victim assistance. It addresses them in turn and also includes

⁴ This report generally uses the terms weapon, munition, and ammunition interchangeably. In technical terms, a weapon is an instrument that launches ammunition of any size. Many people, however, think of ammunition as referring primarily to small munitions like bullets. The report seeks to avoid that confusion by following common parlance.

a discussion of international cooperation and assistance. Each chapter lays out international principles and standards, describes the current status of activities in Libya and progress achieved so far, and analyzes challenges to future work. The report concludes each chapter with recommendations to relevant parties.

Responsible Parties and the Need for a National Plan

Protecting civilians by securing or eliminating the abandoned ordnance in Libya is a monumental task that involves a range of actors. First, it requires support and leadership from the national government. According to international standards, Libya bears responsibility for proper management of its stockpiles because it is a sovereign country. As an affected state, it also has primary responsibility for clearance, risk education, and victim assistance. To date, however, the United Nations Mine Action Service (UNMAS) and international non-governmental organizations (NGOs) have done most of the work. Under the National Transitional Council (NTC), the *de facto* parliament formed during the revolution, the Libyan government provided little financial or material support. Furthermore, it did not formulate a national strategy; in fact, several government agencies claimed jurisdiction over the abandoned ordnance problem producing a state of “government confusion.”⁵ The inadequate action and poor coordination stemmed in large part from the weak and transitional nature of the NTC. Although also transitional, the new government elected on July 7, 2012, should accept Libya’s responsibilities and make dealing with abandoned ordnance a priority. This prioritization should continue with the election of a permanent parliament in 2013.

Second, the international community should provide continuing cooperation and assistance to help deal with the abandoned ordnance threat. Best practices and multiple treaties call on states “in a position to do so” to provide assistance for stockpile management, clearance, risk education, and victim assistance related to weapons left after an armed conflict. Because of NATO’s role in the 2011 conflict, the alliance and its member states, especially those that participated in the military campaign, should accept special responsibility for helping ameliorate the situation. NATO’s bombings of ammunition bunkers, while lawful, spread abandoned ordnance across open fields, thus creating a more dangerous and difficult problem. In addition, NATO intervened in the Libyan armed conflict in order to protect civilians—a mandate that should guide its post-conflict actions. The international community has provided funding totaling about US\$17.1 million in 2011 and US\$5.6 million to date in 2012.⁶ The contributions, which have been largely earmarked for clearance, seem to be declining, however, despite no decrease in risks to civilians. Ongoing and increased assistance is needed.

Finally, local authorities and militias, known as *katibas*, should be integrated into the process to deal with abandoned ordnance. These entities have held much of the abandoned ordnance and have wielded

⁵ IHRC telephone interview with Max Dyck, program manager, UN Mine Action Service (UNMAS), Tripoli, July 3, 2012.

⁶ Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011; UN Office for the Coordination of Humanitarian Affairs (UNOCHA) Financial Tracking Service, “Libya Emergencies for 2011: List of All Humanitarian Pledges, Commitments & Contributions in 2011,” report as of July 24, 2012, <http://fts.unocha.org/pageloader.aspx?page=emerg-emergencyCountryDetails&cc=lby&yr=2011> (accessed July 24, 2012); UNOCHA Financial Tracking Service, “Libya Emergencies for 2012: List of All Humanitarian Pledges, Commitments & Contributions in 2012,” report as of July 24, 2012, <http://fts.unocha.org/pageloader.aspx?page=emerg-emergencyCountryDetails&cc=lby> (accessed July 24, 2012).

significant power since Qaddafi fell. The relevant Libyan and international actors should work closely with the local parties, who should cooperate in return. Together, they can help protect civilians from the dangers of the detritus of war.



Some of Qaddafi's abandoned weapons landed in this tangled pile after NATO bombed an ammunition bunker outside Zintan. They remained there in March 2012, tempting to civilians and challenging to clear properly.

Photograph by Bonnie Docherty.

A coordinated and comprehensive strategy to deal with the problem of abandoned ordnance is critical given the complex web of parties and the many activities involved. As an overarching recommendation, this report calls on the Libyan government, which bears primary responsibility for addressing the issue, to develop a national plan. Libya should designate one specific government ministry, with expertise and resources, to serve as the main focal point for administration and implementation of the plan. That ministry should consult with a range of relevant parties—including other national ministries, local authorities, UNMAS, and NGOs—and they should agree on their respective roles. Libya should also take into account the input of affected individuals and communities. Finally, the plan itself should have a broad scope and cover the full spectrum of activities related to minimizing the dangers of weapons left after an armed conflict: stockpile management, clearance, risk education, and victim assistance.

Stockpile Management

Proper stockpile management is essential to protecting civilians from the threats outlined above. Some abandoned ordnance has remained in ammunition storage areas (ASAs) where it has spilled out of bombed bunkers to which civilians frequently have easy access; other ordnance has been stored, often in an unsafe manner, in shipping containers in populated areas. International guidelines on effective stockpile management lay out priorities such as establishing security and appropriately storing and locating stockpiles. The purpose of these guidelines is to establish safe environments and prevent accidents. In Libya, the national government, local civilian and military authorities, and *katibas* have had control of the stocks of abandoned ordnance, and UNMAS has advised each on how to improve stockpile management. As of July 2012, ammunition surveys and proposals for new storage facilities indicated some progress in dealing with the situation in Libya. Challenges to better stockpile management remained, however, including: weak

coordination among relevant parties; the inadequate implementation of stockpile management standards; the need to change attitudes toward stockpiles and weapons; and insufficient funding for stockpile management initiatives. The report's major recommendations to address these challenges are:

To the Libyan government and, where applicable, local authorities:

- Develop a coordinated national strategy for the implementation of basic stockpile management principles
- Provide financial and/or material support for stockpile management, including to UN and NGO partners
- Request additional financial, material, and/or technical assistance from the international community, NATO and its member states in particular, for stockpile management activities in Libya
- As an urgent matter, allocate resources to establish or improve effective security at ASAs
- Prioritize coordination with *katibas* to move stockpiles out of populated areas and to implement proper stockpile management techniques
- Facilitate a survey by international partners of the location and contents of *katiba* stockpiles

To the katibas:

- Cooperate with national and local civilian and military authorities, as well as international partners, to develop a plan for managing stockpiles immediately
- Relocate stockpiles away from populated areas and improve storage practices within stockpiles

Clearance

Abandoned ordnance that has become unusable, or is not in secure storage facilities, needs to be cleared so civilians cannot have contact with the weapons. International instruments and standards provide guidelines for conducting clearance activities. UNMAS and international deminers have taken the lead on such work in Libya, which includes destroying certain weapons in stockpiles and clearing others from homes and farmland. The national government, however, has provided little assistance to date. Challenges to accomplishing effective and efficient clearance have included: resource limitations, such as those related to funding, staff with technical expertise, and explosives for controlled demolitions; difficulties in gaining access to abandoned ordnance sites; and the need to increase national capacity for clearance. This report's major recommendations to address these challenges are:

To the Libyan government and, where applicable, local authorities:

- Develop a coordinated national strategy for the clearance of abandoned ordnance
- Provide national funding and other forms of support for clearance, including to UN and NGO partners

- Request additional financial, material, and/or technical assistance from the international community, NATO and its member states in particular, for clearance activities in Libya
- Cooperate with international demining groups to identify clearance priorities and allocate resources appropriately
- Ensure that demining organizations have ready access to sufficient quantities of explosives to undertake controlled demolitions
- Streamline and centralize the process for deminers to access sites for clearance activities
- Facilitate the growth of local civil society organizations undertaking clearance activities through permissive regulation and funding mechanisms
- Investigate the feasibility of establishing an explosive ordnance disposal academy to build Libyan expertise on clearance within the military, police, and NGO spheres

Risk Education and Victim Assistance

Risk education and victim assistance, both of which involve connecting directly with affected communities, also play an important role in lessening the impact of abandoned ordnance on the civilian population. Risk education raises civilians' awareness of types of weapons, what behaviors are dangerous, and what to do if they encounter weapons. Victim assistance encompasses physical, psychological, and socioeconomic help for individuals, families, and communities who have suffered harm from the weapons an armed conflict leaves behind. International instruments and standards lay out guidelines for ensuring the implementation of effective programs.

International NGOs have taken the lead on risk education in Libya and have coordinated where possible with certain ministries, in particular the Ministry of Education, which has trained trainers. Their programs, however, have faced several key challenges, including: dangerous attitudes toward weapons, particularly among children; difficulty in reaching audiences; insufficient funding; and the need to increase capacity in Libya.

Libya has provided assistance to victims of weapons left after the conflict through a Ministry of Health program, which is designed to help war victims in general, including those harmed by abandoned ordnance. Because the Ministry of Health program has covered so much more than abandoned ordnance victims, a detailed analysis is beyond the scope of this report. The report's major recommendations regarding risk education and victim assistance are:

To the Libyan state and, where applicable, local authorities:

- Develop a coordinated national strategy for risk education and victim assistance

- Request financial, material, and/or technical assistance from the international community, including NATO and its member states, for risk education activities and victim assistance in Libya
- Promote risk education by:
 - Providing financial, material, and/or other support for risk education efforts by NGOs
 - Facilitating the growth of local civil society organizations undertaking risk education activities through permissive regulations and funding mechanisms
- Ensure any victim assistance programs, whether broad or narrow, provide adequate medical care, rehabilitation, psychological support, and assistance for social and economic inclusion of victims

To international NGOs providing risk education in Libya:

- Undertake targeted risk education for women, who have been harder to reach in current programs
- Continue to work with Libyans to increase local capacity for risk education

International Cooperation and Assistance

Given the seriousness and scale of the abandoned ordnance problem, international cooperation and assistance are needed to supplement national efforts. As discussed above, international principles call on the international community, and especially NATO and its member states, to help Libya with activities including stockpile management, clearance, risk education, and victim assistance. While other countries have provided some such assistance, UNMAS and the international demining NGOs told the IHRC team that funding was inadequate; they said their work depended on ongoing and increased funding, which requires political will. Libyan government officials echoed the call for more foreign funding. This report's major recommendations regarding international cooperation and assistance are:

To the international community at large:

- Provide ongoing and increased funding and/or material support for stockpile management, clearance, risk education, and victim assistance in Libya
- Establish partnerships with Libyan authorities to facilitate the exchange of technical information and training on all these activities

To NATO and its member states:

- Provide financial, technical, and/or material support for clearance of ASAs and other ammunition storage facilities bombed by NATO during the armed conflict in Libya
- Provide assistance, including in the form of funding, for civilians harmed by abandoned ordnance kicked out of bunkers that were bombed by NATO during the armed conflict in Libya

Scope of the Report

This report focuses on abandoned ordnance because it is a large-scale problem that has been generally underreported. The problem relates to the broader issue of explosive remnants of war (ERW), a term that encompasses abandoned ordnance (munitions that were not used but were left behind after an armed conflict) and unexploded ordnance (munitions that were used but failed to explode). All ERW pose a serious threat to civilians, but this report hones in on the risks and challenges presented by abandoned ordnance. In Libya, such munitions represent a particularly large portion of the country's ERW, and they raise questions about stockpile management, which might otherwise be overlooked. This approach led to research challenges because data on civilian casualties and donor contributions is generally not broken down by type of ERW involved. Furthermore, some of the report's recommendations could apply to unexploded as well as abandoned ordnance. This overlap, however, does not change the report's findings that abandoned ordnance seriously endangers civilians and that there is an urgent need to address the problem.

The scope of the report has been narrowed in two other ways. The report does not discuss in depth the proliferation issues associated with abandoned ordnance that relate to the spread of weapons outside Libya and the potential risk of these weapons being obtained and used by non-state armed groups. That angle on abandoned ordnance has received significant international attention. Nor does the report dwell on small arms and light weapons (SALW). Concerns about abandoned ordnance and SALW, especially related to civilians tampering or playing with them, are similar to a degree, and certain demining NGOs in Libya have started to deal with SALW.⁷ Experts often discussed the topics separately, however, and addressing SALW could have watered down the impact of this more focused report.

Methodology

The IHRC undertook the research and writing of this report. It partnered with the Campaign for Innocent Victims in Conflict (CIVIC) and the Sustainable Security and Peacebuilding Initiative at the Center for American Progress (CAP), two NGOs that provided a mandate, advice, project direction, and support. Following several months of legal and desk research, a four-person IHRC team did a field investigation in Libya from March 25–April 1, 2012. It conducted interviews in Dafniya, Misrata, Sirte, Tripoli, and Zintan. The team also visited two ASAs, near Misrata and Zintan respectively. In July 2012, IHRC gathered updated information from UNMAS and NGOs and conducted additional interviews with government officials in Tripoli. In total, the team interviewed more than 30 individuals, including representatives from UNMAS, local and international staff working for demining organizations, national and local government officials, and community members.

⁷ "Operations in Sirte remain suspended," JMACT newsletter, July 2, 2012.

SCOPE AND NATURE OF THE ABANDONED ORDNANCE PROBLEM

Arms in Libya and the 2011 Armed Conflict

Background

Almost immediately after Muammar Qaddafi came to power following a 1969 coup, he turned Libya into one of the largest arms purchasing countries in the world. Libya imported nearly US\$22 billion worth of weapons in the 1970s. From 1970 to 2008, the largest supplier of arms to Libya was the USSR/Russia, followed by France, Italy, and the United Kingdom.⁸ During the 1980s and 1990s, the international community treated Libya as a pariah state because of its aggressive and unpredictable behavior. After Qaddafi renounced terrorism and nuclear weapons in 2003 and 2004, a long standing arms embargo and most other international sanctions were lifted. Shortly thereafter, millions of dollars' worth of weapons and ammunition began to flow back into the country. Experts estimate that in 2006/2007 Libya's military budget was US\$1.5 billion.⁹

The "Arab Spring" sparked a revolution in Libya that brought an end to Qaddafi's regime. The revolt began with a peaceful protest in the eastern city of Benghazi on February 15, 2011, following the arrest of a human rights activist. The Qaddafi government responded with force. Some military officers defected, and the population overran local military bases, seizing arms. As the uprising spread across the country and Qaddafi's regime increased its use of force in an attempt to retain power, the international community imposed sanctions on Qaddafi and his family. On March 17, 2011, the UN Security Council established a no-fly zone "in order to help protect civilians."¹⁰ In Resolution 1973, the Council repeatedly emphasized the importance of civilian protection and expressed "grave concern at the deteriorating situation, the escalation of violence, and the heavy civilian casualties."¹¹

The Security Council also invoked its Chapter VII powers. It authorized UN member states "to take all necessary measures ... to protect civilians and civilian populated areas under threat of attack in the Libyan Arab Jamahiriya, including Benghazi, while excluding a foreign occupation force of any form on any part of Libyan territory."¹² As a result, France, the United Kingdom, and the United States commenced airstrikes on Libya on March 19, 2011, and NATO took control of offensive operations on March 31.¹³ Over the next few months, NATO launched air attacks on a range of military targets, including about 440 strikes on the

⁸ Derek Lutterbeck, "Arming Libya: Transfers of Conventional Weapons Past and Present," *Contemporary Security Policy*, vol. 30, no. 3, November 2009, p. 507. The Libyan military under Qaddafi was also remarkably large, especially when compared to the population; there were about 76,000 troops to 6.5 million inhabitants. International Institute for Strategic Studies, *The Military Balance 2011* (Routledge, 2011), p. 320.

⁹ Lutterbeck, "Arming Libya," *Contemporary Security Policy*, p. 513.

¹⁰ United Nations Security Council, Resolution 1973 (2011), S/RES/1973 (2011), http://www.un.org/Docs/sc/unscl_resolutions11.htm (accessed July 22, 2012), para. 6.

¹¹ *Ibid.*, preamble.

¹² *Ibid.*, para. 4.

¹³ UN Human Rights Council, "Report of the International Commission of Inquiry on Libya," A/HRC/19/68, <http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session19/A.HRC.19.68.pdf> (accessed July 27, 2012), para. 83. For more information on the NATO air campaign, see Human Rights Watch, *Unacknowledged Deaths: Civilian Casualties in NATO's Air Campaign in Libya*, May 2012, www.hrw.org/sites/default/files/reports/libya0512webcover.pdf (accessed July 22, 2012).

bunkers where Qaddafi stored his vast arsenal.¹⁴ Muammar Qaddafi was killed in Sirte on October 20, 2011, reportedly at the hands of rebel forces.

The Abandoned Ordnance Problem

Since the beginning of the 2011 revolution, Libya has been flooded with weapons. Many experts told the IHRC team that they found in Libya a larger scale and variety of abandoned ordnance—unused weapons left behind after an armed conflict—than they had encountered elsewhere.¹⁵ Most of them had worked in other conflict or post-conflict zones, such as the Democratic Republic of the Congo, Iraq, Laos, Lebanon, Somalia, and Sudan, so they had points of comparison. A technical advisor from UNMAS said, “The scope of it all has blown me away.”¹⁶

The Origins of the Problem

In Libya, the extent of the abandoned ordnance problem stems from the fact that there were so many weapons in the country prior to the 2011 armed conflict. Qaddafi reportedly had dozens of ASAs, which are designated areas with a number of bunkers and/or other permanent storage facilities.¹⁷ These ASAs contained anywhere from 25 to 140 bunkers.¹⁸ Qaddafi stored his tens of thousands of tons of ammunition throughout the country,¹⁹ often in odd locations. The program manager of UNMAS in Libya told the IHRC team, “What we saw is that it is fairly spread out. There are strange things in strange places. Why the main naval base is 200 miles from the sea is anybody’s guess.”²⁰ Many facilities, such as the El Ga’a ASA about 30 kilometers outside Zintan, were located far from urban centers, but others, such as the Al Giran ASA on the outskirts of Misrata, were close to populated areas. At the time, civilian access was appropriately prohibited.²¹

During the armed conflict, weapons were dispersed across Libya. In loyalist areas, Qaddafi reportedly opened up his stores of weapons to allow supporters to arm themselves.²² According to deminers, he also ordered local commanders to take ammunition out of storage areas and scatter it across the desert, or hide it within residential areas to avoid targeting by NATO.²³ As Qaddafi’s troops fled, advancing rebel forces

¹⁴ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

¹⁵ See, for example, IHRC interview with Steve Joubert, operations officer, Joint Mine Action Coordination Team (JMACT) Libya, Misrata, March 29, 2012; IHRC interview with John McFarlane, technical field manager, Mines Advisory Group (MAG), Zintan ASA, March 28, 2012; IHRC interview with Paul Brown, technical field manager, MAG, Misrata, March 29, 2012.

¹⁶ IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012. FitzGerald-Finch was one of two technical advisors detailed to Libya as part of the UN Support Mission in Libya created by United Nations Security Council, Resolution 2009 (2011). The advisors were assigned to “provide technical and managerial advice to relevant national and local authorities on all aspects of Mine Action and ammunition and weapons management activities and coordination.” UNMAS, “UNMAS Mine Action Programming Handbook,” January 2012, <http://reliefweb.int/report/world/unmas-mine-action-programming-handbook-2012> (accessed July 26, 2012), p. 44.

¹⁷ The director of the Libyan Mine Action Center estimated that 25 ASAs exist. IHRC interview with Col. Yousef Abdel Jawad, director, Libya Mine Action Center (LMAC), Tripoli, July 11, 2012. Max Dyck, program manager of UNMAS, told IHRC he had heard estimates ranging from 20 to 36 ASAs, but he added that the actual figure will not be known until all sites have been surveyed. IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012. The US government, meanwhile, has reported visiting 120 ASAs as part of its efforts to reduce proliferation of man-portable air defense systems (MANPADS), which are discussed later in this chapter. See Sara Sorcher, “Long Haul for U.S. to Secure Weapons Stockpiles in Libya,” *National Journal*, February 3, 2012, <http://www.govexec.com/defense/2012/02/long-haul-us-secure-weapons-stockpiles-libya/41084/> (accessed July 22, 2012).

¹⁸ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

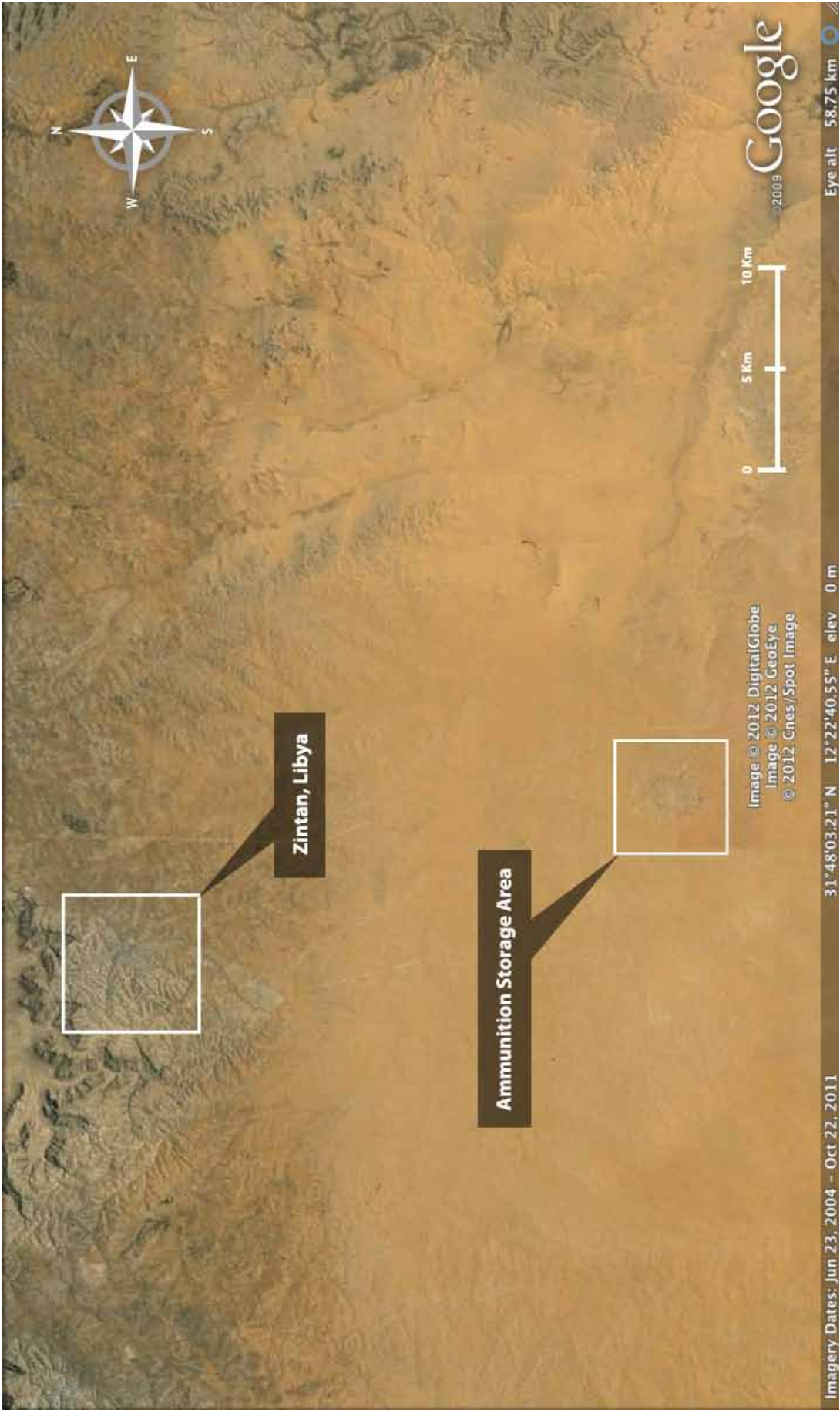
¹⁹ IHRC phone interview with John McFarlane, technical field manager, MAG, Zintan, July 24, 2012.

²⁰ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

²¹ IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

²² Ibid.

²³ Ibid.; IHRC interview with Paul McCarthy, operations manager, Danish Demining Group (DDG), Sirte, March 31, 2012. Human Rights Watch told IHRC it found





took ammunition contained in the bunkers and moved it to the front lines of the conflict. The problem of abandoned ordnance was exacerbated in Misrata because it was liberated only after a prolonged battle toward the end of the war in mid-August 2011; both loyalist and rebel fighters brought a large number of weapons into the city, and as the conflict was nearly over, they did not need to transport these weapons to other battlegrounds in Libya.²⁴ Following the fighting, ammunition was abandoned across the country. Some was left on the front lines, some was secured, and some was looted.

Who Holds Abandoned Ordnance and Where

The war spread the weapons once held by Qaddafi to a variety of parties and places. They have surfaced in the possession of *katibas* (local militias or irregular forces formed during the 2011 armed conflict), local authorities, the national government, and ordinary Libyans.²⁵ The weapons have been found in bunkers,



The armed conflict littered Libya with a wide variety of weapons, including mortars, artillery shells, rockets, missiles, and landmines. This risk education banner from the Mines Advisory Group warns civilians of the dangers of such weapons.

Photograph by Bonnie Docherty.

temporary storage facilities, *katiba* stockpiles, museums, fields, and homes. In many cases, *katibas* who acquired weapons during the conflict have been storing them within populated areas. The location and size of stockpiles, and who has controlled them, however, is often unknown. For example, one deminer told IHRC that immediately after the conflict, he visited a facility in Tripoli that contained 150,000 antipersonnel mines, but when he returned to the poorly secured facility two days later, they had disappeared. The deminer said in March 2012 that he believed similar facilities still existed.²⁶

While many weapons have dispersed across the country, large quantities also have remained in Libya's ASAs, which have fallen under the control of local military and civilian authorities or the national government. At the Misrata and Zintan ASAs, the IHRC team observed a stunning range of abandoned ordnance—including rocket-propelled grenades, artillery shells, mortars, white phosphorous munitions, surface-to-air missiles, naval torpedoes, and components of man-portable air defense systems

evidence of similar conduct in Tripoli.

24 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012; IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

25 This paper uses the term "Libyans" to refer to people living within Libya, and not as synonym for the country's citizens.

26 IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

(MANPADS)—spilling out of bunkers and strewn across nearby fields. Some of this ammunition remained usable, but much was damaged during the NATO bombing and was therefore unsafe for future use. When a bomb hits a bunker, it usually does not destroy all the ammunition inside; rather, it “kicks out” much of it from the bunker to the surrounding area, across a distance of up to two and a half kilometers.²⁷ The initial blast may cause some of the weapons partially to arm, or it may render them unstable, posing challenges for deminers and risks to civilians who enter the area.

Post-Conflict Players

A broad mix of players holds the fate of Libya’s abandoned ordnance and its impact on civilians in their hands. National, local, and international parties have all had a role so far, and at every level they have encountered problems with coordination, which have exacerbated the threat posed by the weapons.

The Libyan national government, as will be discussed in later chapters, bears primary responsibility for dealing with abandoned ordnance, regardless of how nascent government institutions may be. In the post-conflict era, several bodies within the government have claimed jurisdiction over the issue. For instance, the National Program, which reports to the Prime Minister, has argued it should take the lead in coordination because it has addressed demining issues in Libya since before the revolution; it aims to work with the government and Libyan civil society “to see that everything is done to international and national standards.”²⁸ The Libyan Civil Defense, which falls under the Ministry of the Interior, has reported conducting surveys, clearance, and risk education although it has done little work on the ASAs.²⁹ The Libyan Mine Action Center (LMAC), which began as part of the Ministry of Defense and has since shifted to the Army Chief of Staff’s office, has been actively engaged in surveying weapons, particularly in the ASAs; its director sees the problem as one that should be handled by a military entity.³⁰ Finally, the Libyan Army has a department that deals with ammunition and argues, as does LMAC, that the matter is a military not a civilian one.³¹

The overlapping mandates of these numerous bodies have led to confusion. “There’s complete chaos at the moment....We have four different sections at the ministerial level trying to trump each other,” UNMAS’s program manager told the IHRC team.³² Although representatives of the different government agencies disagreed about which one should be in charge, they concurred that the lack of coordination represents a “huge problem.”³³ “After the liberation of Libya, we have had a problem building cooperation,” the head

27 IHRC interview with Steve Joubert, operations officer, JMACT, Misrata ASA, March 30, 2012.

28 IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012; IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012.

29 IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

30 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

31 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

32 Ibid.

33 IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012.

of the National Program said.³⁴ The director of LMAC had a similar perception, saying, “There are difficult situations” related to coordination.³⁵ It is too soon to predict how the “chaos” will sort itself out after Libya’s recent elections. “The trick to all this is what happens in the coming months with the elections. That will set the tone for the next year and what we can and can’t do,” the UNMAS program manager said.³⁶ Despite their different points of view, however, the Libyan officials IHRC spoke with shared optimism about the future: “Better days are coming, and soon,” one said.³⁷

Other Libyan bodies are also involved in dealing with abandoned ordnance. At the national level, the Ministry of Education has worked on risk education programs, and the Ministry of Health has established a



Col. Mohammed Torgman of the Misrata Military Council points to some of the weapons collected by international deminers at the Misrata ASA, which was under the Council’s jurisdiction in March 2012. Coordination at the local, national, and international levels is crucial for dealing effectively with the threat of abandoned ordnance.

Photograph by Nicolette Boehland.

fund to help victims of the war, including those injured by abandoned ordnance. To complicate the situation further, local civilian and military authorities have retained significant control over the abandoned ordnance that they acquired during the armed conflict. For example, they sometimes have control of ASAs in their area. Furthermore, *katibas* have continued to hold stockpiles of abandoned weapons they captured from Qaddafi’s forces. The national agencies have had different kinds of relationships with these local groups. For example, the National Program leaves coordination with the *katibas* to the military,³⁸ while the LMAC director said, “It’s not difficult to coordinate with them.... All in the *katiba* leadership are happy to coordinate.”³⁹

International entities are another key part of the mix. UNMAS has advised the above Libyan governmental and non-state actors on all aspects of dealing with the country’s abandoned ordnance. Its program manager emphasized that the agency has tried not to “force” itself on the host country. “It’s a sovereign country. If they ask us to do something, great. We’ll try to get to places and

34 Ibid. A representative of one of the National Program’s civil society groups told IHRC, “There is so much fighting over who should run everything.” IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012.

35 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

36 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

37 IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012 (also predicting the new government would be strong enough to counteract the *katibas*’ power). See also IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012 (“I think the new government will be strong on [abandoned ordnance]. It will take two to five years to find solutions, but they will do it. They will put money toward building bunkers, making people feel safe.”).

38 IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012.

39 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

try to do it. We're here to help and support, not to do ... things they don't want us doing," he said.⁴⁰ UNMAS has, in addition, played a coordinating role. It founded the Joint Mine Action Coordination Team–Libya (JMACT), a partnership which has included, at different times over the past year, UNMAS, the United Nations Children's Fund (UNICEF), the International Committee of the Red Cross (ICRC), and several international demining NGOs, such as:

- DanChurchAid
- Danish Demining Group (DDG)
- DEMIRA
- Handicap International
- Information Management and Mine Action Programs (IMMAP)
- Mines Advisory Group (MAG)
- Norwegian People's Aid
- St. Barbara Foundation
- Swiss Foundation for Mine Action (FSD).

JMACT describes itself as “working together with the Libyan Mine Action Centre and Ministry of Education to present a coordinated response to the explosive remnants of war threat in Libya. JMACT provides coordination, prioritizes clearance tasks, mobilizes resources and liaises with the appropriate authorities in Libya.”⁴¹ The NGOs, meanwhile, have taken the lead in doing the actual clearance and risk education work on the ground.

As is common in many post-conflict and transitioning countries, government actors seem to have had very different relationships with these international entities. The head of the National Program accused the internationals of taking credit for Libyan demining,⁴² and a Civil Defense representative complained UNMAS had not coordinated with his organization. He told IHRC, “Last week we saw on TV that the UN is doing a survey in Jufra, and that's one of the mistakes. They should go through the proper channels. We are here to work with them, and they should work with us.”⁴³ The director of LMAC, by contrast, said he had had a more positive experience and described plans to work closely with UNMAS on a stockpile survey as well as with foreign NGOs on risk education.⁴⁴

⁴⁰ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

⁴¹ “Operations in Sirte remain suspended,” JMACT newsletter, July 2, 2012.

⁴² IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012.

⁴³ IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

⁴⁴ IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

International Attention to the Abandoned Ordnance Problem

The problem of abandoned ordnance in Libya has attracted international attention primarily because of its proliferation across national borders, which could lead to destabilization of the region and the acquisition of arms by non-state armed groups. The discussion of the proliferation issue has focused on MANPADS, as they can be used to take down airliners. A US State Department official estimated that Qaddafi had 20,000 MANPADS in his stockpiles.⁴⁵ By February 2012, the United States had pledged US\$40 million toward a comprehensive program “to assist Libya’s efforts to secure and recover its weapons stockpiles”;⁴⁶ it feared that MANPADS in particular “could be smuggled out of the country and fall into the hands of those planning terrorist attacks.”⁴⁷ As part of that program, US-Libyan teams visited ASAs with more than 1,500 bunkers containing MANPADS and other weapons.⁴⁸ The UN Security Council, meanwhile, has called upon Libyan authorities to take “all necessary steps to prevent the proliferation of all arms and related materiel of all types, in particular man-portable surface-to-air missiles [MANPADS];” and upon states in the region “to consider appropriate measures to prevent the proliferation of all arms and related materiel of all types, in particular man-portable surface-to-air missiles, in the region.”⁴⁹ The Security Council has also called on UN member states, international and regional organizations, and relevant UN bodies “to provide the necessary assistance to the Libyan authorities and States in the region in order to achieve this goal.”⁵⁰

Nevertheless, weapons have reportedly been flowing out of Libya and into other countries including Chad, Egypt, Mali, Niger, Somalia, Syria, and Tunisia, as well as the Palestinian territories.⁵¹ In March 2012, for example, the *New York Times* reported that “hundreds of Tuareg rebels, heavily armed courtesy of Colonel Qaddafi’s extensive arsenal, have stormed towns in Mali’s northern desert in recent weeks, in one of the most significant regional shock waves to emanate directly from the colonel’s fall.... Emboldened by their new weaponry, they have formed a made-to-order liberation movement.”⁵²

International NGOs and the media have drawn attention also—although to a lesser extent—to the humanitarian threats associated with abandoned ordnance, which is the focus of this report.⁵³ For example, *Time* magazine reported that “the danger to civilians is exacerbated by the fact that some of the ordnance is primed for use. Dropped, kicked or stepped on, even a single live mortar round would be enough to blow

45 Andrew Shapiro, “Addressing the Challenges of MANPADS Proliferation,” Stimson Center, Washington D.C., February 2, 2012 <http://www.state.gov/t/pm/rls/rm/183097.htm> (accessed July 22, 2012). See also C.J. Chivers, “How to Control Libya Missiles? Buy Them Up,” *New York Times*, December 22, 2011, http://www.nytimes.com/2011/12/23/world/africa/us-seeks-program-to-buy-up-missiles-loose-in-libya.html?_r=1&pagewanted=all (accessed on July 22, 2012).

46 Shapiro, “Addressing the Challenges of MANPADS Proliferation.”

47 Sorcher, “Long Haul for U.S. to Secure Weapons Stockpiles in Libya,” *National Journal*.

48 Ibid.

49 United Nations Security Council, Resolution 2017 (2011), S/RES/2017 (2011), <http://www.unhcr.org/refworld/category,LEGAL,,LBY,4ec4edac2,0.html> (accessed July 22, 2012).

50 Ibid.

51 C.J. Chivers, “Death Illustrates Issues with Loose Weapons Stockpiles in Libya,” *New York Times*, June 13, 2012, <http://www.nytimes.com/2012/06/14/world/middleeast/death-illustrates-issues-with-libyas-stockpiles-of-arms.html> (accessed July 22, 2012).

52 Adam Nossiter, “Qaddafi’s Weapons, Taken by Old Allies, Reinstantiate an Insurgent Army in Mali,” *New York Times*, February 5, 2012, <http://www.nytimes.com/2012/02/06/world/africa/tuaregs-use-qaddafis-arms-for-rebellion-in-mali.html?pagewanted=all> (accessed July 22, 2012).

53 For a description of the humanitarian threats posed by abandoned ordnance, see next chapter on “Humanitarian Threats of Abandoned Ordnance in Libya.”

up an entire warehouse. And many Libyan families have been among those trawling for souvenirs in these warehouses.”⁵⁴ During the armed conflict in Libya, Human Rights Watch published news releases on the dangers of abandoned ordnance in April, September, and October 2011.⁵⁵ In addition to discussing the risks of proliferation and ongoing failure to secure sites, Human Rights Watch warned that weapons left after the armed conflict, including abandoned ones, “pos[e] a great threat to civilians.” It noted that children were playing with weapons and people were collecting them as mementos of the conflict.⁵⁶ In a statement at an April 2012 meeting of the Convention on Conventional Weapons (CCW), the organization highlighted the humanitarian consequences of NATO bombings of ASAs. Human Rights Watch stated that such bombings “create a new level of threat” because they scatter dangerous weapons out of storage bunkers.⁵⁷ In Libya’s post-conflict phase, the risks to civilians remain.

⁵⁴ Abigail Hauslohner, “Gaddafi’s Abandoned Arsenal Raise Libya’s Terror Threat,” *Time*, September 7, 2011, <http://www.time.com/time/world/article/0,8599,2092333,00.html> (accessed July 22, 2012).

⁵⁵ See “Libya: Abandoned Weapons, Landmines Endanger Civilians,” Human Rights Watch news release, April 5, 2011, <http://www.hrw.org/news/2011/04/05/libya-abandoned-weapons-landmines-endanger-civilians-0> (accessed July 22, 2012); “Libya: Secure Unguarded Arms Depot,” Human Rights Watch news release, September 10, 2011, <http://www.hrw.org/news/2011/09/09/libya-secure-unguarded-arms-depots> (accessed July 22, 2012); “Libya: Transitional Council Failing to Secure Weapons,” Human Rights Watch news release, October 25, 2011, <http://www.hrw.org/news/2011/10/25/libya-transitional-council-failing-secure-weapons> (accessed July 22, 2012).

⁵⁶ “Libya: Abandoned Weapons, Landmines Endanger Civilians,” Human Rights Watch news release, April 5, 2011.

⁵⁷ “Human Rights Watch Statement on Explosive Remnants of War in Libya and the Implementation of Convention on Conventional Weapons Protocol V,” Group of Governmental Experts Meeting on CCW Protocol V, Geneva, April 25, 2012, <http://www.hrw.org/news/2012/04/25/statement-explosive-remnants-war-libya-and-implementation-convention-conventional-we> (accessed July 22, 2012).

HUMANITARIAN THREATS OF ABANDONED ORDNANCE IN LIBYA

Introduction

The IHRC team identified five major humanitarian threats associated with abandoned ordnance in Libya: stockpiles in populated areas; curiosity, particularly of children; the harvesting of materials from abandoned weapons; clearance by communities; and displays of mementos. While the first threat is exclusively a problem of abandoned ordnance, the other four threats relate to all explosive remnants of war—that is, both abandoned ordnance (unused ordnance) and unexploded ordnance (ordnance that failed to explode when it was used during an armed conflict).⁵⁸ This report focuses on abandoned ordnance, which represents a large percentage of the ERW in Libya, but reports of harm rarely distinguish between abandoned and unexploded ordnance. The blurring of lines does not change the analysis, however, because civilian activities documented below pose the same danger regardless of the type of ordnance.⁵⁹

Humanitarian Threats

Stockpiles in Populated Areas

A large number of weapons, especially those held by *katibas* or local authorities, have been stored in populated areas. Due to poor stockpile management practices, these weapons have been at risk of explosion. Summer heat can heighten the risk because it can cause spontaneous explosions. The March 2012 explosion of several shipping containers in Dafniya, discussed further below, demonstrated the potential danger of storing weapons in populated areas. The incident spread ordnance throughout the community, although surprisingly there was only one casualty (a DanChurchAid deminer). When stockpiles are located in populated areas, however, the possibility of civilian casualties, from either an initial event or the resulting remnants, escalates.⁶⁰

The dangers stockpiles pose in populated areas have been tragically illustrated in other countries. In March 2012, an explosion caused by an electrical short circuit occurred at an ammunition depot located in a residential area in Congo-Brazzaville. The explosion destroyed an entire neighborhood, killing 282 people, injuring more than 1,500, and leaving 14,000 people homeless and in need of assistance.⁶¹ The blast shattered windows more than 700 meters away, and a church full of worshippers near the site collapsed,

58 For more detailed definitions of explosive remnants of war, abandoned ordnance, and unexploded ordnance, which draw from CCW Protocol V, see “Glossary of Key Terms.”

59 As of the end of June 2012, UNMAS reported 208 civilian casualties from ERW, at least 54 of whom were killed, but it emphasized that that the number was likely low because many casualties have gone unreported. Its data did not distinguish between casualties caused by abandoned ordnance and unexploded ordnance. Email communication from Yumiko Yoshioka, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, July 4, 2012.

60 For more information on the Dafniya incident and the storage of stockpiles in populated areas, see the next chapter on “Stockpile Management.”

61 Christian Tsoumou and Jonny Hogg, “Blast at Congo’s Brazzaville Arms Depot Kills Hundreds,” *Reuters*, March 4, 2012, <http://uk.reuters.com/article/2012/03/04/uk-congo-explosions-idUKTRE8230AE20120304> (accessed on July 23, 2012). See also Celine Schmitt, “Congo-Brazzaville: Arms Depot Blast Victims Crowd Shelter Sites in Brazzaville,” *All Africa*, March 12, 2012, <http://allafrica.com/stories/201203130909.html> (accessed July 26, 2012).

killing or trapping those inside.⁶² This preventable explosion will have a significant, long-term impact on the affected communities and the Congolese state.



This Handicap International risk education brochure illustrates the many threats posed by abandoned ordnance. It warns civilians not to trespass on ASAs or play with, burn, throw, or tamper with weapons.

Courtesy of Handicap International.

Curiosity

Civilians in Libya have been visiting areas contaminated with abandoned ordnance, including ASAs.⁶³ Both civilians and NGO workers frequently told the IHRC team that locals were merely “curious” to see the weapons. While it is not clear to what extent curiosity, rather than other factors, has motivated adults to handle weapons in Libya, it is certainly the case that children are often fascinated by weapons. According to the ICRC, children often find weapons “attractive to examine or play with. They are conspicuous, may have an interesting shape and are often brightly coloured.”⁶⁴

Children’s familiarity with weapons and general fearlessness were common themes expressed in risk educators’ interviews with IHRC. A representative from Handicap International said that in Libya, “[s]adly enough, I would say that in pretty much every school I’ve been, when you ask, ‘Have you seen any of these objects?’ a majority of the children will say they have.”⁶⁵ A DDG deminer told the IHRC team that children “try to set off the anti-aircraft missiles with nails and bricks.”⁶⁶ Another deminer from MAG noted, “[Children] are playing war, but this is real.”⁶⁷

62 Adam Nossiter, “Explosions at Congo Weapons Depot Kill Scores,” *New York Times*, March 4, 2012, <http://www.nytimes.com/2012/03/05/world/africa/explosion-at-arms-depot-rocks-congo-capital.html> (accessed July 23, 2012).

63 See, for example, IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012; IHRC interview with Steve Joubert, operations officer, JMACT, Misrata, March 29, 2012; IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

64 International Committee of the Red Cross (ICRC), “Explosive Remnants of War: The Lethal Legacy of Armed Conflict,” July 2004, <http://www.icrc.org/eng/resources/documents/publication/p0828.htm> (accessed July 26, 2012), p. 11.

65 IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

66 IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

67 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

Curiosity has led to serious injuries and even death in Libya. Between September 23, 2011 and May 8, 2012, UNMAS received reports from demining organizations of 72 children injured or killed by ERW, of whom at least 31 were playing at the time of the incident.⁶⁸ Data through the end of June 2012 reported that at least 16 more children had become casualties, but it did not break the number down by what the victims were doing at the time of the accident.⁶⁹ UNMAS emphasized that the data was almost certainly incomplete, however, as not all incidents are reported and there have been no local or central mechanisms to which medical authorities may report ERW casualties.⁷⁰

“One week ago, there was an accident in the school I teach in. There was a boy who was banging a bullet, and it exploded and hurt his fingers. He was 11 or 12 years old. There was another boy whose face was burned.” –Fehi Belgassim Al-Samud, a teacher in Zintan, in March 2012⁷¹

While doing field research in Libya, Human Rights Watch documented two casualties that occurred when curious civilians were playing with abandoned weapons near Mizda. Abdulhamid al-Shaybani, 38, was killed on December 14, 2011 at Al-Mayadeen military base while shooting at a tank shell. A companion, Radwan Mabrouk, said, “We were walking around, and he found a tank shell, and he was trying to play with it. I tried to stop him, and he said, ‘I will just use it as a target.’ He kept shooting at it with a Kalashnikov until he got the target, and it went off.”⁷² Muhammad al-Azumi Ahmayd, 18, was slightly injured when a piece of ammunition exploded under him while he was playing in a weapons depot.⁷³

Harvesting Materials from the Weapons

Civilians have been harvesting both explosive material and metal from abandoned weapons, particularly from ASAs. The civilians use explosives for fishing, while they have collected metal for the scrap trade.⁷⁴ One deminer told the IHRC team that brass and copper are particularly sought-after metals, as they are traded on the Libyan black market.⁷⁵ The metals have inherent worth and, at least in other countries, are used to make trinkets for sale.⁷⁶ In Misrata, the IHRC team observed a community member removing scrap metal from an abandoned tank yard that had been bombed by NATO. The site was a former food market, located in the center of Misrata, and it was littered with the remains of several tanks, although many more had been removed. When approached, the man, an Egyptian migrant, expressed the view that he was “sure it was safe”

68 UNMAS Libya Casualty Data as of May 8, 2012 (obtained by email communication from Matthew Williams, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, May 20, 2012). “Children” refers here to any person age 18 or under.

69 Email communication from Yumiko Yoshioka, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, July 4, 2012. Yoshioka defined children as anyone under the age of 18.

70 “It is believed that many many more were injured and killed from ERW incidents. [T]his is only the data that we have received to date,” wrote Matthew Williams, a program officer for UNMAS. Email communication from Matthew Williams, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, May 20, 2012.

71 IHRC interview with Fehi Belgassim Al-Samudi, teacher from Zintan at Al-Dahr School, Zintan, March 28, 2012.

72 Human Rights Watch interview with Radwan Mabrouk, Mizda, March 2012 (testimony shared by Human Rights Watch with IHRC, March 9, 2012).

73 Email communication from Sidney Kwiram, consultant, Human Rights Watch, to Mark Hiznay, senior researcher, Human Rights Watch, March 8, 2012 (email shared by Human Rights Watch with IHRC, March 9, 2012).

74 See, for example, IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012; IHRC interview with Paul Brown, technical field manager, MAG, Dafniya, March 29, 2012.

75 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

76 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

because the site was in a busy area. He said that he had previously taken “something like more than fifty items” from other sites.⁷⁷



Curious locals explore a tank yard in downtown Misrata where an Egyptian migrant had been gathering scrap metal. Many civilians have been killed or injured while harvesting weapons for scrap metal or explosives.

Photograph by Bonnie Docherty.

Similarly, the Human Rights Watch researcher who visited an ammunition storage facility in Mizda in early March 2012 observed at least four carloads of scrap metal/explosives collectors at the site and saw them set off an explosion. A local man, Abduladim Amar, told her that another explosion killed a 22-year-old scrap metal collector, Mustafa Abdulrahim Muhammad, on December 10, 2011; Amar had arrived immediately after the incident.⁷⁸ Human Rights Watch confirmed that at least five other men and one boy suffered injuries, primarily to their legs, from explosions at the site in Mizda. It is unclear if they were there to collect scrap metal, like many other civilians, or for other purposes.⁷⁹ “It was the first time for me to go to the depot,” explained Ahmed Jebriil, who was there with his 8-year-old son, Abdulrahman, and his cousin Salah Sadeq Jebriil on October 13, 2011. “Our car broke down while we were leaving.... so we were trying to find a way to fix it to get out of there. I didn’t see what Salah picked up, but I felt something hit my leg, and Salah was on the ground.” Ahmed’s leg was seriously injured, Salah suffered organ damage, and shrapnel penetrated Abdulrahman’s back.⁸⁰

“The guys were collecting metal. Mustafa was with his brother, and he was hitting a Grad rocket to disassemble it to get valuable parts out. By mistake he hit the warhead of one of the Grads and it went off. His body was in pieces.” –Abduladim Amar, describing a December 2011 incident at an ammunition depot in Mizda⁸¹

⁷⁷ IHRC interview with Egyptian migrant (name withheld), Misrata, March 29, 2012.

⁷⁸ Human Rights Watch interview with Abduladim Amar, Mizda, March 2012 (testimony shared by Human Rights Watch with IHRC, March 9, 2012).

⁷⁹ Email communication from Sidney Kwiram, consultant, Human Rights Watch, to Mark Hiznay, senior researcher, Human Rights Watch, March 8, 2012 (email shared by Human Rights Watch with IHRC, March 9, 2012). These figures do not include the death and injury of two males who were playing at the site, which are discussed in the section on “Curiosity” above.

⁸⁰ Human Rights Watch interview with Ahmed Yahya Ahmed Omar Jebriil, Mizda, March 2012 (testimony shared by Human Rights Watch with IHRC, March 9, 2012).

⁸¹ Human Rights Watch interview with Abduladim Amar, Mizda, March 2012 (testimony shared by Human Rights Watch with IHRC, March 9, 2012).

Abandoned ordnance collected for scrap metal can be dangerous even after it is removed from an ASA. A MAG deminer told IHRC that an explosion killed three people searching for scrap metal at the Zintan ASA in December 2011. Their relatives later called the MAG hotline to report ERW in their homes. When the deminer visited their property to clear the ordnance, he found a large pile of scrap metal with highly flammable propellant lying around and people smoking nearby.⁸² While the IHRC team encountered differing views on the extent of the scrap metal problem, this deminer described it as a large issue.⁸³

Community Clearance

In most post-conflict environments, people are eager to return to their normal lives and are impatient to begin the task of making their communities safe again. The situation has been no different in Libya, where community members (on their own initiative) have been clearing ERW and landmines without expert assistance. The conflict left this ordnance scattered throughout communities, often near key infrastructure. A local field assistant for MAG in Misrata noted, “Abandoned ordnance was left behind at the airport, at farms, hidden under trees, at houses, hospitals, and schools.”⁸⁴ As a result, community members have felt pressure to take measures into their own hands. The IHRC team observed a resident of Sirte demonstrating this self-help attitude when he drove up to the gate of the DDG compound and handed a piece of ordnance to the deminers before driving off without a word of explanation.

“[T]he argument is if no one else will help, they are going to [clear munitions] themselves.” – UNMAS technical advisor Paul Grimsley⁸⁵

Despite extensive risk education efforts in Libya, some civilians have continued to take risks by clearing abandoned weapons, out of either ignorance or disregard for the consequences of doing so. A MAG community liaison manager told IHRC, for example, that a number of Libyans believe it is safe to burn weapons or shoot at them from a distance.⁸⁶ A risk educator from Handicap International said, “[P]eople think they can run faster than explosions.”⁸⁷ Such misperceptions are understandable and not unusual among uninformed civilians in any country.⁸⁸ Regardless of their level of awareness, “community members are putting themselves at a huge risk” to clear the ERW. A second community liaison manager from MAG explained, “[P]eople want to do it [the clearance] for the good,” but they use risky practices, “They use rakes and sticks. They shoot mines and move things.”⁸⁹

⁸² IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012

⁸³ Ibid.

⁸⁴ IHRC interview with Mohammed Al-Mahjoub, field assistant, MAG, Dafniya, March 29, 2012.

⁸⁵ IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

⁸⁶ IHRC interview with Amira Zeidan, community liaison manager, MAG, Zintan, March 28, 2012.

⁸⁷ IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

⁸⁸ See, for example, Human Rights Watch, *A Dying Practice: Use of Cluster Munitions by Russia and Georgia in August 2008*, April 2009, http://www.hrw.org/sites/default/files/reports/georgia0409web_0.pdf (accessed July 26, 2012), p. 74-75; Human Rights Watch, *Flooding South Lebanon: Israel's Use of Cluster Munitions in Lebanon in July and August 2006*, February 2008, <http://www.hrw.org/sites/default/files/reports/lebanon0208webwcover.pdf> (accessed July 22, 2012), pp. 88-90; Human Rights Watch, *Fatally Flawed: Cluster Bombs and Their Use by the United States in Afghanistan*, vol. 14, no. 7(G), December 2002, <http://www.hrw.org/reports/2002/us-afghanistan/Afghan1202.pdf> (accessed July 22, 2012), p. 35.

⁸⁹ IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

One of the most common reasons for handling ERW in post-conflict countries is the clearance of farmland, and this has also been the case in Libya.⁹⁰ Farmers have faced particular risks from ERW in their fields, which include abandoned ordnance left on the front lines. A deminer in Zintan stated that he had already heard of accidents on farms and related the story of a local farmer who had almost run over a rocket with his tractor.⁹¹ Because of these risks, some farmers have tried to clear their own land. A MAG community liaison manager told the IHRC team about a farmer near Misrata who collected submunitions he had found on his farmland and placed them in one large pile, greatly enhancing the chance of a catastrophic explosion.⁹² Similar behavior has led to disastrous results in other post-conflict countries, such as Lebanon.⁹³

Even the Libyan military has participated in *ad hoc* clearance, although it has been hampered by limited training and equipment. The IHRC team met with a National Transitional Council military official in Zintan who was leading a team of eight soldiers in clearing minefields: he reported that he had no access to mine-sweeping vehicles, so his team was using tanks instead. He observed, “In spite of our basic equipment, we have done a lot. We won’t stop until all is clear.”⁹⁴ While the officer represented the NTC, his work did not seem to be part of a coordinated national effort to clear ERW.

Displays of Mementos

Many communities in Libya have created war museums that often contain a wide variety of abandoned ordnance. These museums provide a reminder of the conflict and a place to remember those who died, serving an important commemorative function. They range in size from a small room to a city block, and exhibit all types of ammunition from bullets to missiles. While demining organizations have been working to make these museums safe for people to visit—for example, by replacing live weapons with inert ones—new weapons have been regularly installed, and it has been difficult to persuade museum owners not to display dangerous items.⁹⁵ When the IHRC team visited the Zintan museum with MAG deminers, the deminers noticed munitions had been added since their last visit. Deminers have also frequently surveyed the Misrata museum, the largest such museum in Libya, to assess weapons as they appear and to remove them as necessary. The owner of that museum has reportedly planned to expand it beyond the city block that it has occupied.⁹⁶ While deminers have attempted to make the museums safer, the public exhibitions normalize the

90 For information on other countries, see Landmine Action, “Explosive Remnants of War and Mines Other than Anti-Personnel Mines, Global Survey 2003–2004,” March 2005, <http://www.landmineaction.org/resources/UKWGLM.pdf> (accessed July 23, 2012), p. 7.

91 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012. The UNMAS data, though incomplete, recorded 18 ERW casualties as being associated with farming as of May 8, 2012. UNMAS Libya Casualty Data as of May 8, 2012 (obtained by email communication from Matthew Williams, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, May 20, 2012).

92 IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012. It was unclear whether the cluster munitions were unexploded ordnance or abandoned ordnance.

93 For example, Shadi Sa’id ‘Aoun, a 26-year-old farmer in South Lebanon, cleared dozens of submunitions on his farm after Israel blanketed the country with cluster munitions in 2006. He told Human Rights Watch he had collected about 80 submunitions in a box for deminers. When he went to lift the box to deliver it to deminers, the bottom broke, and an explosion shattered the bones in both his legs. Human Rights Watch, *Flooding South Lebanon*, pp. 61–63.

94 IHRC interview with Abdul Akim, representative of National Transitional Council (NTC), Zintan ASA, March 28, 2012.

95 IHRC interview with Paul Brown, technical field manager, MAG, Dafniya, March 29, 2012.

96 IHRC interview with Steve Joubert, operations officer, JMACT, Misrata, March 29, 2012.

collection of weapons, undermining risk education efforts.⁹⁷ The museums are particularly problematic if the weapons are not displayed safely or if they are glorified.



A war museum containing a vast array of potentially dangerous weapons is located on the main street of Misrata. Civilians can interpret such public displays of munitions to mean it is safe to bring weapons into their own homes.

Photograph by Anna Crowe.

The weapons Libyans have on personal display are a potentially even more serious issue than the museums because deminers may be unaware or unable to access them. People have collected weapons as souvenirs in their homes, schools, universities, restaurants, shops, and other places where they live and work.⁹⁸ A Civil Defense official told IHRC, “We have a problem that some Libyans are taking weapons for showing in their homes and in ... public [display]. We found that some are making decorations.”⁹⁹ Col. Mohammed Torgman, a member of the Misrata military council, also described decorations people had made in their homes out of tank shells and the barrels of guns.¹⁰⁰ While displays of weapons in and of themselves may not be problematic, they can endanger civilians if they are not dealt with carefully and accompanied by adequate risk education.

“If we keep the weapons, we lose our future.” –Doctor Ali Younis, head of the Medical Service Office, Sirte Hospital¹⁰¹

⁹⁷ IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

⁹⁸ IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012; IHRC interview with Fehti Belgassim Al-Samudi, teacher from Zintan at Al-Dahr School, Zintan, March 28, 2012; IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata ASA, March 30, 2012; IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

⁹⁹ IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

¹⁰⁰ IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata ASA, March 30, 2012.

¹⁰¹ IHRC interview with Dr. Ali Younis, chief of Medical Service Office and head of the Anesthesia Department, Sirte Hospital, Sirte, March 31, 2012.

STOCKPILE MANAGEMENT

Introduction

As a result of the armed conflict, a range of actors have held stockpiles of abandoned ordnance in Libya. Given the risks posed to civilians by abandoned ordnance, good stockpile management is crucial. The stockpile management practices of these actors, however, have fallen short of international guidelines. As the recently elected government begins to take shape, the time is ripe to develop an overall strategy for dealing with the issue. In the meantime, all those involved—national and local authorities, *katibas*, UNMAS, NGOs, and donor and partner states—must work together to overcome immediate challenges to stockpile management, including: weak coordination among relevant parties; the inadequate implementation of stockpile management standards; the need to change attitudes toward stockpiles and weapons; and insufficient funding for stockpile management initiatives.

Principles and Standards

The International Ammunition Technical Guidelines, standards published by the United Nations Office of Disarmament Affairs (UNODA), define the term “stockpile management” as “[t]hose procedures and activities regarding the safe and secure accounting, storage, transportation, handling and disposal of conventional ammunition.”¹⁰² Implementing those procedures requires significant technical expertise and a willingness to adapt to specific circumstances. The guidelines explain, “These are complex technical areas that require specialist management to ensure safety and security.”¹⁰³ Furthermore, there is no one model prescribing rules of stockpile management; rather, “there are a range of options and procedures to ensure effective stockpile management, which can be an expensive process. The unavailability of resources in some states means that it is not possible, nor is it desirable, to establish a unique set of criteria which alone dictate conventional ammunition stockpile management standards.” Therefore, “it is necessary to identify a framework of guidelines that provide the options for a graduated improvement in safety and security within an integrated risk management process.”¹⁰⁴

The requirements of good stockpile management include:

- appropriate locations for stockpiles
- physical security measures
- control of access to stocks

¹⁰² UNODA, “International Ammunition Technical Guideline: Guide to the International Ammunition Technical Guidelines (IATG); IATG 01.10:2011(E), January 10, 2011, www.un.org/disarmament/convarms/Ammunition/IATG/ (accessed July 26, 2012), p. iv.

¹⁰³ Ibid.

¹⁰⁴ Ibid. See also CCW Protocol V, Technical Annex 3(b).

- inventory management and accounting control
- staff training
- security
- accounting and control [of ammunition] held or transported by operational units or authorized personnel
- procedures and sanctions in the event of thefts or loss.¹⁰⁵

Poor stockpile management can cause significant, but preventable, civilian casualties and may entail serious economic and social consequences. According to the Small Arms Survey,

A single unplanned explosion at a munitions site can claim dozens of lives, injure hundreds, and displace thousands of people. The damage to infrastructure can be extensive, covering many square kilometres. In addition, the loss of economic activity can exceed tens of millions of dollars and have long-term ramifications on livelihoods and the environment.¹⁰⁶

Stockpile management expert Adrian Wilkinson has noted that “the economic costs of the subsequent explosive ordnance disposal clearance can be far greater than the prior implementation of safer procedures, limited infrastructure development, and stockpile disposal would have been.”¹⁰⁷

While a state may receive advice and assistance from the international community, it is responsible for the stockpile management of its own weapons. According to the International Ammunition Technical Guidelines, the state should vest the responsibility in an authority, “which is charged with the regulation, management and coordination of conventional ammunition stockpile management.” That authority “shall be responsible for establishing the national and local conditions that enable the effective management of conventional ammunition. It is ultimately responsible for all phases and all facets of the stockpile management processes within its national boundaries, including the development of national standards, [standard operating procedures] and instructions.”¹⁰⁸ Assuming primary responsibility for stockpile management is in a state’s interest, as maintaining control protects national security information and the tangible means to defend itself.

¹⁰⁵ UN Program of Action on Small Arms and Light Weapons, “Programme of Action to Prevent Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects,” U.N. Doc. A/CONF.192/15, 2001 <http://cns.miis.edu/inventory/pdfs/aptsarms.pdf> (accessed July 26, 2012). Relevant resources on stockpile management in the international arena include: the Technical Annex to CCW Protocol V; UNODA, “International Ammunition Technical Guidelines,” www.un.org/disarmament/convarms/Ammunition/IATG/ (accessed July 23, 2012); North Atlantic Treaty Organization (NATO), “Manual of NATO Safety Principles for the Storage of Military Ammunition and Explosives,” May 2010, <http://www.rasrinitiative.org/resources-publications.php> (accessed July 23, 2012); Organization for Security and Co-operation in Europe (OSCE), “OSCE Handbook of Best Practices on Conventional Ammunition,” September 15, 2008, <http://www.osce.org/fsc/33371> (accessed July 23, 2012); Regional Center on Small Arms and Light Weapons (RECSA), “Best Practice Guidelines for the Implementation of the Nairobi Declaration and the Nairobi Protocol on Small Arms and Light Weapons,” June 2005, <http://www.poa-iss.org/RegionalOrganizations/8.aspx> (accessed July 23, 2012).

¹⁰⁶ Small Arms Survey, “Research Note 6: Unplanned Explosions at Munitions Sites,” January 2012, <http://www.smallarmssurvey.org/about-us/highlights/highlight-research-note-6-unplanned-explosions-at-munitions-sites.html> (accessed July 26, 2012), p. 1.

¹⁰⁷ Adrian Wilkinson, “Ammunition Depot Explosions,” in James Beven, ed., *Conventional Ammunition in Surplus: A Reference Guide* (Geneva: Small Arms Survey, 2008), <http://www.smallarmssurvey.org/fileadmin/docs/D-Book-series/book-05-Conventional-Ammo/SAS-Conventional-Ammunition-in-Surplus-Book.pdf> (accessed July 26, 2012), p. 132.

¹⁰⁸ UNODA, “International Ammunition Technical Guideline: Guide to the International Ammunition Technical Guidelines (IATG),” p. 3.

Promoting effective stockpile management is also an important part of a nation's plan for security sector reform (SSR), as the leakage, availability, or proactive dissemination of ordnance can intensify the potential for armed violence and overall insecurity. In turn, the inclusion of stockpile security in an SSR strategy enhances coordination and helps build overall security and safety for the civilian population.

The Stockpile Management Situation in Libya

Stockpile management in Libya has involved many players. The Libyan government has sought to exercise its authority over the fate of stockpiles in the territory it controls, while the *katibas* and local authorities have continued to control many of the stockpiles that need to be managed. UNMAS has provided advice and information regarding stockpile management to all of these parties on request.¹⁰⁹

At the national level, initiatives addressing stockpiles have focused on surveying the situation. In spring 2012, six UNMAS teams conducted a six-week survey that looked at stockpiles, destroyed ASAs, and minefields.¹¹⁰ The UNMAS program manager told the IHRC team, "It was limited to be honest. [But it] gave us a good snapshot and has given us things to work on. It opened doors in these areas."¹¹¹ The next step is an assessment of what needs to be done to rehabilitate the ASAs. For example, UNMAS plans to consider what can be repaired and what needs to be replaced. The assessment was scheduled to start in July 2012, but the timeline for completion depended on the Libyan government.¹¹² While UNMAS can provide technical information and advice, the Libyan government needs to play the primary role in making stockpile management decisions and implementing them because it is ultimately responsible for the weapons on its territory.

According to the director of LMAC, his organization and part of the Libyan Army will be intimately involved in the survey of ASAs. He sees surveying and marking of the ASAs as a high priority.¹¹³ "This is a big challenge," he said. "[T]here is so much work to do.... How can we clear them all? How can we rebuild the bunkers? How can we collect all of the ammunition and make the storage areas safe? These are the questions."¹¹⁴ Asked what else the Libyan government has done so far about abandoned weapons, however, the LMAC director replied, "Now we are still waiting.... Now we are in a planning stage."¹¹⁵ He predicted actually making the ASAs safer could take more than a decade.¹¹⁶

109 Summarizing UNMAS's role in stockpile management, one of its technical advisors in Libya said, "We can advise, but the ultimate decision is the state's. We can't tell Libya what they should do with their ammunition." IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

110 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

111 Ibid.

112 Ibid. ("It's driven by the Libyans. Without the Libyans, your timeline won't work").

113 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

114 Ibid.

115 Ibid.

116 Ibid.

More tangible progress has arguably been made at the local level. UNMAS has been establishing relationships with local authorities and *katibas* to facilitate the separation of items that are dangerous if stored together and the relocation of stockpiles to more remote locations. For example, in Sabha, after a March 2012 meeting with the UNMAS technical advisors, the civilian council agreed to assist the military council in storing ammunition in appropriate facilities.¹¹⁷

Developments in Misrata exemplify the potential for progress in stockpile management. UNMAS's program manager told IHRC that the *katibas* there "won't give [the abandoned ordnance] all back to the government tomorrow, but they are very cognizant of the dangers involved."¹¹⁸ To address those dangers, UNMAS has been working with *katibas*, who, according to a technical adviser, "are happy to put in security or to move a stockpile to the top of a hill, so that it will have a minimal impact. They are looking to manage their stockpiles better. This is one example of many across Libya."¹¹⁹ UNMAS is advising the local military council on the planning and construction of a temporary field storage facility. According to the UNMAS program manager, the chief of staff of the Army promised at the end of June 2012 to earmark money to build the facility, but a schedule had not yet been put in place.¹²⁰ Even if implemented, such proposals are not necessarily ideal permanent solutions, and a more comprehensive national strategy is needed; however, they will at least provide a safer, short-term alternative to keeping stockpiles within heavily populated areas.

Challenges for Libya

Weak Coordination

Weak coordination among relevant players, common in many transitioning countries, has complicated efforts to improve stockpile management in Libya. The UNMAS program manager told IHRC, "There's government confusion we're laboring under."¹²¹ As discussed earlier, several bodies, some of which have only recently hired staff, have sought to claim a role in dealing with Libya's ERW problem. The fact that local authorities and *katibas* have also controlled stockpiles furthers the confusion. Coordination helps ensure stockpiles of abandoned ordnance are managed consistently and correctly, which is essential to reducing the humanitarian threat of poorly stored weapons.

Asked about the lack of coordination, government officials generally agreed a problem existed both internally and between the government and international bodies. A Civil Defense official said, "Really, there's no coordination.... Everybody doesn't know what his job is; everybody wants to show he can

¹¹⁷ "Joint Mine Action Coordination Team—Libya Weekly Report 6 March, 2012," JMACT newsletter, March 6, 2012, <http://reliefweb.int/organization/jmact> (accessed on July 22, 2012).

¹¹⁸ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

¹¹⁹ IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

¹²⁰ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

¹²¹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

do it.”¹²² Nevertheless, some held out hope that the new government would improve the situation. The director of LMAC told IHRC that “we expect to have a very positive, good solution with new members of the government.”¹²³

Despite the progress discussed in the previous section, there also appears to have been insufficient coordination with *katibas*, which has been a challenge in dealing with the immediate stockpile management problem. One UN official expressed frustration that without information about the quantity and location of *katiba* stockpiles, they could not do their planning.¹²⁴ While the director of LMAC did not report any problems working with *katibas*,¹²⁵ a civil defense official said his agency has found it “too difficult” to cooperate with them in many places, including Bani Walid, Misrata, and Zintan. He added that “we can work with *katibas*” in Tripoli, at least to a degree. “We don’t do investigations into their stores of weapons, but we do register and document when we can,” he said.¹²⁶

Inadequate Implementation of Stockpile Management Standards

There have been several problematic practices by the parties that hold abandoned ordnance. While development of a national plan may take time, these practices should be easier to change in the short term. Parties controlling a stockpile should urgently correct these practices to minimize the immediate threat to civilians from abandoned ordnance.

Limited Security at Sites

Security has varied significantly across stockpile sites allowing the possibility of civilian access. In Libya’s transitional period, security of stockpiles has been re-established in some areas, but it has remained notably lacking in others. An UNMAS technical advisor told IHRC that there has been “close to zero security at [some] sites.”¹²⁷ For example, in March 2012, the two UNMAS technical advisors visited a place in the desert near Birak where ammunition had been discarded and found evidence of looting, with many boxes of ammunition lying empty.¹²⁸ The same month, a Human Rights Watch researcher who visited the Mizda weapons depot, which is located within a few kilometers of the town, saw mounds of earth blocking the entrance per a Defense Ministry order, but she reported no other security measures and found access to be easy.¹²⁹

122 IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012. See also IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012; IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012; IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

123 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

124 IHRC interview with Steve Joubert, operations officer, JMACT, Misrata, March 29, 2012.

125 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

126 IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

127 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

128 “Joint Mine Action Coordination Team—Libya Weekly Report 12 March, 2012,” JMACT newsletter, March 12, 2012, <http://reliefweb.int/organization/jmact> (accessed on July 22, 2012).

129 Email communication from Sidney Kwiram, consultant, Human Rights Watch, to Mark Hiznay, senior researcher, Human Rights Watch, March 8, 2012 (email shared by Human Rights Watch with IHRC, March 9, 2012).

In March 2012, the IHRC team visited two ASAs, near Zintan and Misrata respectively, that needed stronger security. NATO bombed most of the bunkers within these ASAs, although several bunkers were not hit and still contained intact stockpiles. At the Zintan ASA, which covers approximately nine square kilometers, the IHRC team observed a small number of guards at the entrance to the site. A mound of packed earth ringed the ASA, and barbed wire fencing had been erected in some areas.¹³⁰ This security had been largely insufficient, however, even though the ASA is located 30 kilometers south of Zintan. For example, Fehti Belgassim Al-Samudi, a local teacher, went to the site with his friends. Before IHRC's visit, Al-Samudi said that "at that time, there were no signs, no fencing" at the site. While his group encountered a guard, "the guard let me and my group in because he was a relative of mine."¹³¹ The IHRC team also spoke to a soldier, Sinee Rouhouma Saleh, who had guarded the ASA for a period during the armed conflict; Saleh noted that while he was on duty there, civilians had tried to access the site.¹³² Allowing easy access goes against basic best practices of stockpile management requiring "physical security measures" and "control of access to stocks."¹³³ It can also have tragic consequences. For instance, in December 2011, a man and his two sons were killed at the Zintan ASA while they were collecting scrap metal: one of them dropped a cigarette butt, triggering an explosion.¹³⁴

When the IHRC team visited the Misrata ASA, which covers two square kilometers just outside the city, access to community members seemed to be more limited: two barbed wire fences ringed the site, and the main entrance was guarded. Nonetheless, residents of Misrata had been going to the site. Colonel Torgman, representative of the Misrata Military Council, reported that "there are guards here, but the area is very difficult to secure."¹³⁵ His aide noted that they had visited the site one day prior to the IHRC team's visit and had seen people with two cars collecting abandoned ordnance.¹³⁶ An official from Handicap International also told the IHRC team that she had observed community members passing through the site.¹³⁷ In April 2012, one man was killed and another was injured in an explosion when they went to this ASA to collect scrap metal.¹³⁸

130 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

131 IHRC interview with Fehti Belgassim Al-Samudi, teacher from Zintan at Al-Dahr School, Zintan, March 28, 2012.

132 IHRC interview with Sinee Rouhouma Saleh, soldier in Martyrs of the Mountain unit in Martyrs of Zintan brigade, Zintan, March 28, 2012.

133 The UN Program of Action on Small Arms and Light Weapons, "Programme of Action to Prevent Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects."

134 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

135 IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

136 IHRC interview with aide to Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata ASA, March 30, 2012.

137 IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

138 "Joint Mine Action Coordination Team-Libya Weekly Report 23 April, 2012," JMACT newsletter, April 23, 2012, <http://reliefweb.int/organization/jmact> (accessed on July 20, 2012).





The shortage of security seems to have continued into July. The UNMAS program manager told IHRC, “there is no real security” at the ASAs.¹³⁹ He explained that cost has been a large part of the problem: “In Libya today, it’s fine to put 100 people on an ASA, but you have to pay and feed them and organize rotations. Where’s that coming from?”¹⁴⁰

Despite the shortcomings, concern about the insufficient security has been growing. The UNMAS program manager said the head of the Army was considering providing security at the Misrata ASA. “It’s been heartening to hear that security is the biggest concern. They need to work out how to do it.”¹⁴¹ Nevertheless, much remains to be done, especially by the Libyan government.

Dangerous Storage Methods

The *katibas* have controlled large quantities of the abandoned ordnance outside ASAs and have adopted generally poor storage methods. Although the number of weapons in Misrata may not be typical of all cities in Libya, Colonel Torgman reported that the city had more than two hundred *katibas* as of March 2012, each of which held between six and 40 shipping containers full of weapons.¹⁴² Prior to the armed conflict, he said, there was less than half of one container of weapons in the whole city.¹⁴³ “There are now more weapons than people in Misrata,” said Colonel Torgman, speaking of a city which has a population of about 300,000.¹⁴⁴

Although the exact number of munitions cannot be known without a survey,¹⁴⁵ the way *katibas* have stored these large stockpiles has exacerbated the situation. Torgman explained, “[The *katibas*] have no experience storing ammunition. They need education. They don’t know what they are storing. They don’t know the techniques.”¹⁴⁶ An UNMAS technical advisor also expressed concern that *katibas* were storing ordnance in a haphazard manner. “There is a problem with putting all of this incompatible ammunition together,” he said; when he visited *katiba* stockpiles, he found himself “grinding [his] feet on flammable material. There is all sorts of stuff piled in together.”¹⁴⁷

139 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

140 Ibid.

141 Ibid.

142 IHRC interview with Colonel Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012. A *katiba* as a unit does not contain a set number of members; some *katibas* may be comprised of the inhabitants of one street or one city block. Others are larger and more organized, like a military brigade. Colonel Torgman spoke of 250 *katibas* in Misrata, and Liam FitzGerald-Finch from UNMAS said there were 221. Ibid.; IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012. At the time the team visited in March 2012, there had apparently been discussion about combining the Misrata *katibas* into one “super *katiba*.” In July 2012, Max Dyck, UNMAS program manager, told IHRC he had heard talk of creating eight *katibas* in Misrata. IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

143 IHRC interview with Colonel Mohammed Torgman, Liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

144 IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

145 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

146 IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012. See also IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012 (“*Katibas* are doing mistakes. Sometimes they try to interfere when [ordnance] is reported to them, so I say, ‘Please don’t do anything.’ I also tell them, ‘There’s no shame in not knowing how to store these things. Even I need to get the expertise.’”).

147 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012. International risk educators, who focus their efforts on civilians, have not directed risk education at *katibas*. IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

While always dangerous, these poor storage practices have the potential to lead to large-scale explosions during the summer, when the temperature in Libya rises significantly. According to a UNMAS technical advisor, “the chance of accidents increases daily as the weather warms up. [There is] ammunition that has been cooking in the sun for a year, and this will likely cause huge problems, horrible issues.”¹⁴⁸ The other UNMAS technical advisor told IHRC, “[In the heat] metal will expand, and then will explode at night as it starts to cool down again.”¹⁴⁹ The heat could be a particular issue for white phosphorus munitions that are no longer stored properly having been kicked out during NATO’s bombings of the ASAs or moved to urban storage sites. White phosphorus is volatile and will liquefy at high temperatures that may be reached during the summer.¹⁵⁰ This process could trigger fires throughout a stockpile and cause a cascade of explosions. Although no such accidents had been reported by the end of July, heat remained a concern.¹⁵¹

Storage of Stockpiles in Populated Areas

The *katibas* have located many of their stockpiles of abandoned ordnance within urban areas, putting civilians in harm’s way.¹⁵² In Misrata, for example, *katibas* have been storing collections of weapons near schools, mosques, and homes. “[E]ach *katiba* is storing in its own way. Some under trees, others in buildings,” Colonel Torgman said.¹⁵³ According to one of the UNMAS technical advisors, *katibas* have kept stockpiles inside cities because they wish to have their weapons nearby: “the *katibas* want all of their assets in their pocket right now. Military commanders want to be near their stockpiles. This is not a good storage principle, but it makes them feel safe, and they can see what they’ve got.”¹⁵⁴ The UNMAS advisors showed the IHRC team photos of a collection of weapons next to a school playground where children were playing.

The threat posed by poor choice of stockpile location was illustrated by an explosion in March 2012 in Dafniya, which is located approximately 20 kilometers west of Misrata. The local *katiba* was storing abandoned ordnance in 22 adjacent shipping containers behind an urban police station. A fight about access to the weapons reportedly ensued, and someone fired a shot that penetrated one of the containers. That container ignited and, “the explosion that followed ruptured at least 11 containers, heaving into the air a poorly stored collection of grenades, rockets and mortar rounds.”¹⁵⁵ ERW littered the neighborhood in Dafniya.¹⁵⁶ While no one was injured in the initial blast, a DanChurchAid deminer from Estonia was later killed by a Type-84 anti-tank mine that had been thrown out by the explosion.¹⁵⁷ During its visit, the IHRC

148 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

149 IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

150 IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

151 Email communication from Karen McClure, senior program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, July 25, 2012. See also email communication from Steve Joubert, operations officer, JMACT, to Bonnie Docherty, senior clinical instructor, IHRC, July 18, 2012; IHRC phone interview with John McFarlane, technical field manager, MAG, Zintan, July 24, 2012.

152 Given that *katibas* are irregular forces, there is also the potential that some *katiba* members could provide a range of civilians and/or non-state actors access to their storage facilities.

153 IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

154 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

155 Chivers, “Death Illustrates Issues with Loose Weapons Stockpiles in Libya,” *New York Times*. See also IHRC interview with Paul Brown, technical field manager, MAG, Misrata, March 29, 2012. The facts leading up to the explosion are somewhat unclear. The IHRC team also heard another account of the incident in which someone fired a tracer at a padlock to try to unlock a crate of weapons. It blew up the site.

156 IHRC interview with Paul Brown, technical field manager, MAG, Dafniya, March 29, 2012.

157 Chivers, “Death Illustrates Issues with Loose Weapons Stockpiles in Libya,” *New York Times*.

team observed dangerous areas marked off and extensive damage to a school and a mosque close to the site of the explosion; nevertheless, despite the risks posed by ERW, both buildings remained in use.¹⁵⁸ A risk education specialist expressed the hope that after the accident in Dafniya, “the perception of the *katibas* on the dangers of having containers like that close to residential areas [might change].”¹⁵⁹



A shipping container that was part of a *katiba*'s urban stockpile exploded in March 2012, setting off chain reaction that littered a Dafniya neighborhood with weapons. A landmine thrown out by the blast later killed a DanChurchAid deminer. The painted message reads, “Don’t come closer—danger, death.”

Photograph by Nicolette Boehland.

The Need to Change Attitudes

Improving stockpile management practices also requires changing existing attitudes toward weapons. First, not all stockpilers understand that certain weapons are too dangerous to keep. There are essentially three types of ammunition across Libya: ammunition that should be destroyed because it is unusable or unstable; ammunition that was involved in an event, and which may or may not be unstable; and ammunition that can be included in the national stockpile and stored safely.¹⁶⁰ The first category includes many of Qaddafi’s stockpiles, which were aging and had reached the end of their operational life. The IHRC team was told of weapons in the stockpiles that were designed to last 10 years, but had been kept for up to 40 years.¹⁶¹ “It is hard for host nations to accept, but just storing [old weapons] will present a problem in the long term,” explained one of the UNMAS technical advisors.¹⁶² The second category includes ammunition too unpredictable to be kept safely, such as most of that kicked out from an ASA bunker by a NATO bombing. As part of its national plan, Libya, with guidance from international partners, will need to decide what to retain and what to destroy.

¹⁵⁸ A JMACT official reported that, by July 2012, the situation was “under control largely.” Email communication from Steve Joubert, operations officer, JMACT, to Bonnie Docherty, senior clinical instructor, IHRC, July 18, 2012

¹⁵⁹ IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

¹⁶⁰ IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

¹⁶¹ Ibid.

¹⁶² Ibid.

Second, in the uncertainty following the armed conflict, many commanders—as well as community members—are perhaps understandably reluctant to give up their means of protection or even to move it to a safer storage location outside of town. A MAG representative from Misrata said, “*Katibas* want to stockpile just in case there is a possibility they might need to use [the weapons] again.”¹⁶³ According to the director of LMAC, the *katibas* have retained not only small arms, but also heavy weapons, including tanks.¹⁶⁴ Colonel Torgman explained, “We have to know that before the war they were normal citizens. They are very proud of their role in victory... [T]hey were transformed from civilians to soldiers. It is hard to convince them to give weapons back.”¹⁶⁵ A national official added, “There will be people who will not agree to hand over the weapons, and law enforcement will have to deal with that. There really should be a strategy for this.”¹⁶⁶

Finally, the gravity of the risks of poor storage can be difficult to convey. “It’s difficult to explain that [poor storage] is going to be a problem. It’s hard to get a technical point over when people don’t understand munitions...,” said a UNMAS technical advisor. “Even [international] NGOs need education about the deterioration of ammunition.”¹⁶⁷

Insufficient Funding

Another key challenge to proper stockpile management has been insufficient funding. According to the program manager of UNMAS, the Libyan government has not given money to UNMAS or NGOs to work on stockpile management, although it is unclear what the government has spent on its own initiatives.¹⁶⁸ Even small-scale projects can produce tangible results, however. For example, at the request of a Libyan naval officer, UNMAS provided technical advice and money to hire workers as well as trucks and cranes to move abandoned ordnance into a secure location. The US\$40,000 project secured US\$500 million worth of ammunition.¹⁶⁹ The head of UNMAS support services noted, “Many small but important projects could be solved with a little money.”¹⁷⁰ One of the UNMAS technical advisors added, “We are talking about a few thousand bucks for a lot of progress.”¹⁷¹ The Libyan government should provide funding, supplemented by international donors, to improve the management of its stockpiles and thus augment civilian protection.

163 IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

164 IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

165 IHRC interview with Col. Mohammed Torgman, liaison with JMACT and member of the Military Council of Misrata, Misrata, March 29, 2012.

166 IHRC interview with Saleh Amnissi, director, Environmental General Authority, Tripoli, July 11, 2012. But see IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012 (“Weapons will not be a big problem actually. I know we have a lot of AK-47s, but they will never be used. The people who have them will give them up when the country is safe.”)

167 IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

168 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

169 IHRC interview with Sarah Marshall, head of support services, UNMAS, Palm City, Tripoli, March 27, 2012; IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

170 IHRC interview with Sarah Marshall, head of support services, UNMAS, Palm City, Tripoli, March 27, 2012.

171 IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

Recommendations

To the Libyan government and, where applicable, local authorities:

- Develop a coordinated national strategy for the implementation of basic stockpile management principles:
 - As an early step, facilitate a survey of the contents of ASAs and temporary storage facilities established by national and local authorities to determine which weapons are safe to stockpile and to develop a timeline for destruction of those that are not safe
- Provide financial and/or material support for stockpile management, including to UN and NGO partners
- Request additional financial, material, and/or technical assistance from the international community, and NATO and its member states in particular, for stockpile management activities in Libya
- As an urgent matter, allocate resources to establish or improve effective security at ASAs, including:
 - Installing physical barriers to civilian access, such as fences and locks, and adequate signage alerting civilians to the danger
 - Posting sufficient numbers of trained security personnel to prevent civilian access
- Prioritize coordination with *katibas* to:
 - Move stockpiles out of populated areas, particularly cities, to minimize the likelihood of incidents affecting civilians and civilian infrastructure
 - Implement proper stockpile management techniques within their stockpiles
- Facilitate a survey by international partners of the location and contents of *katiba* stockpiles
- Initiate a program for developing and building relevant technical expertise within the central and local government

To the katibas:

- Cooperate with national and local civilian and military authorities as well as international partners to develop a plan for managing stockpiles immediately. As part of this plan:
 - Allow a survey of the location and contents of *katiba* holdings
 - Accept guidance from experts on identification and appropriate separation of ammunition
 - Relocate stockpiles away from populated areas

CLEARANCE

Introduction

Clearance activities are essential for the protection of Libya's civilians as well as the country's reconstruction.¹⁷² Any delay means that the munitions left after the war will continue to endanger civilians. A body of established principles and standards provides guidance for these activities, which in Libya include the removal of weapons people have collected or found in their homes or on their land and the destruction of weapons that NATO bombs kicked out of bunkers.¹⁷³ While international NGOs have done most of the actual clearance, the Libyan government should help facilitate their work, and it should designate a ministry with relevant expertise to take the lead on managing and coordinating efforts across the country. Libya should also work with other bodies, including local authorities, *katibas*, UNMAS, NGOs, and donor countries, to help overcome the numerous challenges to clearance. Deminers have had to deal with limitations in funding, staff with technical expertise, and explosives for controlled demolitions. They have also faced obstacles to gaining access to abandoned ordnance sites and there is a need to increase national capacity for clearance. The newly elected government should prioritize addressing these challenges and augmenting support for clearance efforts.

Principles and Standards

Protocol V to the Convention on Conventional Weapons provides guidance on the clearance, marking, removal, and destruction of ERW, including abandoned ordnance. While Libya is not a party to Protocol V, it is the only treaty devoted to dealing exclusively with ERW. Its provisions supplemented with other international standards represent best practices.¹⁷⁴ Those particularly relevant to abandoned ordnance include:¹⁷⁵

- The threats posed by abandoned ordnance should be surveyed and assessed. This evaluation should consider not only the physical areas of contamination, but also the potential for accidents, based on what risks the local population may take, given socio-economic circumstances.
- Abandoned ordnance should be cleared and destroyed or moved to appropriate storage facilities.
- The areas that pose the most serious humanitarian threats should be cleared as a priority. Humanitarian threats should be determined according to the danger of the abandoned ordnance to the civilian population and not to military operations. Local communities should participate in deciding priorities.¹⁷⁶

172 This report will use "clearance" as a short-hand for a range of clearance activities, including marking, clearance, removal, and destruction of ERW.

173 When NATO bombed bunkers, many of the weapons inside them were not destroyed but, rather, spilled out of the front of the bunker and spread across a large area, contaminating surrounding land.

174 See Landmine Action, *Ambiguity in Practice: Benchmarks for the Implementation of CCW Protocol V* (London: Landmine Action, 2009), <http://www.landmineaction.org/resources/resource.asp?resID=1114> (accessed July 26, 2012), p. 3; "Human Rights Watch Statement on Explosive Remnants of War in Libya and the Implementation of Convention on Conventional Weapons Protocol V," Group of Governmental Experts Meeting on CCW Protocol V, Geneva, April 25, 2012.

175 Some of the principles apply specifically to abandoned ordnance, while others apply to ERW generally. See generally Landmine Action, *Ambiguity in Practice*.

176 *Ibid.*, pp. 9-14; see also CCW Protocol V, art. 3.

The widely accepted International Mine Action Standards (IMAS), used in UN operations, provide details about how to implement these steps. They have specific guidelines on, for example, assessment and clearance.¹⁷⁷ The IMAS state that “ERW can also include larger items such as artillery ammunition, guided missiles, air-dropped bombs and caches of [abandoned ordnance]” and that clearance “may also involve stockpiles of ammunition, [abandoned ordnance] left in bunkers or ammunition points.”¹⁷⁸

International principles place the burden of clearance on the state that controls the territory where abandoned ordnance is located. While states that contribute to the creation of the abandoned ordnance should provide assistance to facilitate those activities (as discussed more below), the affected state has primary responsibility. This state must “mobilize the resources”¹⁷⁹ to carry out its duties. It should put in place an administrative apparatus. It should also “[secure] internal budgets and [organize] local human resources and equipment as well as [seek] assistance from external partners to address any shortfalls in these budgets.”¹⁸⁰

Clearance Activities in Libya

As in many post-conflict zones, UNMAS and a group of international NGOs have taken the lead on the organized clearance of abandoned ordnance. UNMAS has played a coordination role while NGOs have done actual clearance. According to an early July 2012 JMACT report, the organizations active in this clearance and some of the areas in which they were working included:

- DanChurchAid (Dafniya)
- Handicap International (Dafniya and Misrata)
- MAG (Misrata and Zintan), and
- St. Barbara Foundation (Mitiga Airport and Ghod Romman).

At the time of writing, insecurity had led to the temporary cessation of operations in Sirte.¹⁸¹ Therefore, NGOs including Handicap International and FSD had pulled out and were considering operations in the al-Jufra region.¹⁸²

¹⁷⁷ See generally International Mine Action Standards (IMAS) 08.10, “General Mine Action Assessment,” 2nd ed. (January 1, 2003, incorporating amendments); IMAS 09.10, “Clearance Requirements,” 2nd ed. (January 1, 2003, incorporating amendments), both available at <http://www.mineactionstandards.org/international-standards/imas-in-english/list-of-imas/> (accessed July 26, 2012).

¹⁷⁸ IMAS 09.30, “Explosive Ordnance Disposal,” 2nd ed. (October 1, 2008, incorporating amendments), <http://www.mineactionstandards.org/international-standards/imas-in-english/list-of-imas/> (accessed July 26, 2012), pp. v, 2.

¹⁷⁹ CCW Protocol V, art. 3.

¹⁸⁰ Landmine Action, *Ambiguity in Practice*, p. 14.

¹⁸¹ “Operations in Sirte remain suspended,” JMACT newsletter, July 2, 2012.

¹⁸² *Ibid.*

As of July 2, 2012, 23 teams from different groups were performing clearance activities in Libya. The NGOs had cleared a total of 314,399 ERW and mines. Among the sites they had completed were 89 schools and 2,819 houses¹⁸³ Although these JMACT statistics do not differentiate among types of ordnance, abandoned ordnance is a large subset of clearance work. In Sirte, for example, a deminer from DDG told the IHRC team in March that abandoned ordnance represented around two-thirds of what they had cleared and the remainder was unexploded ordnance.¹⁸⁴ The high percentage in Sirte may be due in part to the large quantities of abandoned ordnance left behind on the frontlines after the city fell. In Misrata, a MAG representative said that approximately one in five new areas identified as contaminated each week contained abandoned ordnance, but this statistic excluded the ASA, which had large quantities of abandoned ordnance yet to be cleared.¹⁸⁵

Challenges to Clearance in Libya

Resource Limitations

UNMAS and the NGO deminers working in Libya have faced a number of resource challenges related to clearance of abandoned ordnance. First, many deminers reported to the IHRC team in March 2012 that they received insufficient funding for clearance work. An UNMAS technical advisor added that currently in Libya, “funding is a massive issue. Money is short.”¹⁸⁶ Deminers emphasized the need for more international funding, which will be discussed more below.¹⁸⁷ The Libyan national government, however, has also contributed to the shortfall. UNMAS and the NGOs have done most of their work without any financial assistance from the Libyan government. “No money has gone to internationals and the UN from the Libyans so far. What they’re putting in themselves is anyone’s guess. There’s nothing for NGOs,” said UNMAS’s program manager.¹⁸⁸ Libya should help close the funding gap to the extent feasible because it bears primary responsibility for clearance of its territory.¹⁸⁹

Second, deminers have called for additional technical specialists to manage clearance activities. The diversity and scale of weapons in Libya, particularly at ASAs, requires a high level of scarce technical expertise. A deminer from MAG in Zintan explained, “[There is] a lack of feet on the ground to address the

¹⁸³ Ibid.

¹⁸⁴ IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

¹⁸⁵ IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012. By the end of July 2012, the Misrata ASA was undergoing daily clearance and had gone “a good distance.” Email communication from Steve Joubert, operations officer, JMACT, to Bonnie Docherty, senior clinical instructor, IHRC, July 18, 2012.

¹⁸⁶ IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

¹⁸⁷ See chapter on “International Cooperation and Assistance.”

¹⁸⁸ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

¹⁸⁹ The chief executive officer of the National Program questioned the need of UNMAS and international NGOs for funding. He said, “The internationals ... are asking for amounts of money. It’s a very hard question what the internationals will actually do with this money. This is the difficult question no one wants to answer.” IHRC interview with Aladdin Kawan, chief executive officer, National Program, Tripoli, July 11, 2012.

scope of the problem. There are not enough skilled people here. If we had more staff, we could do more.”¹⁹⁰ Extra funding would alleviate this problem.

A third obstacle to clearance in Libya has been the shortage of explosives for controlled demolitions to destroy abandoned ordnance and other ERW.¹⁹¹ Some demolitions are carried out by deminers *in situ*, while other abandoned ordnance is transported to a central disposal site for later demolition. Deminers require explosives to carry out this work. Such materials have been difficult to obtain, however, causing unnecessary delays and risks for civilians.¹⁹² In Sirte, DDG deminers told the IHRC team that people had stolen weapons from their central disposal site: “All that stuff is in the middle of the desert. We’ve tried to guard it ourselves, but without the explosives, we’re putting everything in one big area. We need explosives to do demolition.”¹⁹³

A number of factors have contributed to the explosives problem. First, Libya has fewer pre-existing supplies of explosives than initially thought. “The huge stocks of explosives we thought were there probably aren’t



there,” the UNMAS program manager told the IHRC team.¹⁹⁴ Second, regulations restrict the movement of explosives within Libya and from abroad. “We know where the explosives are stocked, but it took convincing generals to write a letter to transfer 20 kilograms of explosives from one site to another,” the program manager said.¹⁹⁵ Finally, getting explosives is expensive. UNMAS investigated flying some into the country but found that airplane insurance cost

Deminers gathered and marked off these weapons found at the Zintan ASA. Deminers across the country said they often could not destroy the munitions they collected due to a lack of explosives.

Photograph by Nicolette Boehland.

¹⁹⁰ IHRC interview with John McFarlane, technical field manager, MAG, Zintan ASA, March 28, 2012.

¹⁹¹ Ibid.; IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

¹⁹² IHRC interview with Paul McCarthy, operations manager, DDG, Sirte, March 31, 2012.

¹⁹³ Ibid.; see also “Joint Mine Action Coordination Team–Libya Weekly Report 16 April, 2012,” JMACT newsletter, April 16, 2012, <http://reliefweb.int/organization/jmact> (accessed on July 22, 2012).

¹⁹⁴ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

¹⁹⁵ According to the program manager of UNMAS, under Qaddafi, deminers working for oil companies would gather ERW, but only the Libyan civil defense force could destroy it. Despite the revolution, “[t]hings are slowly going back to where they were” within the government because many of the civil servants are the same, and as a result similar hurdles exist. The UNMAS program manager said, “There was a revolution, but 90 percent of people are still in the same ministry so the systems are the same, the way of doing business is the same. It’s not as easy as people like.” IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

US\$70,000 and a plane itself cost US\$250,000.¹⁹⁶ A Libyan Civil Defense official acknowledged the shortage, but told IHRC that large quantities of explosives could not be brought in all at once because NGOs cannot adequately protect them from theft by terrorists.¹⁹⁷ Nevertheless, the Libyan government should take steps to alleviate the problem by providing available explosives, loosening regulations for transit and import, and funding purchases of additional explosives.

Obstacles to Deminers Gaining Access to Sites

During Libya's transitional period, the process for obtaining permissions to undertake clearance work, especially at ASAs, has been at times opaque and arduous. In March, deminers reported that in some cases they were forced to use precious time and resources negotiating and liaising with local and national authorities. Furthermore, permissions granted in the capital were not always respected in other regions. An UNMAS technical advisor told IHRC, "Who actually runs the operation is a problem. Letters of authority can be meaningless. Deminers might have a letter from some [government official], but it won't work elsewhere."¹⁹⁸ ASAs have fallen under the control of different parties. During IHRC's visit, for example, the local military council controlled the Misrata ASA and the national government the Zintan ASA. The situation at the ASAs seemed to have improved to a degree by July 2012. The UNMAS program manager said, "I haven't had any major dramas because the Army is seen as the main people to deal with." He added, however, that access may have been easier for UN representatives because they are seen as "very neutral." Furthermore, he said, the true test will be the access UNMAS has during its upcoming survey of weapons left from the conflict.¹⁹⁹

Regardless, this challenge to clearance seems to be primarily a matter of poor coordination between levels of government that should be easy to resolve. In the case of the ASAs, the problem relates to who controls the stockpiles, and a national plan that assigns responsibility for stockpiles could help decide that. Local and national authorities should share an interest in solving the problem because civilians remain at risk, if deminers cannot access areas to clear.

Need to Increase Capacity in Libya

To date, the vast majority of clearance has been done by international NGOs, and national capacity has been limited. Civil society groups were almost non-existent under Qaddafi. Indeed, the Boy Scouts were the only organized civil society group.²⁰⁰ Volunteer groups did some clearance during the revolution, but according to the UNMAS program manager, they were not self-sustaining.²⁰¹ Even capacity within the military and government has been relatively small: a community liaison manager noted, "National capacity needs to be

¹⁹⁶ Ibid.

¹⁹⁷ IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

¹⁹⁸ IHRC interview with Paul Grimsley, chief of ammunition management, UNMAS, Palm City, Tripoli, March 27, 2012.

¹⁹⁹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

²⁰⁰ IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

²⁰¹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

created. The Army and the police force should be trained. We need an explosive ordnance disposal school. This would be more sustainable than international organizations doing the work.”²⁰²

Given the scale of the problem in Libya, which consists not only of recently abandoned ordnance but also other forms of ERW dating back to World War II, national capacity is critical for the long term. The UNMAS program manager said, “These guys will be clearing long after we’re gone.”²⁰³ While he agreed about the need for Libyan organizations to assume responsibility at some point, he argued that the Libyan government should facilitate the process. He explained to IHRC, “In terms of clearance, everyone says build capacity, that’s the solution. But whom do you develop? Who’s going to pay them and give them equipment?... Our take is you need to develop capacity but [it can only be] done once Libyans have an idea of what they’re doing.”²⁰⁴

A member of Libyan civil society disagreed about the amount of existing capacity, but he concurred that building it further is critical. The head of a local NGO that is part of the National Program, he argued that Libyan civil society has some technical expertise. He also told IHRC, however, “We need to build the local capacity. We don’t want the international community to come back in five years, and the Libyans have learned nothing from this.”²⁰⁵

Recommendations

To the Libyan government and, where applicable, local authorities:

- Develop a coordinated national strategy for the clearance of abandoned ordnance
- Provide national funding and other forms of support for clearance, including to UN and NGO partners
- Request additional financial, material, and/or technical assistance from the international community, and NATO in particular, for clearance activities
- Cooperate with international demining groups to identify clearance priorities and allocate resources appropriately
- Ensure that demining organizations have ready access to sufficient quantities of explosives to undertake controlled demolitions
- Streamline and centralize the process for deminers to access sites for clearance activities
- Facilitate the growth of civil society organizations undertaking clearance activities through permissive regulation and funding mechanisms
- Investigate the feasibility of establishing an explosive ordnance disposal academy to build Libyan expertise on clearance within the military, police, and NGO spheres

²⁰² IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

²⁰³ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

²⁰⁴ Ibid.

²⁰⁵ IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012.

RISK EDUCATION AND VICTIM ASSISTANCE

Introduction

To maximize civilian protection in the new Libya, education about the risks of abandoned ordnance and other ERW and assistance for victims must go hand in hand with effective stockpile management and clearance efforts. UNMAS and the international NGOs, with some local support, have provided risk education in Libya. Their programs, however, have faced several key challenges, including: dangerous attitudes toward weapons, particularly among children; difficulty in reaching audiences; insufficient funding; and the need to increase capacity in Libya. The recent elections give the central government, working closely with local authorities throughout the country, a fresh opportunity to take on these challenges and increase support and planning for risk education. As of July 2012, there was no program dedicated to helping the victims of ERW, including abandoned ordnance. A general assistance program for war wounded has helped fill the gap, but an analysis of its effectiveness and the challenges it has faced is beyond the scope of this report.

Principles and Standards

Multiple weapons treaties impose obligations to provide risk education and/or victim assistance to those affected by abandoned ordnance as well as other ERW.²⁰⁶ Although Libya is not formally bound by these treaties, two basic principles are relevant. First, affected states should ensure that the general population, and particularly those most at risk, receive education on the dangers associated with ERW to enable them to identify threats and mitigate risky behavior.²⁰⁷ Second, affected states should take specific measures, with respect to victims of ERW, to “adequately provide medical care, rehabilitation, psychological support and adequate assistance for social and economic inclusion.”²⁰⁸ The definition of victim should include individuals, families, and communities.²⁰⁹

Risk education refers to “activities which seek to reduce the risk of death and injury from mines and ERW ... by raising awareness and promoting safe behaviour. These activities include information exchange with at-risk communities, communication of safety messages to target groups, and support for community risk management and participation in mine action.”²¹⁰ The IMAS provide “guidance for the effective assessment, planning, implementation, management, monitoring and evaluation of [risk education].”²¹¹ They state that

206 See CCW Protocol V, art. 5 (risk education); Convention on Cluster Munitions, adopted May 30, 2008, entered into force August 1, 2010, arts. 4(2)(e) and 5 (risk education and victim assistance).

207 See CCW Protocol V, art. 5; Convention on Cluster Munitions, art. 4(2)(e).

208 “CCW Protocol V—Plan of Action on Victim Assistance,” 2006, <http://www.unog.ch/80256EE600585943/%28httpPages%29/ECEBD38C355D8C6AC125791F004CDA9D?OpenDocument> (accessed July 23, 2012).

209 See Convention on Cluster Munitions, art. 2(1).

210 IMAS 12.10, “Mine/ERW Risk Education,” 2nd ed. (April 1, 2010), <http://www.mineactionstandards.org/international-standards/imas-in-english/list-of-imas/> (accessed July 26, 2012), p. 8.

211 *Ibid.*, p. 7.

risk education activities should be based on a needs assessment of local risks and capabilities and that all communication should be carried out under “a carefully planned strategy that is targeted to specific at-risk groups and which is socially and culturally appropriate.”²¹² This strategy should take into account relevant risky behaviors, target groups, safety messages, communication channels, and means of dissemination.²¹³

The Plan of Action on Victim Assistance, agreed to by states parties to CCW Protocol V, lays out principles of victim assistance. Although Libya is not a state party to Protocol V, the Plan of Action articulates international standards on the subject. It includes a series of measures that affected states should undertake, such as:

- making every effort to collect reliable relevant data with respect to victims
- assessing the needs of victims
- developing a national plan and budget to carry out victim assistance activities
- seeking to mobilize national and international resources
- ensuring that differences in treatment are based only on medical, rehabilitative, psychological or socio-economic needs
- striving to incorporate relevant guidelines and good practices including in the areas of medical care, rehabilitation and psychological support, as well as social and economic inclusion.²¹⁴

Several human rights treaties, to which Libya is bound as a state party, also impose obligations that could be relevant to the problem of abandoned ordnance.²¹⁵ For instance, the Convention on the Rights of Persons with Disabilities requires that a state party take “all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk.”²¹⁶ The Convention on the Rights of the Child mandates that a state party “take all appropriate measures to promote physical and psychological recovery and social reintegration of a child victim of ... armed conflicts [and] [s]uch recovery and reintegration shall take place in an environment which fosters the health, self-respect and dignity of the child.”²¹⁷ These treaties both support the call for robust risk education and victim assistance programs.

With regard to other human rights provisions,²¹⁸ the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) require states parties to protect certain rights that may be applicable to the presence of abandoned ordnance. For example, people may find the prevalence of abandoned ordnance in an area restricts their freedom of

212 Ibid., p. 13.

213 Ibid.

214 “CCW Protocol V–Plan of Action on Victim Assistance.”

215 For a list of international treaties to which Libya is a state party, see Rule of Law in Armed Conflicts Project, “Libya: International Treaties Adherence,” http://www.geneva-academy.ch/RULAC/international_treaties.php?id_state=128 (accessed July 23, 2012).

216 Convention on the Rights of Persons with Disabilities, adopted December 13, 2006, entered into force March 30, 2007, art. 11.

217 Convention on the Rights of the Child, adopted November 20, 1989, G.A. Res. 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2, 1990, art. 39.

218 See E-Mine: Electronic Mine Information Network, “Human Rights Law,” <http://mineaction.org/overview.asp?o=1120> (accessed July 23, 2012).

movement,²¹⁹ while abandoned ordnance in homes or on agricultural land may interfere with the rights to an adequate standard of living and to food.²²⁰ Additionally, the right to life and the right to personal integrity can be implicated when abandoned ordnance causes injury or death.²²¹ Libya is party to both of these covenants.

Risk Education and Victim Assistance Activities in Libya

Risk education is crucial to the protection of civilians because it helps them identify types of weapons, understand what risky behaviors to avoid, and know what to do if they encounter abandoned ordnance, or other forms of ERW.²²² According to an early July 2012 JMACT report, NGOs doing risk education in Libya included Handicap International in Misrata and MAG in Misrata and Zintan. As with clearance, some work had temporarily ceased in Sirte due to the insecurity of the city. As of July 2, 2012, 29 teams from such NGOs were conducting education programs, and these programs had reached 184,639 individuals had participated in awareness sessions.²²³

Many of the NGOs working on ERW have employed community liaison teams who conduct risk education sessions and identify and assess areas where community members have reported finding ERW. In the Zintan region in March 2012, for example, the four MAG community liaison officers serving as risk educators conducted about five awareness trainings a day to audiences of 25 to 30 participants.²²⁴ Such trainings have taken place in a variety of locations including schools, religious centers, hospitals, and universities.²²⁵ NGOs have undertaken a number of other awareness-raising activities in Libya. They have distributed warning brochures, advertised and operated regional ERW information hotlines, coordinated with imams to spread the word at mosques, displayed billboards on streets and posters in shops, and broadcast radio messages to alert the population to the dangers of ERW and to encourage them to report any weapons they find.²²⁶ Although international NGOs have taken the lead on most risk education efforts, Handicap International and MAG told the IHRC team that they have also been cooperating with the Ministry of Education to train school teachers to provide risk education.²²⁷ Representatives from the Libyan Civil Defense and LMAC said their

219 International Covenant on Civil and Political Rights (ICCPR), adopted December 16, 1966, G.A. Res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 52, U.N. Doc. A/6316 (1966), 999 U.N.T.S. 171, entered into force March 23, 1976, art. 12.

220 International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted December 16, 1966, G.A. Res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3, entered into force January 3, 1976, art. 11.

221 ICCPR, arts. 6 and 7. Abandoned ordnance may also implicate the right to health care and the right to education. ICESCR, arts. 12 and 13.

222 Risk education does not distinguish between types of ERW, i.e., abandoned ordnance and unexploded ordnance, because all weapons left after an armed conflict endanger civilians.

223 "Operations in Sirte remain suspended," JMACT newsletter, July 2, 2012.

224 IHRC interview with Amira Zeidan, community liaison manager, MAG, Zintan, March 28, 2012.

225 Ibid.

226 Ibid.; IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

227 IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012; IHRC interview with Amira Zeidan, community liaison manager, MAG, Zintan, March 28, 2012; IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012. The Ministry of Education has also expressed an interest in encouraging Libya to join the Convention on Cluster Munitions and the Mine Ban Treaty, two treaties that set out obligations for dealing with arms left behind after an armed conflict. IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

agencies have also conducted or will coordinate with international NGOs to conduct some risk education.²²⁸ Furthermore, unlike with clearance, “there is a lot of development” in local organizations doing risk education.²²⁹



This Handicap International risk education brochure warns civilians of the risks of weapons left after the armed conflict and shows them what to do in case they encounter one.

Courtesy of Handicap International.

As noted above, there is no established assistance program dedicated to victims of ERW, including abandoned ordnance, in Libya.²³⁰ The broader assistance program for war victims, run through the Ministry of Health, however, has helped victims of ERW. The UNMAS program manager said, “During the revolution, we were finding out about people injured because of [ERW] who were sent overseas to hospitals. They were considered part of the people injured because of the war.”²³¹ Because the Ministry of Health program is not dedicated to ERW victims, a detailed analysis and evaluation of the program is outside the scope of this report, which draws no conclusions on its adequacy.

Challenges to Risk Education in Libya

Like stockpile management and clearance projects, risk education programs in Libya have faced multiple challenges. The Libyan government should play a role in addressing these challenges on a strategic and resourcing level, even if the risk education itself is implemented primarily by NGOs.

²²⁸ IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012; IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

²²⁹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

²³⁰ Ibid. (“Everyone is focused on the war wounded more than guys injured through an accident from UXO [unexploded ordnance].”). See also IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012 (“Victim assistance doesn’t really exist now. There were victims after the war, but nobody was taking care of them.... After an incident, the victim will maybe get medical treatment, but that’s it. They just treat him and get him well.”).

²³¹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

Dangerous Attitudes toward Weapons

Beyond having to overcome expected knowledge gaps, risk educators in Libya have also had to change attitudes to weapons that endanger civilians. Tens of thousands of Libyans were killed during the 2011 conflict,²³² and children were not sheltered from the violence. Risk educators have in some circumstances found it difficult to persuade these children, who have become desensitized to injury and death, of the dangers of weapons left over after the conflict. Basma Ahmed Dabshoon, a local risk educator for MAG in Misrata, said that the war-hardened classmates of a child who was injured after playing with a Kalashnikov told her that “it doesn’t matter if people die.”²³³ In addition, both public museums and private individuals display weapons as mementos of the war. The IHRC team was told that in Sirte, for example, “the directors of schools store ERW in their offices.”²³⁴ These exhibits confuse children and adults, undermining the risk education message that it is unsafe for civilians to handle any piece of ordnance.



A Libyan man looks at the weapons on display at the Misrata war museum. Such exhibits can undermine risk education efforts, which seek to warn civilians of the dangers of handling any type of munition.

Photograph by Anna Crowe.

Practical Challenges

Risk educators highlighted two practical challenges to their work. First, it has been difficult to gather community members, particularly women, for risk education sessions. Risk educators told the IHRC team that they have found obstacles to convening adult audiences because there are so few community groups with which to liaise. Because women’s participation in the public sphere is limited, they have been especially hard to reach. “The problem is that there is no specific place to target women,” a local risk educator said.²³⁵ Women

232 Karin Laub, “Libyan Estimate: At Least 30,000 Died in the War,” *The Guardian*, September 8, 2011, <http://www.guardian.co.uk/world/feedarticle/9835879> (accessed on July 22, 2012); see also Rod Nordland, “Libya Counts More Martyrs than Bodies,” *New York Times*, September 16, 2011, <http://www.nytimes.com/2011/09/17/world/africa/skirmishes-flare-around-qaddafi-strongholds.html?pagewanted=all> (accessed on July 22, 2012).

233 IHRC interview with Basma Ahmed Dabshoon, community liaison, MAG, Misrata, March 29, 2012. Although a Kalashnikov rifle does not fall under the definition of abandoned ordnance, the injury it caused in this case could have been caused by any munition that children have access to.

234 IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

235 IHRC interview with Basma Ahmed Dabshoon, community liaison, MAG, Misrata, March 29, 2012.

are less likely to be victims of ERW: for example, of 208 ERW casualties reported by UNMAS as of June 30, 2012, at least 175 were males.²³⁶ Women play a key role in educating their families on the risks of dangerous weapons, however, so it is essential that they receive risk education.



This haphazard exhibit of different types of weapons at the Misrata war museum suggests to viewers that weapons need not be handled with care. Cluster munitions are identifiable in this image by their yellow diamond design.

Photograph by Bonnie Docherty.

Second, risk education programs, like stockpile management and clearance, have faced funding challenges. One risk educator noted, for example, that programs for women could especially benefit from increased financial support. She proposed, for example, the idea of funding a van that could pick women up at their homes and take them to a center for the trainings.²³⁷ Although risk educators did not emphasize the funding issue as much as clearance professionals did, their programs should receive substantial support from both the Libyan government and, as discussed below, international donors.

The Need to Increase Capacity in Libya

Finally, as with clearance, a challenge for the future will be the transfer of risk education activities to Libyan organizations. Existing programs have often hired local staff to do training and liaising; on July 2, 2012, of the 359 NGO staff members working in clearance or risk education, 293 were Libyan nationals.²³⁸ In addition, the Ministry of Education has helped train trainers,²³⁹ and a Libyan Civil Defense official said his agency has given lectures and seminars on television and in the schools.²⁴⁰ Programs, however, have still been based primarily in international organizations. Members of those organizations are aware that their presence in Libya is ultimately short term. A risk educator from Handicap International told IHRC, “[E]ventually we will leave. It’s important to leave capacity.”²⁴¹

²³⁶ The sex of twelve of the 208 casualties was unknown so the number of males is likely higher. Email communication from Yumiko Yoshioka, program officer, UNMAS, to Bonnie Docherty, senior clinical instructor, IHRC, July 4, 2012.

²³⁷ IHRC interview with Alexandra Arango, community liaison manager, MAG, Misrata, March 29, 2012.

²³⁸ “Operations in Sirte remain suspended,” JMACT newsletter, July 2, 2012.

²³⁹ IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

²⁴⁰ IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012.

²⁴¹ IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

Recommendations

To the Libyan state and, where applicable, local authorities:

- Develop a coordinated national strategy for risk education and victim assistance
- Request financial, material, and/or technical assistance from the international community, including NATO and its member states, for risk education activities and victim assistance
- Promote risk education by:
 - Providing financial, material, and/or other support for risk education efforts by NGOs
 - Facilitating the growth of local civil society organizations undertaking risk education activities through permissive regulations and funding mechanisms
- Ensure any victim assistance programs, whether dedicated to ERW victims or not, provide adequate medical care, rehabilitation, psychological support, and assistance for social and economic inclusion of victims. Such programs should also require the government to:
 - Adopt a broad definition of victim that includes individuals, families, and communities
 - Make every effort to collect reliable relevant data with respect to victims
 - Assess the needs and expectations of victims
 - Develop, implement, and enforce any necessary national laws and policies
 - Develop, in accordance with national procedures, a national plan and budget, including time frames to carry out these activities, with a view to incorporating them within as well as supporting applicable national disability, development, and human rights frameworks and mechanisms, while respecting the specific role and contribution of relevant actors
 - Seek to mobilize national and international resources
 - Ensure that differences in treatment are based only on medical, rehabilitative, psychological, or socioeconomic needs
 - Closely consult with and actively involve victims and their representative organizations
 - Designate, in accordance with national procedures, a focal point within the government for coordination of matters relating to the implementation of this national program
 - Strive to incorporate relevant guidelines and good practices including in the areas of medical care, rehabilitation, and psychological support, as well as social and economic inclusion

To international NGOs providing risk education in Libya:

- Undertake targeted risk education for women, who have been harder to reach in current programs
- Continue to work with locals to increase Libyan capacity for risk education

INTERNATIONAL COOPERATION AND ASSISTANCE

Introduction

In light of the scale of the abandoned ordnance problem in Libya and the threat it poses to civilians, cooperation and assistance from the international community are vital. Multiple treaties and best practices call on states that are “in a position to do so”²⁴² to help states affected by ERW, including abandoned ordnance. According to some international instruments and the emerging principle of “making amends,” states that contributed to the creation of an ERW problem should accept special responsibility for providing assistance. As of July 2012, the international community had provided more than US\$20 million,²⁴³ but ongoing and increased support is needed. To help Libya deal with its massive abandoned ordnance problem, other states should provide a range of forms of assistance for stockpile management, clearance, risk education, and victim assistance. While the abandoned ordnance originated with Qaddafi, NATO’s bombing of the ASAs, though lawful, exacerbated the problem, so NATO states should help reduce the humanitarian risks those sites present. Providing assistance to minimize the risks of abandoned ordnance would also accord with NATO’s UN mandate to protect civilians when it intervened in the armed conflict.

Principles and Standards

The international cooperation and assistance needed to deal with abandoned ordnance can take many forms. It can include: the donation of funds; the provision of technical expertise, training, and advice to affected states; and actual participation in clearance and other activities. Each member of the international community should provide such assistance according to its ability to do so, but given the variety of assistance that qualifies, every state should be “in a position” to help in some way.

International treaties further affirm that a state that contributed to the problem but does not control the affected territory should accept a special responsibility to assist.²⁴⁴ CCW Protocol V and the Convention on Cluster Munitions both include provisions calling on states that used weapons to minimize their post-conflict effects.²⁴⁵ In addition, the emerging principle of “making amends” urges warring parties to help victims of their actions, even if those actions are lawful.²⁴⁶

242 CCW Protocol V, art. 7; Convention on Cluster Munitions, art. 6; Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (Mine Ban Treaty), adopted September 18, 2007, entered into force March 1, 1999, art. 6.

243 Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011; UNOCHA Financial Tracking Service, “Libya Emergencies for 2011,” p. 11; UNOCHA Financial Tracking Service, “Libya Emergencies for 2012.”

244 See Landmine Action, *Ambiguity in Practice*, p. 34.

245 CCW Protocol V requires user states parties to “provide where feasible, *inter alia* technical, financial, material or human resources assistance.” CCW Protocol V, art. 3(1). The Convention on Cluster Munitions “strongly encourage[s]” states parties that used cluster munitions to “provide, *inter alia*, technical, financial, material or human resources assistance” to affected states parties. Convention on Cluster Munitions, art. 4(4).

246 CIVIC, “Making Amends Guiding Principles,” http://www.civicworldwide.org/index.php?option=com_content&task=view&id=405&Itemid=260 (accessed July 23, 2012).

Stockpile Management

Internationally, a number of programs have provided assistance to states where poor stockpile management practices pose particular dangers.²⁴⁷ Stockpile management expert Adrian Wilkinson writes that “these programmes include comprehensive stock auditing, assessments of risk (of both explosion and diversion), improvements to the physical storage of arms and ammunition, and training and assistance for stockpile management personnel.”²⁴⁸ Following a 2007 UN General Assembly resolution on conventional ammunition stockpiles in surplus,²⁴⁹ a group of governmental experts reported to the General Assembly that “international efforts with regard to the management and security of ammunition stockpiles have increased in recent years. Capacity-building with regard to stockpile management, as well as destruction and industrial demilitarization operations, has often been orchestrated in cooperation with international donors, which provide assistance either through bilateral or multilateral channels.”²⁵⁰ International bodies particularly active in the field include the Forum for Security and Cooperation in the Organization for Security and Co-operation in Europe (OSCE), the South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC), the United Nations Development Program (UNDP), and NATO’s Maintenance and Supply Agency (NAMSA).²⁵¹ While stockpile management assistance does not exclusively relate to the storage of abandoned weapons, the underlying principles behind it remain applicable.

The German Armed Forces, for example, undertook a project in close collaboration with the Cambodian Armed Forces, from 2007 to 2009 in order to improve the safety and storage of the ammunition and small arms of the Cambodian Armed Forces.²⁵² The project was initiated after the Cambodian government sought assistance from the international community following a 2005 ammunition depot explosion that killed five people.²⁵³ Across the project, “[t]he basic technical and logistical knowledge needed for the handling of ammunition was conveyed, and operations commenced to rewarehouse still serviceable ammunition into buildings suited to and prepared for the storage of ammunition.”²⁵⁴

The United States provides extensive stockpile management assistance to other countries, primarily through the Office of Weapons Removal and Abatement in the Department of State’s Bureau of Political-Military Affairs, and the Small Arms/Light Weapons Branch of the Defense Threat Reduction Agency (DTRA).²⁵⁵ When

247 Michael Ashkenazi, “Stockpile Management: Security,” in Beven, ed., *Conventional Ammunition in Surplus*, p. 74.

248 Wilkinson, “Ammunition Depot Explosions,” in Beven, ed., *Conventional Ammunition in Surplus*, p. 133.

249 United Nations General Assembly, Resolution 61/72, “Problems Arising from the Accumulation of Conventional Ammunition Stockpiles in Surplus” (2007), <http://www.un.org/Depts/dhl/resguide/r61.htm> (accessed July 23, 2012).

250 United Nations General Assembly, “Report of the Group of Governmental Experts Established Pursuant to General Assembly Resolution 61/72 to Consider Further Steps to Enhance Cooperation with Regard to the Issue of Conventional Ammunition Stockpiles in Surplus,” U.N. Doc. A/63/182, July 28, 2008, para. 46. The report also notes that this assistance included “the development of stockpile management and destruction programmes, financial support, assistance in ammunition technical assessments, the development of operational support tools, and training in stockpile management and security.” *Ibid.*, para. 49.

251 Benjamin King, “Introduction,” in Benjamin King, ed., *Safer Stockpiles: Practitioners’ Experiences with Physical Security and Stockpile Management (PSSM) Assistance Programmes* (Geneva: Small Arms Survey, 2011), <http://www.smallarmssurvey.org/fileadmin/docs/B-Occasional-papers/SAS-OP27-Safer-Stockpiles.pdf> (accessed on July 23, 2012), p. 5.

252 See generally German Federal Ministry of Defense/ Bundeswehr Verification Centre, “German Armed Forces’ Experiences Gained in a Small Arms and Light Weapons/ Conventional Arms Project Cambodia,” in King, ed., *Safer Stockpiles*, pp. 75-95.

253 *Ibid.*, p. 75.

254 *Ibid.*, p. 95.

255 The Branch’s work is not limited to SALW. See US Department of State, Bureau of Political-Military Affairs, “To Walk the Earth in Safety,” July 1, 2011, <http://www.state.gov/documents/organization/176689.pdf> (accessed July 20, 2012), p. 23 (“The SA/LW Branch of DTRA aims to reduce proliferation by aiding foreign

a state requests assistance, these two groups “work closely with the host nation to offer technical assistance on [physical security and stockpile management] issues, develop and execute cost-effective projects that meet the needs of the requesting government, and promote regional security.”²⁵⁶ Between 2001 and 2010, the Small Arms/Light Weapons Branch of DTRA, for example, provided assistance to 58 countries; this assistance included “employing teams of [small arms and light weapons] experts that provide foreign governments with assessments and technical advice, while also orienting them with the best practices for [physical security and stockpile management].”²⁵⁷

Clearance, Risk Education, and Victim Assistance

Law and practice also support the principle of providing affected states with international cooperation and assistance for clearance, risk education, and victim assistance related to abandoned ordnance and other forms of ERW. Several international treaties call for assistance. CCW Protocol V and the Convention on Cluster Munitions both provide precedent for requiring assistance to deal with abandoned ordnance in particular, and the Mine Ban Treaty supports the principle more broadly.²⁵⁸ The first two treaties also place a duty on states that contributed to the problem to provide “technical, financial, material or human resources assistance.”²⁵⁹

States that are bound by these treaties, in addition to states that have not yet joined them, have engaged in international assistance and cooperation in a variety of post-conflict situations, responding to the humanitarian imperative to protect civilians from the dangers of ERW. In 2010, international assistance for 57 ERW-affected states and areas amounted to US\$480 million.²⁶⁰ In general, non-user states give much of this assistance. For example, in Afghanistan in 2010, international contributions towards ERW and mine clearance activities and victim assistance totaled US\$102,552,749; Japan, which had no involvement in the generation of ERW in Afghanistan, provided more than US\$18 million of that total.²⁶¹ User states provide other assistance. In the same year, the United States, the leader of ISAF, made the largest contribution, US\$33,820,000, to clearance activities and victim assistance in Afghanistan.²⁶² Some assistance is given through multilateral bodies: in 2010, international donors allocated 13 per cent of their overall contributions to the UNDP.²⁶³ Although international assistance does not usually differentiate by the type of weapon being dealt with, it encompasses efforts to deal with abandoned ordnance.

governments with security improvements and the management of state-controlled stockpiles of man-portable air-defense systems (also known as MANPADS), SA/LW, and conventional ammunition.”)

256 Ibid., p. 5.

257 Ibid., p. 23.

258 CCW Protocol V, art. 8; Convention on Cluster Munitions, art. 6; Mine Ban Treaty, art. 6. See also “Protocol V–Plan of Action on Victim Assistance,” action 3.

259 CCW Protocol V, art. 3(1). See also Convention on Cluster Munitions, art. 4(4).

260 Landmine Monitor 2011, “Support for Mine Action,” http://www.the-monitor.org/index.php/publications/display?url=lm/2011/es/Support_for_Mine_Action.html (accessed July 24, 2012).

261 Landmine and Cluster Munition Monitor 2011, “Afghanistan: Support for Mine Action,” August 31, 2011, http://www.the-monitor.org/index.php/cp/display/region_profiles/theme/1554 (accessed July 26, 2012). The Monitor noted, “Of the total contribution, 96% went towards clearance activities, while the remainder was for victim assistance activities.” Ibid.

262 Ibid.

263 Landmine Monitor 2011, “Support for Mine Action.”

Status and Shortcomings of International Cooperation and Assistance in Libya

International Community at Large

The international community has contributed about US\$22.7 million to dealing with Libya's ERW. According to the Landmine and Cluster Munition Monitor, 14 states and the European Union provided US\$17.1 million in 2011, primarily for clearance.²⁶⁴ This figure made Libya a relatively large recipient of aid,²⁶⁵ but donor states seem to have been responding to Libya's emergency situation. Although the ERW problem remains serious, funding levels are on track to drop dramatically in 2012. The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) reported that four states gave or pledged a total of only US\$5.6 million for similar ERW projects in the first seven months of 2012.²⁶⁶ All of the reported assistance earmarked for ERW work went to UNMAS, the ICRC, or NGOs.²⁶⁷

Without foreign assistance, UNMAS and the international NGOs could not have accomplished as much as they have in reducing the threat of abandoned ordnance and ERW more generally. Nevertheless, according to a MAG community liaison manager, "Funding is a problem—donors are interested in the emergency phase but not as much with the post-emergency phase that we are in now."²⁶⁸ The UNMAS program manager echoed this assessment: "There is not enough money that has been given. It's as simple as that."²⁶⁹

Libyan government officials echoed the call for more international funding. When asked why Libya has not done more to address the problem of abandoned ordnance, the director of LMAC responded, "The priority now is to request funding from the international community... We need help and support from the international community. Libya is a huge country with many problems."²⁷⁰ He said LMAC would also seek technical assistance, such as training for its ordnance disposal teams.²⁷¹ A Civil Defense official added, "We need support for equipment, capacity building for local groups."²⁷²

Stockpile management, in particular, has attracted limited funding. The program manager of UNMAS said that international assistance for different types of ERW programs has "been fairly across the board, [but] to

²⁶⁴ The list of donor countries included Australia, Austria, Canada, Denmark, Germany, Italy, South Korea, the Netherlands, Romania, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011. All 2011 assistance data comes from the Monitor's spreadsheet, except for information on US assistance, which reportedly included US\$960,000 for "conventional weapons destruction." For the US data, see UNOCHA Financial Tracking Service, "Libya Emergencies for 2011," p. 11.

²⁶⁵ Email communication from Mike Kendellen, Landmine and Cluster Munition Monitor, to Bonnie Docherty, senior clinical instructor, IHRC, July 25, 2012.

²⁶⁶ UNOCHA Financial Tracking Service, "Libya Emergencies for 2012." The UNOCHA data at this point in the year is likely incomplete, but the trend seems to be real. Email communication from Mike Kendellen, Landmine and Cluster Munition Monitor, to Bonnie Docherty, senior clinical instructor, IHRC, July 25, 2012.

²⁶⁷ The NGO recipients included: DEMIRA, DanChurchAid, FSD, Handicap International, MAG, Norwegian People's Aid, St. Barbara Foundation, and the Swedish Civil Contingencies Agency (MSB). Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011; UNOCHA Financial Tracking Service, "Libya Emergencies for 2012." Donor states almost never give assistance for ERW work directly to other governments, unless it is a military-to-military contribution. Email communication from Mike Kendellen, Landmine and Cluster Munition Monitor, to Bonnie Docherty, senior clinical instructor, IHRC, July 25, 2012.

²⁶⁸ IHRC interview with Amira Zeidan, community liaison manager, MAG, Zintan, March 28, 2012.

²⁶⁹ IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

²⁷⁰ IHRC interview with Col. Yousef Abdel Jawad, director, LMAC, Tripoli, July 11, 2012.

²⁷¹ Ibid.

²⁷² IHRC interview with Col. Nuri Saaid Gurdap, head of explosives, Civil Defense, Tripoli, July 14, 2012. The Civil Defense official noted that some demining equipment had been lost during the revolution due to looting.

date nobody has put a huge amount of money into ammunition management.”²⁷³ The main exception has been US funding related to MANPADS. To manage Libya’s stockpiles properly will require vast resources. Rehabilitating a single bombed-out bunker can cost more than US\$1 million, not including security walls, fences, and lights or clearance of the ordnance kicked out in the attack, and NATO launched about 440 strikes on bunkers.²⁷⁴ “The sum of money that could be used—nobody has the complete picture—is huge,” the UNMAS program manager said.²⁷⁵ He attributed the shortage of funding in this area to the daunting nature of the task as well as to other states’ belief, whether correct or not, that Libya is a wealthy country that should pay for its own stockpile management.²⁷⁶

Deminers also noted a shortfall in money for clearance, and to a lesser extent, risk education. The vast majority of the 2011 contributions reported by the Landmine and Cluster Munition Monitor were earmarked for clearance; Australia, Germany, and the European Union specified that their funds should also cover risk education, which is less expensive than clearance.²⁷⁷ More assistance is needed, however, to facilitate these activities and thus increase protection of civilians. JMACT’s July 2, 2012 newsletter reported, “Funding remains a huge challenge to maintaining current levels of operation in Libya, let alone expanding to meet the necessary need.”²⁷⁸ It explained that certain clearance work, including “essential road clearance” in Sirte, had shut down due to lack of funding. “This means more than just the works stops; this means that the money invested in training and equipment is actually lost,” the newsletter said.²⁷⁹ A risk educator from Handicap International pointed out that irregular funding can force NGOs to pull out temporarily, which causes inefficiencies and can increase costs: “If the donors don’t come forward, it’s just a loss. Bringing things here costs money, training, etc. We would have to do that all again.”²⁸⁰ Austria and Sweden were the lone donor states to provide funds dedicated for victim assistance in Libya.²⁸¹

Persuading international donors to provide enough funding and other support to address Libya’s abandoned ordnance problem is a challenge. “Is money being put in? Yes.... Could there be more money? There could always be more. Do I think it will get on the scale needed? No,” said the program manager of UNMAS.²⁸² To help protect the civilians of Libya, the international community should both continue and increase its assistance for all the activities discussed in this report—stockpile management, clearance, risk education, and victim assistance.

273 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.

274 Ibid.

275 Ibid.

276 Ibid.

277 Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011.

278 “Operations in Sirte remain suspended,” JMACT newsletter, July 2, 2012.

279 Ibid.

280 IHRC interview with Teresa Tavares, risk education project manager, Handicap International, Misrata, March 30, 2012.

281 Austria’s victim assistance funding went to UNMAS and the UN Voluntary Trust Fund for Assistance in Mine Action. Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011. Sweden contributed victim assistance support to the ICRC in 2012. UNOCHA Financial Tracking Service, “Libya Emergencies for 2012.”

282 IHRC telephone interview with Max Dyck, program manager, UNMAS, Tripoli, July 3, 2012.



Deminers gathered these abandoned munitions at the Misrata ASA, where they have been working for months. More international funding is needed to support ongoing clearance efforts around Libya.

Photograph by Bonnie Docherty.

NATO and Its Member States

NATO and its member states should accept special responsibility to provide cooperation and assistance to address the abandoned ordnance problem for three reasons. First, NATO contributed to the creation of the problem through its bombings of Libya's ammunition bunkers. According to principles derived from international treaties, states that contribute to the creation of ERW should help the affected state deal with it.²⁸³ Even though the arms had been left by Qaddafi, the NATO attacks spread unstable ordnance in every direction, leading to civilian harm. NATO told both CIVIC and Human Rights Watch that the alliance has no mandate to go on the ground to investigate civilian casualties.²⁸⁴ There are other ways it could help reduce the threat of abandoned ordnance, however. An UNMAS technical advisor told the IHRC team that NATO "needs to come in to fix its mess."²⁸⁵

Second, assistance from NATO would be consistent with the emerging principle of "making amends," under which a warring party offers recognition and assistance to civilians harmed in the course of its lawful combat operations.²⁸⁶ In this case, NATO is a warring party, and its lawful attacks on the bunkers have led to civilian casualties. Therefore, under this principle, NATO and its member states should help ameliorate the situation by contributing to programs that assist victims associated with their actions.

Finally, NATO intervened in Libya's revolution under the authorization of the UN Security Council and with a mandate to protect civilians.²⁸⁷ NATO statements during and after the war repeatedly referred to this

²⁸³ See CCW Protocol V, art. 3(1); Convention on Cluster Munitions, art. 4(4).

²⁸⁴ See, e.g., Human Rights Watch, *Unacknowledged Deaths*, p. 14.

²⁸⁵ IHRC interview with Liam FitzGerald-Finch, chief of weapons management, UNMAS, Palm City, Tripoli, March 27, 2012.

²⁸⁶ CIVIC, "Making Amends Guiding Principles."

²⁸⁷ The mandate responded to widely reported and credible threats from Qaddafi that he would hunt down his opponents, go door to door, and execute them.

mandate.²⁸⁸ In an address on March 28, 2011, US President Barack Obama also emphasized the need to protect civilians. He said, “We have intervened to stop a massacre, and we will work with our allies and partners to maintain the safety of civilians.... These may not be America’s problems alone, but they are important to us. They’re problems worth solving. And in these circumstances, we know that the United States, as the world’s most powerful nation, will often be called upon to help.”²⁸⁹ To follow the spirit of the mandate, those that took part in the intervention should take care to protect civilians from its aftermath. NATO expressed some willingness to help Libya at its summit in Chicago in May 2012. NATO leaders stated they were “ready to welcome Libya as a partner [and stood] ready, if requested, and on a case-by-case basis, to consider providing assistance to Libya in areas where NATO can add value.” They added that “NATO’s activities would focus primarily on security and defence sector reform.”²⁹⁰ Addressing the problem of abandoned ordnance fits this mandate and is a place where NATO’s financial, material, and/or technical assistance “can add value.”

NATO member states provided a substantial portion of the international assistance for dealing with Libya’s ERW in 2011. Nine of the 14 donor states belonged to NATO, and another, Sweden, provided support for NATO’s intervention in Libya.²⁹¹ The number of NATO donor countries had fallen by 2012, however. While its mid-year information is likely incomplete, UNOCHA’s data shows that Germany has been the only NATO state to report continuing assistance in 2012. NATO partner Sweden has also continued to contribute aid, expanding its support to cover victim assistance.²⁹²



NATO bombed this ammunition warehouse at the Misrata ASA, which remained full of damaged weapons in March 2012. The alliance has a responsibility to contribute to clearance efforts because it exacerbated the abandoned ordnance problem. It also intervened in Libya with a mandate to protect civilians.

Photograph by Bonnie Docherty.

288 See, e.g., NATO, “Statement on Libya: Following the Working Lunch of NATO Ministers of Foreign Affairs with Non-NATO Contributors to Operation Unified Protector,” April 14, 2011, http://www.nato.int/cps/en/natolive/official_texts_72544.htm (accessed July 26, 2012) (“NATO-led forces are taking robust action to protect civilians and civilian-populated areas under threat of attack in Libya.... We will continue to adapt our military actions to achieve maximum effect in discharging our mandate to protect civilians and civilian-populated areas.”); NATO, “Statement on Libya Following the Working Lunch of NATO Ministers of Defence with Non-NATO Contributors to Operation Unified Protector,” June 8, 2011, http://www.nato.int/cps/en/natolive/news_75177.htm?mode=pressrelease (accessed July 23, 2012) (“We are fulfilling our mandate. We have made significant and steady progress and saved countless lives as a result.”); “NATO Secretary General Statement on End of Libya Mission,” October 28, 2011, http://www.nato.int/cps/en/natolive/news_80052.htm (accessed July 26, 2012) (“We have fully complied with the historic mandate of the United Nations to protect the people of Libya, to enforce the no-fly zone and the arms embargo.”).

289 Barack Obama, “Remarks by the President in Address to the Nation on Libya,” National Defense University, Washington, D.C., March 28, 2011, <http://www.whitehouse.gov/the-press-office/2011/03/28/remarks-president-address-nation-libya> (accessed July 23, 2012).

290 NATO, “Chicago Summit Declaration,” May 20, 2012, http://www.nato.int/cps/en/SID-B83237D5-B60EA88E/natolive/official_texts_87593.htm (accessed July 26, 2012).

291 The list of NATO states that donated in 2011 is: Canada, Denmark, Germany, Italy, the Netherlands, Romania, Spain, the United Kingdom, and the United States. Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011. For information on Sweden’s role in the 2011 intervention in Libya, see NATO, “NATO and Libya: Facts and Figures,” http://www.nato.int/cps/en/natolive/topics_71652.htm (accessed July 24, 2012).

292 UNOCHA Financial Tracking Service, “Libya Emergencies for 2012,” p. 1.

Recommendations

To the international community at large:

- With regard to stockpile management:
 - Provide ongoing and increased funding and/or material support for stockpile management projects in Libya
 - Establish partnerships with Libyan authorities to facilitate the exchange of technical information and training on safe stockpile management
- With regard to clearance:
 - Provide ongoing and increased funding and/or material support for clearance activities in Libya
 - Help the Libyan state build technical expertise related to clearance by providing technical information, advice, and training
- With regard to risk education and victim assistance:
 - Provide ongoing and increased funding and/or material support for risk education and victim assistance in Libya
 - Provide assistance in particular to NGOs for risk education programs targeted to women

To NATO and its member states:

- Provide specific financial, technical, and/or material support for clearance of ASAs and other ammunition storage facilities bombed by NATO during the armed conflict in Libya
- Provide assistance, including in the form of funding, for civilians harmed by abandoned ordnance kicked out of bunkers that were bombed by NATO during the armed conflict in Libya

CONCLUSION

As a result of Qaddafi's extensive acquisition and hoarding of weapons over his nearly four-decade rule, the 2011 revolution left Libya with vast quantities of abandoned ordnance. The ammunition, which has been controlled by the national government, local authorities, and *katibas*, has seriously endangered the country's civilians. Stockpiles of weapons in populated areas have had the potential to create catastrophic explosions. Other factors—curiosity, the harvesting of materials, community clearance, and the display of weapons as mementos—have led civilians to handle ammunition at the risk of injury or death. While world leaders and the media have extensively discussed the dangers of proliferation of abandoned ordnance, the humanitarian threats within Libya also warrant attention and urgent action.

Effective initiatives in several areas are required to minimize the danger of abandoned ordnance. Proper stockpile management should isolate the ordnance in safe and secure facilities. Clearance should eliminate weapons outside such facilities, especially when they are no longer safe to use. Risk education should increase awareness within the civilian population of the risks of abandoned ordnance. Victim assistance programs should ensure that those harmed by abandoned ordnance and other forms of ERW receive adequate physical, psychological, and socioeconomic aid.

While progress has been made in all four areas, many challenges must be overcome to address the situation adequately. In particular, the central government has contributed little support or leadership to minimizing these challenges, at least in part because of its weak and transitional character. At the same time, international cooperation and assistance have been insufficient to make up for the Libyan government's shortcomings. Therefore, much work remains to be done.

The question of who is responsible for undertaking this work is complicated. Under international principles, primary responsibility lies with the Libyan national government, while in practice, local civil and military authorities and *katibas* also have an important role to play. Building capacity within Libya therefore is an important goal. "The international agencies are mainly giving to international organizations, but the emphasis must lie in advancing Libyans so that they can do their own work," an UNMAS official told IHRC.²⁹³ Non-Libyan actors also need to become increasingly involved. UNMAS and international NGOs have already taken the lead in implementing initiatives in all four areas mentioned above, but the international community more broadly should grow more engaged in order to augment protection of civilians. "This is a global problem that demands a global solution," the UNMAS program manager said. "Governments around the world need to take action before it becomes too late."²⁹⁴

²⁹³ IHRC interview with Steve Joubert, operations officer, JMACT, Misrata, March 29, 2012.

²⁹⁴ "Joint Mine Action Coordination Team—Libya Weekly Report 28 November, 2011," JMACT newsletter, November 28, 2011, <http://reliefweb.int/organization/jmact> (accessed on July 22, 2012).

Ultimately both statements about responsibility are true. The most effective way to address the problem is a response coordinated at the local, national, and international levels that combines immediate action with long-term planning. As a member of Libyan civil society told IHRC, the country needs “more cooperation between all parties—all the way from NATO to the man who lives next to the abandoned ordnance.”²⁹⁵ While even *ad hoc* interim steps can help reduce human suffering, this holistic approach has the greatest potential to eliminate the threat abandoned ordnance poses to the civilians of Libya.

²⁹⁵ IHRC interview with Sabri Ebdawi, chief executive officer, Green Libya Petrol Services Company and civil society member of the National Program, Tripoli, July 10, 2012.

Explosive Situation: Qaddafi's Abandoned Weapons and the Threat to Libya's Civilians

Over the course of four decades, Muammar Qaddafi's regime acquired a stockpile of munitions worth billions of dollars (US) and contained in dozens of storage facilities spread across Libya. Due to the 2011 armed conflict, some of these weapons have proliferated across national borders; however, vast quantities remain within Libya. Many of the munitions, now unstable and inadequately secured, spill out of bombed bunkers. Abandoned weapons have also been found in militia stockpiles in urban centers, public museums, farmers' fields, and private homes.

This report, based on investigations within Libya, examines the widespread humanitarian impact of abandoned ordnance in Libya. Children have been killed or injured while playing with weapons. Civilians of all ages face ongoing dangers from the harvesting of weapons materials for sale or personal use, clearance by untrained community members, and display of munitions as mementos. In addition, Libyan militias store stockpiles in an unsafe manner in populated areas where an explosion could have catastrophic consequences.

The report calls on Libya to create and implement a coordinated and comprehensive national plan to reduce these threats to civilians. Libya bears primary responsibility for dealing with the abandoned ordnance problem, according to international standards and legal principles. Its plan should encompass work in four areas: stockpile management, clearance of munitions, risk education, and victim assistance.

Donor states and the United Nations, meanwhile, should provide ongoing and increased assistance for efforts related to abandoned ordnance. NATO should accept special responsibility given its involvement in the conflict and mandate to protect civilians.

FRONT COVER:

Weapons ranging from artillery shells to surface-to-air missiles spill out of an ammunition bunker near Zintan that was bombed by NATO in 2011. These unstable and inadequately secured weapons exemplify the danger posed to civilians by Qaddafi's abandoned ordnance months after the end of the armed conflict.

Photograph by Nicolette Boehland.

