Regional Fact Sheet **November 2008**

Cluster Munitions in the Middle East and North Africa

Prepared by Human Rights Watch

Participation in the Oslo Process

A total of four states from the Middle East/North Africa region agreed to adopt the Convention on Cluster Munitions (CCM) in Dublin on 30 May 2008, as detailed in the following table:

Bahrain, Lebanon, Morocco, and Qatar.

States from MENA that Agreed to Adopt the CCM, May 2008

Another six countries attended the Dublin negotiations only as observers and thus did not formally adopt the Convention: Egypt, Iraq, Kuwait, Libya, Oman, and Saudi Arabia. It is notable that Algeria and Kuwait had subscribed to the "Wellington Declaration," which affirmed their objective of concluding a treaty prohibiting cluster munitions in Dublin in May 2008. In addition, Jordan participated in two and Yemen in one of the four major international meetings of the Oslo Process (Oslo, Lima, Vienna, and Wellington), but were not present at the negotiations in Dublin. [1]

Support in the region for action on cluster munitions has historical precedent. Algeria, Egypt, and Lebanon were among a small group of countries that proposed a ban on antipersonnel cluster munitions at the 1976 conference that preceded the Convention on Certain Conventional Weapons (CCW).

Regional Overview

In the MENA region, four countries have produced cluster munitions, two have exported them, and fifteen have stockpiles of the weapon.

- **Egypt**, **Iran**, **Iraq**, and **Israel** have produced cluster munitions.
- **Egypt** and **Israel** have exported cluster munitions.

- **Algeria**, **Bahrain**, **Egypt**, **Iran**, **Iraq**, **Israel**, **Jordan**, **Kuwait**, **Libya**, **Morocco**, **Oman**, **Saudi Arabia**, **Syria**, **United Arab Emirates (UAE)**, and **Yemen** stockpile cluster munitions.
- Cluster munitions have been used in **Iraq**, **Israel**, **Kuwait**, **Lebanon**, **Saudi Arabia**, **Syria**, and the **Western Sahara.**

Globally, 34 countries are known to have produced over 210 different types of air-dropped and surface-launched cluster munitions including projectiles, bombs, rockets, missiles, and dispensers. Existing stockpiled cluster munitions contain billions of individual submunitions. Cluster munitions are stockpiled by at least 77 states and have been used in at least 31 countries and disputed territories. According to available information, at least 13 countries have transferred over 50 types of cluster munitions to at least 60 other countries.

Use of Cluster Munitions

The region has seen extensive use of the weapon. Known instances of use include:

- Israel used air-dropped cluster munitions against non-state armed group (NSAG) training camps near Damascus, **Syria** in 1973.
- Moroccan forces used air-dropped and artillery-delivered cluster munitions against an NSAG in the **Western Sahara** sometime between 1975 and 1988.
- Israel used air-dropped cluster munitions against targets in **Lebanon** in 1978 and against Syrian forces and NSAGs in Lebanon in 1982.
- US aircraft dropped 12 CBU-59 and 28 Rockeye bombs against Syrian air defense units near Beirut in **Lebanon** in December 1983.
- Saudi Arabian and US forces used air-dropped and artillery-delivered cluster munitions against Iraqi forces during the battle of Khafji in **Saudi Arabia** in January 1991.
- During the Gulf War in 1991, the US, France, and the United Kingdom dropped 61,000 cluster bombs containing some 20 million submunitions in **Iraq** and **Kuwait**. The number of cluster munitions delivered by surface-launched artillery and rocket systems during the Gulf War is not known, but an estimated 30 million or more dual

purpose improved conventional munitions (DPICM) submunitions were used in the conflict.

- The US and UK used nearly 13,000 cluster munitions containing an estimated 1.8 to 2 million submunitions in the three weeks of major combat in **Iraq** in 2003.
- Israeli forces used surface-launched and air-dropped cluster munitions against Hezbollah forces in **Lebanon** in 2006. The UN estimates that Israel used up to 4 million submunitions.
- Hezbollah fired more than 100 Chinese-produced Type-81 122mm cluster munition rockets into northern **Israel** in 2006.

Production and Transfer

The Helipolis Company for Chemical Industries in **Egypt** produces projectiles for 122mm, 130mm, and 152mm caliber artillery pieces which contain M42D DPICM submunitions. The SAKR Factory for Developed Industries produces 122mm surface-launched rockets containing 72 submunitions, some of which were exported to Iraq. Egypt is also a significant importer of cluster munitions, primarily from the US, which include artillery projectiles, aircraft bombs, and surface-fired multiple launch rockets.

Media reports indicate that in November 2006 **Iran** tested a version of the Shahab-2 missile capable of delivering 1,400 bomblets.[2]

Prior to 2003, **Iraq** produced and imported cluster munitions. This included joint development with Yugoslavia of the M87 Orkan (known in Iraq as Ababil) surface-to-surface rocket with submunitions.[3] Iraq also produced two types of cluster bombs called the NAAMAN-250 and NAAMAN-500.[4] It acquired ASTROS ground rockets from Brazil.[5]

Israel is a major producer and exporter of cluster munitions, primarily artillery projectiles and rockets containing the M85 DPICM submunition equipped with a back-up pyrotechnic self-destruct fuze. Israel Military Industries (IMI) produces, license-produces, and exports cluster munitions including artillery projectiles (105mm, 122mm, 130mm, 152mm, 155mm, 175mm, 203mm), mortar bombs (120mm), and rockets (EXTRA, GRADLAR, LAR-160). IMI has reportedly produced over 60 million M85 DPICM submunitions.[6] IMI concluded

licensing agreements in 2004 with companies in India (Indian Ordnance Factories) and the United States (Alliant Techsystems) to produce DPICMs. Companies in Argentina (CITEFA), Germany (Rheinmetall), Romania (Romtechnica), and Switzerland (RAUG) have also assembled or produced these submunitions under license. Israel transferred four GRADLAR 122mm/160mm rocket launchers to Georgia in 2007. Georgia has acknowledged using the launchers with 160mm Mk.-4 rockets, each containing 104 M85 DPICM submunitions, during its August 2008 conflict with Russia.[7] Israel has also produced several types of air-dropped cluster munitions. The Rafael Corporation is credited with producing the ATAP-300, ATAP-500, ATAP-1000 RAM, TAL-1, and TAL-2 cluster bombs, as well as the BARAD Helicopter Submunition Dispenser.[8] Israel has imported a variety of cluster munitions from the US, including M26 rockets for its MLRS launchers.[9]

While the number of producing countries in the region is relatively small, transfers of cluster munitions to countries in the region are significant. For example, seven countries have received cluster munitions of Soviet or Russian manufacture: **Algeria**, **Egypt**, **Iran**, **Kuwait**, **Libya**, **Syria**, and **Yemen**. The US is a major supplier of cluster munitions to MENA countries. It has exported the weapon to eight countries, including **Bahrain**, **Egypt**, **Israel**, **Jordan**, **Morocco**, **Oman**, **Saudi Arabia**, and the **UAE**. Other countries that have transferred cluster munitions to countries in the MENA region include Brazil, Chile, South Africa, Turkey, and the United Kingdom. In a recent transfer in 2006-2007, Turkey sold the UAE 3,020 TRK-122 rockets, each containing 56 M85 DPICM submunitions.[10] Additionally, Chinese-produced 122mm cluster munition rockets were used by Hezbollah during its conflict with Israel in 2006.

Stockpiling of Cluster Munitions

At least 15 countries in the region are known to currently stockpile cluster munitions, as detailed in the following table:

Country	Type Stockpiled
Algeria	KMG-U Dispenser
Bahrain	M483A1 projectile M509A1 projectile M26 rocket M26A1 rocket ATACMS missile
Egypt	CBU-87 bomb M26 rocket M26A1 rocket M42 projectile Rockeye bomb SAKR-18 rocket SAKR-36 rocket
Iran	Shahab-2 missile KMG-U dispenser PROSAB-250 bomb BL-755 bomb
Iraq	Ababil 50 rocket ASTROS rocket CB-470 bomb FIROS 25 rocket NAAMAN bomb SAKR 36 rocket Type 81 rocket
Israel	M395 projectile M396 projectile M483A1 projectile Mk.-4 LAR-160 rocket M26 rocket MAR-350 rocket MAR-160 rocket ATAP series bomb CBU-58 bomb Rockeye bomb TAL series bomb
Jordan	M483A1 projectile M509A1 projectile Rockeye bomb
Kuwait	9M55K1 rocket
Libya	KMG-U dispenser RBK bomb
Morocco	CBU-52 bomb CBU-58 bomb M483A1 projectile Rockeye bomb
Oman	BL-755 bomb CBU-87 bomb CBU-97 bomb Rockeye bomb
Saudi Arabia	ASTROS rocket BL-755 bomb CBU-58 bomb CBU-87 bomb
Syria	KMG-U dispenser RBK bomb
UAE	CBU-87 bomb BL-755 bomb TRK-122 rocket
Yemen	KMG-U dispenser 9M27K rocket

Types of Cluster Munitions Stockpiled by Countries from MENA

[1] Countries from the MENA region participating in the major international conferences of the Oslo Process held in Oslo, Lima, Vienna, and Wellington are detailed below.

- Egypt, Jordan, and Lebanon endorsed the declaration made at the Oslo Conference on Cluster Munitions on 22-23 February 2007, which committed them to "Conclude by 2008 a legally binding international instrument that prohibits the use and stockpiling of cluster munitions that cause unacceptable harm to civilians and secure adequate provision of care and rehabilitation to survivors and clearance of contaminated areas."
- Three countries participated in the Lima Conference on Cluster Munitions in May 2007: Egypt, Lebanon, and Yemen.
- Ten countries participated in the Vienna Conference on Cluster Munitions in December 2007: Algeria, Egypt, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, and Saudi Arabia.
- Six countries subscribed to the Wellington Declaration: Algeria, Bahrain, Kuwait, Lebanon, Morocco, and Qatar. Subscribing to the Wellington Declaration affirmed the country's "objective of concluding the negotiation of such an instrument prohibiting cluster munitions that cause unacceptable harm to civilians in Dublin in May 2008" and was a prerequisite to full participation in the negotiations.

[2] Nasser Karimi, "Iran Test-Fires New Longer-Range Missile," *Associated Press*, 2 November 2006.
[3] *Jane's Ammunition Handbook*, p. 641.
[4] *Jane's Air Launched Weapons*, Issue 24, July 1996.
[5] Jonathan Beaty and S.C. Gwynne, "Scandals: Not Just a Bank, You can get anything you want through B.C.C.I. -- guns, planes, even nuclear-weapons technology," *Time Magazine*, 2 September 1991.
[6] Presentation to the 48th Annual Fuze Conference by Mike Hiebel, Alliant TechSystems, and Ilan Glickman, Israel Military Industries, "Self-Destruct Fuze for M864 Projectiles and MLRS Rockets," Charlotte, North Carolina, 27-28 April 2004, Slide 9, http://www.dtic.mil/ndia/2004fuze/hiebel.pdf (accessed 28 November 2006).
[7] The transfer of the GRADLAR launchers was reported in: Georgia, UN Register of Conventional Arms, Submission for Calendar Year 2007, 7 July 2008. The Georgian Ministry of Defense, on 1 September 2008, admitted to using Mk.-4 rockets against Russian forces on its website: **"**Georgian Ministry of Defence's Response to the Human Rights Watch Inquire about the Usage of M85 Bomblets," http://www.mod.gov.ge/i.php?l=E&m=11&sm=3&st=40&id=1046 (accessed on 29 October 2008).
[8] *Jane's Air Launched Weapons*, pp. 370-380.
[9] Information on surface-launched cluster munitions produced and possessed by Israel is taken primarily from the IMI corporate website, http://qa-imi.gsites.co.il/division.aspx?FolderID=75 (accessed 28 November 2006). It has been supplemented with information from *Jane's Ammunition Handbook* and US Defense Intelligence Agency, "Improved Conventional Munitions and Selected Controlled-Fragmentation Munitions (Current and Projected) DST-1160S-020-90."
[10] Turkey, UN Register of Conventional Arms, Submission for Calendar Year 2006, 22 March 2007, and submission for Calendar Year 2007, 7 July 2008.