Stockpiling and Destruction of Cluster Munitions: A Global Overview

Prepared for the Berlin Conference on the Destruction of Cluster Munitions June 2009

> Cluster bombs ready to be destroyed at Marandua Air Force base, Vichada Department, Colombia, May 7, 2009. Photo by Camilo Serna, Campaña Colombiana Contra las Minas.

Where does this information come from?

Banning Cluster Munitions: Government Policy and Practice

- 288-page report covering 150 countries
- Researched and written by Human Rights Watch and Landmine Action; published by Landmine Monitor.
- Released on 29 May 2009.
- Focuses on period from November 2006 to December 2008.
- Includes responses to requests for information by 42 governments.

BANNING CLUSTER MUNITIONS

Government Policy and Practice



Cover of report. © 2009 Mines Action Canada

H U M A N R I G H T S W A T C H

Which states stockpile cluster munitions?

- At least 32 signatories to the Convention on Cluster Munitions possess stockpiles.
- At least 48 nonsignatories possess stockpiles.
- In 2002, only 56 countries identified as having stockpiles.



How many are stockpiled by Signatories?

Submunitions in cluster munitions possessed by signatory states	
United Kingdom	38.7 million
Germany	33 million
Netherlands	26 million
France	14.9 million
Norway	3.1 million
Austria	798,336
Slovenia	52,920

Banning Cluster Munitions: Government Policy and Practice, p. 20.

- Seven signatories possess about 672,000 cluster munitions that contain over 115 million submunitions.
 - Spain completed the destruction of 4,724 cluster munitions containing 233,261 submunitions in March 2009.
 - No information on types and quantities possessed by 24 other signatories.
- Stockpiles of non-signatories number in hundreds of millions of submunitions.
 - US stocks in 2004 number nearly 730 million submunitions.

Which signatories currently stockpile what types?

- Non-self-destructing DPICM in artillery projectiles
 - Belgium, BiH, Canada, Germany, Italy, Japan, Netherlands, Spain, UK
- Self-destructing DPICM in artillery projectiles
 - Austria, Denmark, France, Germany, Norway, Slovenia, South Africa, Spain, Switzerland, UK
- DPICM in surface-to-surface rockets
 - BiH, Croatia, France, Germany, Guinea, Italy, Japan, Moldova, Netherlands, UK
- Air-dropped bombs or dispensers
 - Angola, Belgium, BiH, Bulgaria, Chile, Croatia, Czech Republic, Germany, Guinea-Bissau, Hungary, Indonesia, Italy, Japan, Montenegro, Netherlands, Nigeria, Peru, Portugal, South Africa, Sweden, Uganda, UK
- Air-to-surface rockets
 - Japan, Netherlands, UK

H U M A N R I G H T S W A T C H

Which types have already been destroyed?

Destruction activity reported by 12 signatories: Belgium, Canada, Colombia, France, Germany, Honduras, Mali, Netherlands, Norway, Spain, Switzerland, UK

Belouga bomb BL-755 bomb BME-330 B/AP bomb CB-250K bomb CBU-87 bomb DM-602, DM-612, DM-632 projectiles DM-642, DM-652 projectiles ESPIN-21 mortar M26 rocket M483A1 projectile MAT-120 mortar Rockeye bomb (CBU-99, CBU-100, Mk.-20)

What's in a Name?

• The 155mm projectile containing M85 DPICM is called:



Inert M85 submunitions inside a model of a M395 155mm artillery projectile on exhibit at the Seminar on Technical Preventative Measures, Thun, Switzerland, May 2004. © 2004 Human Rights Watch

- M395, M396 (original manufacturer's designation)
- DM-652, DM-662 (Germany, Norway, Denmark)
- KaG-88, KaG-90 (Switzerland)
- Hohlladungssprenkörpergranaten-92 (Austria)
- L20A1 (UK)
- PAT-794 CARGO LR/BB (Slovenia)

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Will many states need outside technical help?

• Some signatories appear to have completed the task quickly.

• Spain

- Limited experience with Soviet systems.
 - KMG-U "universal submunition dispenser"
- Condition and integrity of munitions after prolonged storage.
- Exotic materials can complicate destruction techniques.
 - M26 rockets motors require extensive waste stream treatment because of perchlorate compounds in propellant.



Рис. 133. Противопехотный кассетный элемент для «Урагана» 1 — кольцо переходное; 2 — кольцо резьбовое; 3 — кожух; 4 — прокладка; 5 — заряд разрывной 9X37; 6 — ролики; 7 — стакан; 8 — полиэтилен; 9 — пружина; 10 — толкатель; 11 — ось; 12 — лопасть; 13 — обойма; 14 — элемент боевой; 15 — прокладки; 16 — езрыватель 9Э246M или 9Э246

Antipersonnel cluster element (submunition) for *Uragan rocket.* © Private source



Submunitions in abandoned Soviet ammunition stockpiles in Azerbaijan. $\hfill \ensuremath{\mathbb{O}}$ 2005 Human Rights Watch

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How much does destruction cost?

- Cost data is too variable and "one size does not fit all."
 - Does precluding open detonation increase costs from the very beginning?
 - US averages \$1 million per ton of cluster munitions demilitarized over the past decade.
- Cost savings from resource recovery, recycling, and ending the requirement for continued storage.
- The cost of transporting stockpiles to destruction locations may be significant.





Cluster munition 155mm artillery projectiles being transported by truck. $\ensuremath{\mathbb{C}}$ 2006 Human Rights Watch

Do you have any recommendations?

- Transparency, transparency, transparency,
 - Types and quantities
 - Destruction methods and lessons learned
- Invite civil society and media to witness destruction events.
 - First, last, millionth...
- Start planning and budgeting now.
 - "...as soon as possible..."
 - Engage parliamentarians.
- Have a plan in place within one year of entry-into-force!



CMC campaigner Camilo Serna observes cluster bombs ready to be destroyed at Marandua Air Force base, Vichada Department, Colombia, May 7, 2009. Photo by Campaña Colombiana Contra las Minas.