

**MINES  
ACTION  
CANADA**



**ACTION  
MINES  
CANADA**

1210-1 rue Nicholas Street  
Ottawa ON K1N 7B7  
CANADA  
tél: +1.613.241.3777 fax: +1.613.244.3410  
[macinfo@web.ca](mailto:macinfo@web.ca)  
[www.minesactioncanada.org](http://www.minesactioncanada.org)

**March 2001**

**THE CAMPAIGN AGAINST CLUSTER BOMBS:  
Key considerations for Mines Action Canada**

*Introduction*

- 1. Cluster Bombs Defined*
- 2. Humanitarian Impact and International Humanitarian Law*
- 3. Humanitarian Impact of Cluster Bombs*
- 4. Sampling of Impact Studies*
- 5. Government Positions and Practices*
  - 1. Canada (and others)*
  - 2. United Kingdom*
  - 3. United States of America*
- 6. Mines Action Canada's Mandate Regarding Cluster Bombs*
- 7. Nongovernmental Responses*
- 8. Technical Discussion*
  - 1. Are Cluster Bombs the Legal Equivalent of Landmines?*
  - 2. Can Cluster Bombs Be Fixed?*
  - 3. Can Cluster Bombs Be Accurately Targeted?*
- 9. Key Strategic Considerations*
- 10. Recommendations*
- 11. Appendices*
  - 1. ICRC Recommendations*
  - 2. MCC Petition and Signatories*
  - 3. Statement of Daniel Livermore, Canadian Ambassador for Mine Action*
  - 4. Additional NGO Responses*

## Introduction

Humanitarian organizations are increasingly advocating against the use of cluster bombs. The view of many is that the humanitarian impact of these weapons justifies a moratorium or full ban on their use, production, sale and transfer.

The objective of this report is to assess some of the humanitarian, legal and strategic issues involved and to aid in the development of MAC's policy on cluster bombs. It concludes that there are strong humanitarian reasons to move forward and they are consistent with and reminiscent of the campaign to ban antipersonnel mines. This rationale should influence Mines Action Canada in taking a public position as soon as possible in favour of a moratorium against the production, sale, transfer and use of cluster bombs. The moratorium would be established in support of the effect-based definition of landmines and the norm being established against the class of weapons captured by the Ottawa Treaty.<sup>1</sup> It could not be lifted until concerns about the weapon were addressed to the satisfaction of the proportionality and discriminancy requirements defined by international humanitarian law.

### 1. Cluster Bombs

A cluster weapon, for the purposes of this report, is defined as a "munitions container that breaks open in mid-air and disperses small munitions or submunitions" usually designed to explode on impact, just before impact or a short time after impact. They often carry hundreds of submunitions and may produce an explosive impact the size of several football fields and may produce a "footprint" of up to 100 acres.<sup>2</sup>

Throughout this report, the phrase "cluster bomb" will be used as shorthand to describe the weapon or its contents. Technically speaking, the "bomb" is the casing that holds the munitions or submunitions (bomblets or bombies). Cluster bomb munitions are different from antipersonnel mines insofar as they are not designed to be victim-activated. There is disagreement over whether failed cluster munitions as a group can be legally defined as "landmines" on the basis of their becoming victim-detonated. However, there are cluster weapons that clearly do fall within the mine ban treaty definition because they carry antipersonnel mines -- they are not the subject of this report.<sup>3</sup> It can be said that there is broad agreement that cluster munitions that fail to explode as designed, do function similarly to antipersonnel mines (this question is addressed in some detail in the technical discussion that follows in section 8.1.)<sup>4</sup>

---

<sup>1</sup>Officially, The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Antipersonnel Mines and on Their Destruction.

<sup>2</sup>Drop Today, Kill Tomorrow, Mennonite Central Committee report 1997: [www.mcc.org/clusterbomb/drop\\_today/index.html](http://www.mcc.org/clusterbomb/drop_today/index.html)

<sup>3</sup>"Other cluster weapons disseminate anti-personnel mines from distances of up to 300 km. Examples of minelaying cluster weapons include Chile's CB-770 cluster bomb; China's Type 84 Minelaying Rocket System; Germany's MW-1 Multipurpose Weapon containing MUSPA mines; Russia's PROSAB-250 cluster bomb with PFM-1 mines; and the US CBU-89/B bomb containing BLU-92/B mines. These systems fall within the Ottawa Convention's anti-personnel mines ban, and other areas of international law places restrictions on the use of impact-fired cluster bomblets. Indiscriminate attacks are prohibited, and loss of civilian life is to be minimised." [Richard Lloyd of Landmine Action in Jane's Defence Weekly, November 29, 2000.]

Retired Air Force colonel Karl Polifka, in a letter responding to Virgil Wiebe's condemnation of the dud rate of cluster bombs, argued that "10 percent" and not 30% of cluster munitions failed during the Vietnam War, but admitted that a "tiny percentage of the cluster bomb units used in Southeast Asia fell into the category of 'mines' and these were supposed to self-destruct after 28 days (although some undoubtedly did not)." [Washington Post letter to editor, August 11, 1999]

<sup>4</sup>NATO's parliamentary assembly Civilian Affairs Committee, issued a draft special report Kosovo and International Humanitarian Law, in which was stated: "U.S. Air Force studies have shown that in densely populated areas the collateral damage may be high because of the fragmentation patterns of these weapons, and that there is a serious problem with unexploded ordnance. Clearly, IHL incites the parties to armed conflict to make a judicious choice of weapons when targeting military structures or personnel in proximity to civilians and other persons protected by the Geneva Conventions. More pointedly, cluster bombs may represent a breach of IHL because of the second issue raised above, that of its high 'dud rate' or ratio of unexploded ordnance. While the Ottawa Convention's status as customary international law is still debatable (the U.S., for instance, has not ratified it), it is possible that cluster bombs would fall under the definition of anti-personnel mines in their effects. In any case, even if cluster bombs cannot be considered mines, Articles 35, 51 and 57 of Protocol 1 would protect civilians from their effects, which could be

## **2. Humanitarian Impact and International Humanitarian Law**

International humanitarian law (IHL) requires that parties to a conflict distinguish between civilians and combatants and ensure that civilians are not attacked directly. IHL also prohibits the use of weapons in a manner that cause unnecessary suffering or damaging effects that are disproportionate to their military purposes. These are rules of war that are part of customary law and they do not require parties in conflict to sign a treaty for the rules to be legally binding<sup>5</sup>.

Weapons that are triggered to detonate by the contact or presence of individuals (that is, they are victim-activated) are inherently indiscriminant. Where their placement causes a humanitarian impact disproportionately harmful to civilians, they are then also considered to have illegal effects. Humanitarian impact may be the threat or actual injury or death of community members. Consequences would include severe socio-economic and psychological impacts, such as family disruption, agricultural land denial, loss of primary economic providers or a strain on community medical resources.

Humanitarian law also applies to the targeting of weapons and prohibits deployment that cannot be directed at a specific military objective. This includes use that affects "any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads".<sup>6</sup>

The Ottawa Treaty banning antipersonnel mines (1997) noted in its preamble the precedent of international humanitarian law that prohibited parties in armed conflict from using weapons "of a nature to cause superfluous injury or unnecessary suffering and on the principle that a distinction must be made between civilians and combatants."

## **3. Humanitarian Impact of Cluster Bombs**

Statistical information that is gathered to assess humanitarian impact is often incomplete and inaccurate. The data is likely to underestimate effects on communities, but also the actual number of people injured and killed -- irregularities and inconsistencies in reporting of incidents are a problem for many mine- and UXO-affected countries.

Nonetheless, there are several detailed and well-researched reports available that have attempted to document or describe the impact of cluster bombs on civilians and soldiers. A selection would include those published by: Human Rights Watch (Kosovo Crisis, Cluster Bombs and Civilian Deaths; Ticking Time Bombs; Memorandum to CCW delegates, December 1999); Amnesty International (NATO/FRY: "Collateral Damage" or Unlawful Killings?, June 2000); Mennonite Central Committee [USA] (Drop Today, Kill Tomorrow, 1997; Clusters of Death, 2000); International Committee of the Red Cross [ICRC] (Explosive Remnants of War [Kosovo report], August 2000 and Report to the CCW, December 2000); Independent International Commission on Kosovo (Kosovo Commission Report, 2000, page 180-1, Cluster Bombs); Mines Advisory Group's Laos Report; UK Working Group on Landmines (Cluster Bombs: The military effectiveness and impact on civilians of cluster munitions); Landmine Monitor 2000 report of the Ethics and Justice Working Group (which refers to the article "Cluster Munitions: The Bombs that Keep on Killing").

Most of these studies address the proportionality and indiscriminancy questions, and in some cases the difficulties of clearance, land denial, continuing post-conflict social impact, and the nature and severity of injuries. The Red Cross has also studied medical classifications of superfluous injury and unnecessary suffering in the broad context, which is relevant to

---

judged as unable to discriminate between civilian and military objects. [Emphasis added]", found at: <http://www.naa.be/publications/comrep/1999/as245cc-e.html>

<sup>5</sup>Article 51 of Protocol I (1977) Geneva Conventions, 1949; and originating in the St. Petersburg Declaration of 1868, Article 35 Additional Protocol I (1977).

<sup>6</sup>Protocol III of CCW, Article 1, paragraph 2, relating to incendiary weapons.

cluster bombs<sup>7</sup> and thus raises questions about the physical effects of exploding cluster munitions on the human body and how they compare to the effects of APMs.

#### 4. A Sampling of Impact Studies

The **International Committee of the Red Cross'** Explosive Remnants of War (Kosovo) study found that cluster bombs and AP mines were the leading mine/UXO cause of death and injury in the year following the NATO conflict. Cluster bombs have killed 150 people, who were 4.9 times as likely to be children under the age of 14. They estimated that "around 30,000 unexploded bomblets remained after the conflict" and this weapon group caused about half the deaths and at least a third of the injuries from known ordnance types. The failure rate for cluster bomblets found in Kosovo averaged between 10 and 15 percent.<sup>8</sup>

**The UK Working Group on Landmines** reported that in a 1995 study in two districts in Laos, 1,153 UXO-related accidents occurred within a population of 97,562. More than half of the incidents happened during subsistence farming work or other essential daily tasks. Failure rates for UXO that were used in the conflict (from US airdrops) were as high as 30%. The United Nations estimates that in 1996, there were still 500,000 tonnes of UXO, much of it cluster bombs and bomblets.<sup>9</sup>

**Human Rights Watch** stated in 2000 in their report Ticking Time Bombs that there were reports of Iraqi and Kuwaiti civilians and Kurdish refugees killed or injured by unexploded bomblets from coalition cluster bombs. More than 1,600 civilians were killed and over 2,500 injured in the first two years after the end of the Gulf war from submunitions.<sup>10</sup>

#### 5. Government Positions and Practice

Governments have responded differently and sometimes ambiguously to the impacts of cluster bomb use. While failure rates and targeting problems have been common knowledge since the earliest use of the weapon (in World War 1), but particularly since the 1960s, it has been since the inception of the Landmine Ban Treaty and 1999 Kosovo conflict that political movement seems to be in evidence.

#### **Canada**

Responding to a question from Member of Parliament Svend Robinson<sup>11</sup> about whether Canada used cluster bombs in the NATO campaign in Serbia/Kosovo, Bill Graham, chair of the Standing Committee on Foreign Affairs, responded in February 2000:

"Canada did not use cluster bombs. The use of specific munitions by NATO allies is a national decision. **Canada did voice concerns in the North Atlantic Council after incidents in which such munitions were used.** NATO carefully examined every

---

<sup>7</sup>See Weapons That May Cause Unnecessary Suffering or Have Indiscriminant Effects, ICRC, 1973, but also the ICRC's The SIrUS Project, R. Coupland, ed. 1997, for its attention to this question: "The SIrUS Project involves drawing a clear and objective distinction between the effects of conventional weapons and the effects of other weapons. Legal and moral judgement can then be applied to this distinction. Endorsement of the SIrUS Project amounts to recommendation that this distinction be recognized by States in meeting their obligations under international law."

<sup>8</sup>"Explosive Remnants of War: Cluster Bombs and Landmines in Kosovo", ICRC, August 2000.

<sup>9</sup>"Cluster Bombs: The Military Effectiveness and Impact on Civilians of Cluster Munitions", UK Working Group on Landmines, 2000.

<sup>10</sup>[http://www.hrw.org/hrw/reports/1999/nato2/nato99502.htm#P154\\_34740](http://www.hrw.org/hrw/reports/1999/nato2/nato99502.htm#P154_34740)

<sup>11</sup>Robinson, in his dissenting report to the Standing Committee on Foreign Affairs into Canada's role in the Kosovo Conflict stated that "NATO's use of cluster bombs [...] were a grave violation of any humanitarian rules of war, and will have serious long term consequences. It is particularly appalling that Canada did not vigorously oppose the use of cluster bombs given our position on the use of land mines." Dissenting report: 36/2/fait/studies/reports/faitp08/09-dis-e.html

incident in which there were civilian casualties and took appropriate action to minimize the risk to civilians."<sup>12</sup>[Emphasis added.]

Canadian mine action Ambassador Daniel Livermore stated at the CCW Review Conference in Geneva on December 11, 2000 (see appendix 3):

"While the international community has responded with great vigor to the problems caused by anti-personnel mines, other explosive remnants of war -- including cluster bomb sub-munitions and anti-vehicle mines -- kill or injure significant numbers of civilians, impede humanitarian assistance operations and hinder recovery in war-torn societies. Canada appreciates that the International Committee of the Red Cross and various non-governmental organizations have brought this issue to our attention. We believe that the CCW is the appropriate forum to further examine the problems caused by explosive remnants of war and that our initial examination of these concerns could take place as part of the preparatory process leading to the 2001 CCW Review Conference." [Emphasis added.]

**Canada** proposed at the 2000 CCW conference that the next PrepCom (April 2001) set aside at least three hours on the agenda to discuss cluster bombs and other UXO. A non-paper entitled "Explosive Remnants of War" was presented by the Netherlands<sup>13</sup>, and co-sponsored by Argentina, Austria, Belgium, **Canada**, Cambodia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, New Zealand, Norway, Peru, Portugal, Spain, Sweden, Switzerland, **United Kingdom** and the **United States**. The non-paper was essentially an introduction to the more detailed ICRC report which outlined a proposal for an additional CCW protocol addressing the broad category known as explosive remnants of war. (Switzerland also submitted a working paper concerning the regulation of submunitions.)

The Red Cross Kosovo report of August 2000 referred to the statement of a Canadian military engineer who stated that a cluster bomblet is "not technically a landmine but they do the same job when they're sitting on the ground... They've been the biggest hazard" in the clearance program in Kosovo.<sup>14</sup>

### **United Kingdom**

"The UK's House of Commons Defence Select Committee concluded in its Lessons of Kosovo report published on 23 October that the 'claim that cluster bombs are the most effective weapons for an anti-armour ground attack task does not, we believe, apply to the circumstances of the campaign. At the very least, their reputation as an indiscriminate weapon risks international condemnation, undermining popular support for an action. The UK needs a more discriminatory anti-armour system in order to move to an early end to reliance upon these weapons in inappropriate circumstances'".<sup>15</sup>

Five months after Milosovic's capitulation at the conclusion of the NATO-Serbia conflict, the British Minister of State at the Defence Ministry, Symons of Vernham Dean, stated that "during operations against the military forces in Kosovo...it was appropriate to use cluster bombs. The avoidance of both immediate and longer-term collateral damage is always a high priority...We very much regret any accidents that might occur involving innocent civilian populations."<sup>16</sup>

### **USA**

---

<sup>12</sup>Bill Graham, chair of Standing Committee on Foreign Affairs, in a written response to Svend Robinson, February 15, 2000. The response to Robinson is ambiguous: Did the alliance take appropriate action to minimize risks to civilians, or did it only declare this after the fact? <http://www.parl.gc.ca/InfoComDoc/36/2/FAIT/Studies/References/Svend-E.htm>

<sup>13</sup>The non-paper called on delegates to consider as the subject of discussion for the next CCW prepcom "technical/military measures that could be pursued to address humanitarian concerns, such as inhumane effects", the "types of arms/submunitions that would fall into the scope of this process" and "measures, including legal measures, that could be considered on this issue in the CCW framework."

<sup>14</sup>Original report was from Toronto Sun, December 5, 1999: "An Evil Harvest" by T. Burnett.

<sup>15</sup>Richard Lloyd (of Landmine Action): Nov 29, 2000 in Jane's Defence Weekly. However, see also ICRC Kosovo Report, page 9 (footnote #36 below)

<sup>16</sup>ICRC "Explosive Remnants of War" Kosovo Report, August 2000, page 9.

The directive mentioned in the following Human Rights Watch memorandum to CCW delegates (in 1999) is a reference to civilian deaths from cluster bombs that detonated on civilian targets but it is unclear whether the directive was intended to address cluster bombs that failed to detonate as designed, and not poor targeting only:

"Human Rights Watch has learned that in mid-May, President Clinton issued a [temporary] directive prohibiting further cluster bomb use in the conflict -- indicating perhaps both a recognition of the humanitarian impact, and the lack of necessity to use the weapon to accomplish the military objectives. In doing so, the president has set a precedent for restricting cluster bomb use. Indeed, recognizing the danger to civilians, air combat commander Maj. Gen. Michael Ryan (now U.S. Air Force chief of staff) decided during Operation Deliberate Force in Bosnia in 1995 to prohibit cluster bomb use."<sup>17</sup> [Emphasis added.]

A July 1997 "official US document prepared for use at the Ottawa Convention negotiations in Oslo" stated that when the BLU97/B cluster weapon "fails to operate as designed and remains unexploded (it) can be detonated or exploded by the presence, proximity or contact of a person [and] when detonated or exploded, produces an effect similar to a traditional anti-personnel landmine."<sup>18</sup>

## **6. Mines Action Canada's mandate regarding cluster bombs**

1. Mines Action Canada's mandate includes commitment to "a complete ban on the use, production, stockpiling, and trade of anti-personnel mines and other weapons which function like anti-personnel mines, including cluster bombs and anti-vehicle/anti-tank mines with anti-personnel effect." (MAC objectives, September 27, 1999). As such, advocacy of a moratorium (or ban) on cluster bombs is presently mandated if the weapons have anti-personnel effect (i.e., they are the equivalent of antipersonnel mines due to significant humanitarian impact *when, or because, they are victim-activated*).

2. Mines Action Canada members CIDC, CARE Canada, COCAMO, PGS, UNAC (NCRB), and World Vision signed a letter to the Standing Committee on Foreign Affairs looking at the Kosovo intervention by NATO. In that letter they wrote:

"Cluster bombs need to be examined under principles of International Humanitarian Law to determine whether they are inherently indiscriminate (whenever they are used or only when they fail), whether they are prone to indiscriminate use, are excessively injurious, whether they cause unnecessary suffering, have a disproportionate impact on civilians compared to their military utility, or violate the dictates of public conscience. The fact that previous use of the same weapons in the Gulf War provided ample evidence of their impact on civilians, friendly troops and post-war recovery raises serious issues of negligence."<sup>19</sup> [emphasis added]

4. The Mennonite Central Committee (USA) call for a moratorium on cluster bomb use, manufacture, sale and transfer has been signed (as of December 7, 2000) by these Canadian organizations: MCC (Canada)\*, Project Ploughshares\*, Project Ploughshares (Calgary)\*, PGS\*, WILPF (BC) and Lethbridge Network for Peace. [\* denotes a Mines Action Canada member]

5. The ICBL does not have a formal advocacy position on cluster bombs. According to the Ethics and Justice Working Group Report in the Landmine Monitor 2000 report: "After the NATO bombing in Kosovo, the EJWG began discussions about the feasibility of including cluster bombs in the ICBL ban call. The issue was raised at the ICBL Coordination Committee meeting in September 1999, where it was decided that the sole focus of the ICBL would remain the ban on AP mines, but that national campaigns and/or member organizations could individually look at ways of addressing the issue of

---

<sup>17</sup>Air Force and Joint Chiefs of Staff officers, October 1999  
(Human Rights Watch Memorandum to Convention on Conventional Weapons (CCW) Delegates 6 December 1999;  
<http://www.igc.org/hrw/about/projects/arms/memo-cluster.htm>)

<sup>18</sup>Rae McGrath in "A Wasteland Called Peace": <http://www.icbl.org/resources/raejune99.html>

<sup>19</sup>Statement issued by several members of Mines Action Canada to SCFAIT during consideration of Canada's role in Kosovo, Feb 21, 2000.

cluster bombs...The EJWG also calls upon organizations to work [...] to develop sustained debate on a review of the definition of AP mines contained in the Mine Ban Treaty."

## **7. Non-governmental Responses**

Many NGO responses have been more immediate than most government responses. They have varied from a call for an immediate ban; to a moratorium, (and then a study and ban if the failure rate of cluster bombs cannot be dramatically reduced or eliminated); and have included advocacy of strict civilian area avoidance during cluster bomb use. In effect, these responses have reflected the application of international humanitarian law and requirements of proportionality, discriminatory issues based on both failure rates and targeting issues, attention to severity of injuries, obligations for clearance of UXO, and attention to the assistance and rehabilitation of victims and communities affected.

The International Committee of the Red Cross was a leader in the campaign to ban landmines and many other weapons. They noted in their Dec 14, 2000 report to the annual meeting of the CCW that while the international community has made "significant progress in addressing the humanitarian problem caused by anti-personnel mines, there are no international legal measures in place to lessen the human suffering and long-term consequences of other 'explosive remnants of war'. The rules of amended Protocol II "do not apply to submunitions and other unexploded ordnance and thus have no impact on the problem caused by these munitions..."<sup>20</sup>

The Red Cross issued a call for a new protocol to include ALL explosive remnants of war, and which would cover cluster munitions, anti-tank/anti-vehicle mines, anti-handling devices, "unexploded artillery shells, bombs, landmines, grenades, booby traps and even missiles".<sup>21</sup>

The Mennonite Central Committee (US) supports a full ban and is leading a campaign for signatories to a petition calling for a moratorium on cluster bomb use, manufacture, sale and transfer. "Whether dropped from the air, blasted from cannons, or "delivered" by cruise missiles, the characteristics of cluster munitions are so abhorrent, so inherently indiscriminate, and so likely to cause unnecessary suffering, that they should be banned."<sup>22</sup>

MCC argues in a second report that "We can take no comfort in the knowledge that cluster munitions are not designed to kill and maim indiscriminately long after a conflict has ceased. We know from experience that cluster weapons are difficult to target with precision, that their "footprints" may cover large areas of land, and that even low dud rates will result in large amounts of unexploded ordnance. These results are not isolated, but can be predicted with certainty any time that cluster weapons are used. On these things military planners and those living in countries torn by war agree."<sup>23</sup>

A selection of additional excerpts from nongovernmental organization positions on cluster bombs follows in appendix 4.

## **8. Technical Discussion**

### **8.1 Are cluster bombs the legal equivalent of APM?**

There is no general legal consensus as to whether cluster munitions are APMs in a legal (*de jure*) sense<sup>24</sup>, even if they are *de facto* landmines as evidenced by the humanitarian impact which occurs when they fail to function as designed. Regardless of

---

<sup>20</sup> However, the ICRC notes in their Kosovo report (2000) that "in 1974, 13 States proposed a prohibition on anti-personnel cluster bombs at the Diplomatic Conference on the Reaffirmation and Development of Humanitarian Law".

<sup>21</sup> Section 3a, "The problem of unexploded ordnance" in "Report of the ICRC to the Preparatory Committee of the 2001 Review Conference of the United Nations Convention on Certain Conventional Weapons", December 14, 2000

<sup>22</sup> <http://www.mcc.org/clusterbomb/>

<sup>23</sup> [http://www.mcc.org/clusterbomb/drop\\_today/index.html](http://www.mcc.org/clusterbomb/drop_today/index.html)

<sup>24</sup> See the definitional clauses in the Convention on Certain Conventional Weapons, Ottawa Treaty

their status, there are broad legal restraints in terms of proportionality and discriminancy that include the weapon whether it fails to function properly or not.

Not unlike APMs (i.e., those *clearly* defined as APMs), cluster bombs can fail to function as designed because of military practice (when they are dropped too high, too low, over soft terrain, into a forest canopy or in any other manner as to prevent immediate detonation.) The Red Cross pamphlet that looked at the impact of landmines, "Anti-personnel Landmines: Friend or Foe",<sup>25</sup> concluded that the use of remotely-delivered AP mines will almost certainly cause vastly increased civilian casualties, even if such mines are designed to be self-destructing and self-deactivating, in part (and most pertinent to cluster bombs) because "self-destructing and deactivating devices may be unreliable; inactive mines, like unexploded ordnance, can still be dangerous; and the mere presence of mined areas will produce fear, keeping civilians out of areas important for their livelihood".

However, as far back as 1966, when the US Air Force tested and evaluated the impact pattern of BLU-26 cluster bomblets under controlled conditions at Nellis Air Force Base, 26 percent of the bomblets (173 of 663) failed to explode.<sup>26</sup> While 26% failure is at the high end of estimated cluster munitions failure rates (estimates run from 4% to 30% failure)<sup>27</sup>, it resulted during ideal test conditions and was apparently not the result of improper or hurried techniques in delivery.

There is an important distinction to be made between failure rates caused by "malfunction" (failure to explode upon impact shortly after contact or above targets as intended), and mistargeting into civilian areas but with successful detonation. (Cluster bomb use has resulted in significant casualty rates for different reasons, and while targeting issues causing "collateral damage" are not part of the consideration of cluster bomb dud rates, they do raise additional humanitarian concerns.)<sup>28</sup>

*Cluster munitions that cause both an unintended and an APM-like impact do so when they fail to operate as designed. That unintended impact occurs as a result of their conversion into a victim-activated weapon.*

Until the campaign to ban antipersonnel landmines -- and the publicity surrounding the use of cluster bombs in the conflict in Serbia/Kosovo -- the weapon's failure rate had unfortunately not been a widely known issue, nor one acquiring urgent government attention. ***This does suggest that the norm highlighting legal obligations related to proportionality and indiscriminancy was broadened as a result of the establishment of the Mine Ban Treaty.***

Failure in design (or "by design") is both an engineering and a legal humanitarian issue. The problem of addressing restrictions on APMs and APM-like weapons by reference to their "design" or by their "effect" was noted by Peter Herby of the Red Cross (ICRC) in September 2000:

---

<sup>25</sup> Published by ICRC in 1996, page 73.

<sup>26</sup> Landmines and Unexploded Ordnance, Rae McGrath 2000, page 23; MAC workshop on mine-like weapons, January 2000.

<sup>27</sup>"According to the General Accounting Office, the failure rate in cluster weapons is extremely high, between 5% to 30%. These unexploded bombs essentially become landmines and wreak havoc and kill civilians long after a war is over." <http://www.house.gov/kucinich/info/defense.htm#cluster>; "The Ministry of Defence, which says RAF planes dropped 531 cluster bombs during the Kosovo war, quotes the manufacturer's estimate of a 5% failure rate. But the UN Mine Action Coordinating Centre in Kosovo gives a much higher figure. In Kosovo, preliminary statistics for the British RBL755 [a cluster bomb available on the open arms market] show that the failure rate is about 11-12%", the centre said in March. Moreover, the MoD has itself admitted that the failure rate of cluster bombs used in the Falklands was at least 9.6%, nearly twice as high as the manufacturer's claims." From the Guardian August 8, 2000 <http://www.guardianunlimited.co.uk/international/story/0,,351742,00.html>

<sup>28</sup>"[a] leaked internal report from the British Ministry of Defense, [...] admitted that 60% of the Royal Air Forces' cluster bombs missed their intended target or remain "unaccounted for". R. Norton-Taylor, "MoD Leak Reveals Kosovo Failure" The Guardian August 15, 2000.

"Antipersonnel landmines were doing what they were meant to do, but were not being used properly. Cluster bombs are causing this problem because they're not doing what they were designed to do, so it's a bit more difficult to argue on humanitarian grounds."<sup>29</sup>

In other words, anti-personnel mines can cause a significant humanitarian impact when they function properly but are used improperly, whereas significant and predictable numbers of cluster munitions can cause victim-activated effects only when they malfunction. Because "functioning according to design" becomes particularly important if the legal definition is so determined, many have come to accept that (notwithstanding differing interpretations of definitions inserted into the mine ban treaty) anti-personnel mines are those weapons designed to be triggered by the innocent act of the victim, whereas the cluster bombs (of this discussion) are not so designed.

This distinction is not minor, as Mary Foster points out in Ploughshares Monitor (September 1999):

"Because cluster bombs are not designed to be victim-activated, they generally are not considered to fall under the treaty prohibition, even though they are known to act in the same way. Thus the treaty currently fails to prevent civilians from being subject to this mine-like weapon. Future reviews of landmine-related treaties may be good opportunities to address this limitation internationally but, in the meantime, states such as Canada which are committed to addressing the problems caused by this type of weapon could take unilateral action at the domestic level."<sup>30</sup>

There is still some doubt however, even in the view of the U.S. military, whether or not the land mine treaty does cover failed cluster munitions acting as *de facto* land mines. During an interview in July 1997, three senior U.S. Defense Department officials outlined concerns the Pentagon had with the absence of the words "primarily designed" in the context of the definitional clause of the Ottawa Treaty. Would the definition of the weapons the treaty covered state that APMs are those weapons "primarily designed" to be victim-activated? One official commented that:

"...[A] number of groups and institutions out there [...] want to make this ban, CCW or APL ban, as inclusive and as broad as possible. So what we had the people in our acquisition and technology community do, was go through that definition with our lawyers, take the results of CCW and say to which systems could this definition be stretched if someone chose to do that [...] And the answer was horrifying even to us. Not only do they capture our four or five land mines that we expected, it caught a total of 35 systems, some as far afield as ATTACKMs and various types of bombs and many munitions that have nothing to do with land mines.

"[...] I manage a program for Laos where we do about \$3 million a year with the Laotian Government, 95 percent of that problem is unexploded ordnance dropped there during the '60s and '70s. These were old cluster-bomb type units. And under some circumstances, if you took the existing land mine ban definition, without that "primarily" in there it could be, in fact, stretched to include this high unexploded ordnance rate. [Emphasis added]

"That could knock out a number of systems that we really do need -- some of our runway and island munitions and that sort of thing, and that's what we're concerned about. We want to be sure that if we're talking a land mine ban, we're talking land mines. That is what we're trying to do here."<sup>31</sup>

The Ottawa Treaty definition of antipersonnel landmine, while referring to the "design" and not "effect" of the weapon in determining what is a landmine, did not include the combination of words "primarily designed".

---

<sup>29</sup> Guardian Unlimited, Sept 6, 2000.

<sup>30</sup><http://www.ploughshares.ca/content/MONITOR/mons99c.html>

<sup>31</sup> Transcript, July 3, 1997 U.S. Defense Department Briefing on Land Mines; also reported in Mother Jones, May 28, 1999. [http://www.motherjones.com/total\\_coverage/kosovo/reality\\_check/cluster.html](http://www.motherjones.com/total_coverage/kosovo/reality_check/cluster.html)

The final report to the International Criminal Tribunal for Former Yugoslavia (ICTY) Prosecutor by the committee established to review the NATO bombing campaign, (released in June 2000) also looked at the question of cluster bombs as *de facto* landmines and concluded that:

**"There is no specific treaty provision which prohibits or restricts the use of cluster bombs although, of course, cluster bombs must be used in compliance with the general principles applicable to the use of all weapons.**

"Whether antipersonnel landmines are prohibited under current customary law is debatable, although there is a strong trend in that direction. There is, however, no general legal consensus that cluster bombs are, in legal terms, equivalent to antipersonnel landmines. It should be noted that the use of cluster bombs was an issue of sorts in the Martić Rule 61 Hearing Decision of Trial Chamber I on 8 March 1996. In that decision the Chamber stated there was no formal provision forbidding the use of cluster bombs as such (para. 18 of judgement)..."<sup>32</sup> (Emphasis added).

In other words, the committee found there was no general agreement that (failing) cluster bombs are by definition antipersonnel mines, but regardless, cluster bombs could not be used in such a way that they would violate the proportionality and discriminancy provisions in international humanitarian law.

### **8.2 Can Cluster Bombs Be Fixed?**

Some senior members of the U.S. military have shown interest in reducing the failure rate of cluster bombs. The Aviation Week & Space Technology article is excerpted at some length below because of the important implications of any U.S. military re-assessment of the weapon and their efforts at redesign in 2000 -- almost 35 years after earlier tests of cluster bombs at Nellis Air Force base:

"The U.S. Navy is spearheading an effort to alleviate those concerns, stepping out even before senior Pentagon officials articulate their policy [emphasis added.] The service is leading an effort to improve or replace the BLU-97 cluster bomb used on the AGM-154A Joint Standoff Weapon and the Tomahawk cruise missile. The Air Force also is part of the effort, in part because it uses JSOW and, more importantly, because the submunition is part of the CBU-87 and CBU-103 Combined Effects Munitions.

"Obviously, in recent times, we have become sensitized to the unexploded ordnance issue," says Navy Capt. Robert Wirt, program manager for conventional strike weapons. "Events in the last year, in particular out of Kosovo, [are] really what has caused us to sit back and readdress what we want to do here.

"...The Navy is setting some very ambitious performance requirements. If industry chooses to try to improve the reliability of the existing submunition, it would have to increase to 99% from the current 96%<sup>33</sup>. In fact, the Navy would like to get to a 99.9% level (emphasis added). "The technology to take reliability to that level is going to be very tough," Wirt acknowledged.

"...The timeline the Navy is setting could also prove to be a challenge. The service wants a fix fielded by 2005, reflecting what it believes the Pentagon policy is going to mandate. But there are some aspirations to have a system ready as early as 2003. Whether the improved submunitions would be retrofitted into existing systems hasn't been determined.

"...Design alternatives are being kept open by Navy officials. One potential solution includes adding a battery to each submunition, which would cause the bomblet to explode within a set time after impacting the ground."<sup>34</sup>

---

<sup>32</sup><http://www.un.org/icty/pressreal/nato061300.htm> Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia.

<sup>33</sup>A failure rate of only 4% is disputed by other sources.

<sup>34</sup>Aviation Week & Space Technology, November 27, 2000: "Criticism Forces Bomb Upgrade", Robert Wall; <http://www.aviationnow.com>

More than a year earlier, U.S. Senator Patrick Leahy, in a statement to the U.S. Senate on August 03, 1999, also recommended action to address the dud rate of cluster bombs, including the possibility of a redesign through self-deactivation by battery expiration:

"First, we need to significantly reduce or eliminate the problem of dud cluster bombs that remain active and dangerous. We have the technology to make landmines self-destruct or self-deactivate after a short period of time. Why can't that same technology -- usually a simple battery that runs out after a few hours -- be applied to cluster bombs? It needs to be done.

"I am not the only one concerned about this. The same concerns have been conveyed to me by active duty and retired members of our Armed Forces. Just recently, the House Armed Services Committee included language in its report accompanying the fiscal year 2000 National Defense Appropriation Act, which directs the Secretary of Defense to establish a defense-wide program to develop affordable, reliable self-destruct fuses for munitions.

"I see a real problem, and countless tragedies, resulting from the way these munitions are designed and used. We can do better." [Emphasis added.]

### **8.3 Can Cluster Bombs Be Accurately Targeted?**

There is significant evidence that large numbers of civilian casualties from cluster bomb use were not caused by munitions failing to explode as designed, but by the wide footprint of the weapon both properly and improperly targeted, and particularly when dropped from high altitudes.

In his study, "The Technology of Killing"<sup>35</sup>, Eric Prokosch noted that there was no evidence that the United States military deliberately targeted civilians in their cluster bombing campaigns in Vietnam. However, it was likely that pilots were given some discretion when engaging in attacks on "targets of opportunity" that did not clearly distinguish military from civilian vehicles. The known wide area coverage of cluster bombs was used to compensate for bombing errors and imprecision and thus "any civilians nearby who had not taken shelter stood a good chance of being hit." But inherent bombing inaccuracy was also a problem: "According to a recent study of the air war [U.S.] jets bombing from an altitude of 6,000 feet 'could expect to put about 75 per cent of their load to within 400 feet of the aiming point. In bad weather, bombs often fell between 1,500 and 2,000 feet from the intended targets'".

The precision of the spread of the cluster bomb contents (its footprint) decreases with the increase in aircraft altitude. International humanitarian law requires that pilots restrict the release of their munitions in consideration of known civilian concentrations (rural or urban) and according to the expected maximum footprint spread, which should be predictable. However, it is unclear whether proper targeting practices will be followed or can be enforced.

The landmine campaign considered the problem of landmines being used improperly by both "developed" and "third world" armies or insurgents. The ICRC found that "it would be unwise to base the continued use of landmines on the premise that mines can be used in a lawful and responsible fashion. The historical evidence would indicate that they rarely are [...] and that their effects cannot be limited as doctrine presumes."<sup>36</sup> The Red Cross noted that the "incorrect" use of landmines was consistent throughout the range of conflicts under study, "whether by intention or inadvertence or because of the impracticality of observing specific rules in the heat of battle".

The ICRC noted that in May 1999, following several bombing errors, the US military "defended the use of cluster bombs, claiming that the weapons were as accurate as other gravity bombs and remained effective against troop concentrations,

---

<sup>35</sup>The Technology of Killing: A Military and Political History of Antipersonnel Weapons, Eric Prokosch, 1995, see pages 83-99.

<sup>36</sup> Anti-personnel Landmines: Friend or Foe, ICRC, March 1996, page 39.

airfields and other large military targets. But, reportedly, a few days after the mistaken cluster-bomb strike on the Yugoslav city of Nis, a confidential White House directive prohibited further use of cluster bombs by US forces..."<sup>37</sup>

---

<sup>37</sup>ICRC Kosovo report, page 9. The report also quotes the UK Ministry of Defence report that pointed out that "the type of cluster bomb used by the US was discovered to have a fault and was temporarily withdrawn from service, being returned to service shortly thereafter for use until the end of the conflict." (Emphasis added)

## Key Strategic Considerations for Guiding Mines Action Policy

1. One key consideration is whether the *norm being established against the effect of victim-activated weapons* or -- using the phrasing of the ICRC -- "explosive remnants of war" *is put at risk* if APM ban campaigners do not ensure that weapons that have the same effect as landmines (at least when they operate as *de facto* landmines) are not also banned. Who else would begin and sustain such a campaign if campaigners on a closely related weapon system have determined to steer clear of it? And if a prime objective of the Mine Ban Treaty was to buttress existing international humanitarian law on questions of proportionality and discriminancy, *would the spirit or momentum of the treaty itself be damaged* if mine-like weapons (such as cluster bombs) when triggered in a similar way and that cause similar humanitarian effect, were not also banned? There is strong logic to the argument that refraining from taking a clear and public position against cluster bombs puts into question campaigners commitment to the "effect definition" presumed by many to have been achieved by the landmine campaign and the Ottawa Treaty.

2. The most important consideration in developing a MAC policy on cluster bombs is an evaluation of the net political and subsequent humanitarian effect of implementing that policy. In terms of the norm being established against antipersonnel landmines (that is, those weapons unambiguously defined as APMs), which is at the core of Mines Action Canada's mandate, one unavoidable question is whether muddying the waters about what does and what does not define an antipersonnel landmine, helps or hinders either the ban campaign against landmines or the moratorium/campaign against cluster bombs. Would "opening" the mine ban treaty's APM definitional clause in order to unambiguously include cluster bombs *inhibit* the universalization of the Ottawa Treaty and its influence on the use of APMs? If that was the case, would the repercussions then subsequently *inhibit* a successful campaign against cluster bombs?

The jury is out on whether this would occur, but the International Campaign to Ban Landmines, by its decision to not include cluster bombs as a primary ICBL focus, has concluded (at this point in time) that "opening" the Treaty is probably not a productive strategy for the successful elimination of APMs. However, the ICBL has recognized a difference of opinion among its member groups and has encouraged the development of independent positions on cluster bombs.

3. A third consideration is whether campaigners advocating a moratorium or ban on cluster munitions are in effect "stretching" the definition of landmines to include as wide a range of weapons as possible, and by doing so damage the relationship that has developed between campaigners and governments.

One question here is whether campaigners are being dishonest by insisting on an inclusive interpretation of international humanitarian law as it relates to the mine ban treaty definition<sup>38</sup>. Definitional "creepage" might be charged against an attempt to enlarge the definitional language *within the Mine Ban Treaty* to include weapons that were *known to be intentionally excluded* by governments at the treaty writing and eventual signing in Ottawa in December 1997. Arguably, cluster bombs were so excluded.

Another related question, then, is whether restrictions, a moratorium or a ban on cluster bombs might be better addressed in a treaty separate from the landmines treaty, or in a different forum such as the Convention on Certain Conventional Weapons (CCW).

Canadian government officials had assured campaigners at MAC during a number of debriefing sessions prior to and after December 1997 that the Mine Ban Treaty was incorporating an effect-based definition of APM, even though that assumption has been in dispute since. Italy wrote an effect-based definition into its national implementing legislation and Canada asked that the "ban by effect" interpretation be recorded into the minutes of at least one text-negotiating conference. While the positions of Italy and Canada were arguably stronger than those of other MBT signatories in terms of domestic legislation, it would probably be disingenuous to argue that other States Parties did not realize what they had signed, when they signed. The Canadian government ordered the destruction of tilt rod fuses (a device excluded from the treaty, yet a victim-triggering

---

<sup>38</sup> The Ottawa Treaty defines anti-personnel mine as a "mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons". A mine is defined as a "munition designed to be placed under, on or near the ground or other surface area and to be exploded by the presence, proximity or contact of a person or a vehicle." Cluster munitions are not designed to be exploded by targeted persons.

mechanism) for anti-tank mines in November 1997, prior to, but in the spirit of signing the Ottawa Treaty.<sup>39</sup> While Canada did take this action, this country did not ban cluster bombs. Nonetheless, cluster bombs in inventory were not used during the NATO-Serbia campaign by Canada.

Similarly, as noted in Landmine Monitor 2000, Norway was supportive of the broad interpretation of the treaty and was "one of the governments which reiterated the understanding of the treaty's definitions that antivehicle mines with antihandling devices which function like AP mines -- which may explode from an unintentional act of a person -- are banned under the MBT. The government supported a proposal to form an informal expert group to examine the antivehicle mine issue."<sup>40</sup>

Several countries, including Canada and other mine ban treaty early signatories or NATO members have shown interest in the International Committee of the Red Cross reports on explosive remnants of war in Kosovo and elsewhere, and the addressing of the cluster bomb problem in CCW deliberations. Significantly, the U.S. military has admitted by its research into cluster bomb re-design, that the present design is problematic.

4. A fourth consideration is whether an NGO national campaign organized to ban landmines should be "broadened" to include the advocacy of restrictions or a ban on specific mine-like weapons.

There appears to be significant interest and very little reluctance by Mines Action Canada members to give attention to a campaign against cluster bombs with anti-personnel effect. The MAC coalition has frequently looked at a variety of mines and mine-like weapons within its sphere of advocacy and mine action. Historically, the mine clearance aspect of mine action has not, *and could not*, selectively choose between APMs, ATMs, cluster bombs or other UXO in terms of detection, disposal and destruction. A number of MAC members signed a letter to the Standing Committee on Foreign Affairs looking at the NATO campaign in Serbia/Kosovo and requested that cluster bomb use be evaluated for impact on civilians, discriminancy, and proportionality. At the MAC annual general meeting in March, 2000<sup>41</sup>, a discussion of mine-like weapons took place, and the Steering Committee was encouraged to draw up guidelines to address a range of victim-activated weapons, including cluster bombs.<sup>42</sup>

5. A fifth consideration is of the manner by which Mines Action Canada would approach solutions to the problems of cluster bombs that fail to operate "as designed", and of targeting.

There is general agreement by many nongovernmental, humanitarian organizations and some governments that the failure rate of cluster bombs is unacceptable in terms of the requirements of international humanitarian law. In some sectors there is an interest in evaluating the feasibility of substantially reducing or eliminating the failure rate. This is a reliability question that requires the assessment of a technical evaluation. In humanitarian terms, it is true that a dramatic reduction in cluster bomb detonation failures to a fraction of a percentage (or to zero failure) would significantly improve on their legal status and place them in the same category as other weapon systems that are reliable and legal, even if still contentious .

---

<sup>39</sup> Landmine Monitor 1999, page 231, indicates that tilt rod fuses were being "destroyed in compliance with the treaty". The fuse-stripped anti-tank mines were scheduled for destruction "the coming year". Mines Advisory Group has pointed out that while tilt rod fuses are designed to trigger ATMs by the passage of a tank, they can nonetheless be triggered by a person.

<sup>40</sup> Page 698. See also LM1999, page 640, where Norway states that AHD for TM "are used", indicating a change of position between January 27/March 12, 1999 and January 2000.

<sup>41</sup> Draft minutes of MAC AGM, March 28-29, 2000: "The original goal of the ban campaign was to ban a class of weapons having a similar humanitarian impact. There was a discussion on cluster bombs, Claymore mines, tripwires, anti-handling devices (AHD), anti-tank mines (ATM) and other mine-like weapons. It was noted that if MAC does not address a particular family of mine-like weapons, these may not be addressed at all. It was also noted that there are risks to the progress of the Mine Ban Treaty that must be taken into consideration. All present agreed that MAC activities regarding mines and mine-like weapons should be based on humanitarian concerns and as such these activities are not limited to the wording of the Treaty. Strategies will be carefully selected and priorities will be determined for which mine-like weapons MAC should work on."

<sup>42</sup> It has also been noted elsewhere that MAC and other members of the ICBL considered that the impact and clean-up requirements of both APMs and cluster bombs were similar enough to include them together early in the landmine ban campaign.

Self-destruct or self-deactivating cluster bombs would continue to be subject to the qualifications ICBL campaigners placed on similarly designed ("smart") APMs.<sup>43</sup> However, the reduced failure rates in both cases significantly diminish the kill-injury humanitarian impact, if not the area-denial impact on communities, or the nature of the injury profile on the human body of any individual weapon. Unexploded but explosive remnants of war should always be treated with extreme caution. Nonetheless, the tragic consequences upon lives and limbs would not be the same concern if short duration, self-destruct/self-deactivating mechanisms were installed and *they were completely reliable*.<sup>44</sup> In theory at least, land would not be denied after the self-deactivating period had passed.

There may not be a consensus on the ethics of redesigning cluster bombs, particularly from the perspective of disarmament and humanitarian organizations that are working for removal of aberrant weapons system, and not for their "improvement". ***Momentum in either direction, however, would be served by the call for an immediate moratorium, and then consideration of a ban if the opportunity became available.***

Cluster bomb targeting issues are not related to the mechanism failures which make the weapon *de facto* landmines. However, intentional and accidental mistargeting does fall within the jurisdiction of international humanitarian law and the requirement that militaries avoid civilian casualties. Evidence needs to be collected to confirm whether or not cluster bombs have inherent targeting problems to explain why or whether past military practice has not been made consistent with international law.<sup>45</sup>

---

<sup>43</sup>A controversial discussion of the problem of "persistent" mines and related weapons can be found in "Toward a Genuine Humanitarian Landmine Regime", by Dale Copper in Disarmament Diplomacy, #47.

<sup>44</sup> Advocates of self-deactivating mines argue that even if timing mechanisms fail, the mines will become harmless once the batteries discharge. The remaining issues in this context are battery life duration, the relative danger of explosive material that does not have an active detonator yet where it does not self-destruct, and whether cluster munitions would be accompanied by self-deactivation and self-destruct mechanisms.

<sup>45</sup> Cluster bombs are believed to have been dropped from greater than 15,000 feet during the Iraq and Kosovo conflicts.

## Recommendations

In view of these considerations, this report recommends that:

1. Mines Action Canada takes a strong, public position in favour of a moratorium on production, sale, transfer and use of cluster bombs *as soon as possible*.
2. Without prejudice to the advocacy of a moratorium or ban on use of cluster bombs, MAC should support the requirement that *cluster bomb users clear post-conflict ordnance and provide compensation to victims*.
3. *MAC should call on the Canadian government to:*
  - take a public position calling for a moratorium on production, sale, transfer and use of cluster bombs;
  - refuse participation in alliance exercises or campaigns where these weapons continue to be used by allies during the period of the moratorium or subsequent ban.
4. At this time, MAC should show a preference for a route other than opening up the Ottawa Treaty for addressing the problem of cluster bombs. This would be with the intention of ensuring continued support for the "ban by effect" definition, but without endangering the universalization of the campaign against APMs. MAC should encourage countries to support the efforts of the ICRC in line with their "explosive remnants of war" proposals presented at the CCW Review in December 2000 (see Appendix 1b).
5. MAC should show leadership on this question and encourage a maximum number of ICBL members to take a strong position against cluster bombs.
6. MAC should be engaged in the dissemination of information and further study of the cluster bomb issue, including through participation in work to accumulate reliable data on: targeting issues; the historic use of cluster bombs; their international impact; the extent of their contemporary use and medical/socio-economic and community impacts compared to APMs; cluster munitions and bomb clearance costs and the effect of cluster munitions on explosive ordnance disposal (EOD) procedures; the type and frequency of deminer injury incidents.
7. MAC should assess coalition expenses in terms of personnel and time for cluster bomb related activities and consult with its membership to determine priorities, strategy and funding sources to cover this additional activity.

---

**[Rev6, April 5 2001]**

*Appendix 1: ICRC reports*

**1A: From the ICRC Report: "Explosive Remnants of War: Cluster Bombs and Landmines in Kosovo", August 2000, page 39.**

1. The use of cluster bombs and other types of submunitions against military objectives in populated areas should be prohibited, as is currently the case with incendiary weapons (another weapon causing area-wide effects) under Protocol III of the 1980 UN Convention on Certain Conventional Weapons.
2. Responsibility for the clearance of all unexploded ordnance should be assigned to those who have used them, as is currently the case for landmines under the terms of amended Protocol II (Article 10) of the 1980 UN Convention on Certain Conventional Weapons.
3. All necessary technical information concerning the location, dangers, detection and destruction of cluster bombs and other munitions should be made available to the United Nations and demining bodies immediately after the end of hostilities.
4. Warning of the threat posed by explosive "remnants of war" should be provided to civilian populations immediately after their use in a given area, as is the case for remotely-delivered landmines in the original and amended versions of Protocol II (Articles 5 and 8 respectively) of the 1980 Convention on Certain Conventional Weapons.
5. In order to reduce the risk to civilians in future conflicts, cluster bomb and other submunitions should be fitted with mechanisms which will ensure their self-destruction immediately after the device fails to explode upon impact as designed.
6. The use of cluster bombs should be suspended until an international agreement on their use and clearance has been achieved.

*1B: From the Report of the ICRC to the Preparatory Committee of the 2001 Review Conference of the UN Convention on Certain Conventional Weapons, December 14, 2000, Geneva*

The ICRC believes that States should consider a comprehensive approach to addressing the problem of explosive remnants of war. To be effective such an approach must seek to:

1. prevent munitions from becoming unexploded ordnance in the first place,
2. ensure rapid warning to civilian populations of the specific dangers of unexploded ordnance, and
3. ensure the rapid and safe clearance of unexploded ordnance,

In the case of submunitions, civilians should also be extended protection from their area-wide effects through specific rules on targeting.

To achieve these objectives the ICRC proposes that States Parties consider the adoption of a new protocol to the CCW to address the problems caused by explosive remnants of war. Such a protocol would deal comprehensively with the use and clearance of munitions -- including anti-vehicle mines, submunitions and other munitions.

Possible elements of such a protocol would be the following:

The central principle that those who use munitions which remain after the end of active hostilities are responsible for clearing or providing the technical and material assistance needed to ensure the clearance of such ordnance. Explosive munitions and submunitions should self-destruct if they fail to detonate on impact and be made detectable...

The principle that technical information to facilitate clearance should be provided to mine clearance organizations immediately after the end of active hostilities in an affected area...

The principle that those who use munitions likely to have long-term effects should provide warning to civilian populations on the dangers of such ordnance...

For submunitions only (whether delivered by air or ground based systems) - a prohibition of use against military objects located in concentrations of civilians.

**Appendix 2: Mennonite Central Committee (USA) CALL FOR A MORATORIUM ON CLUSTER BOMB USE, MANUFACTURE, SALE AND TRANSFER**

We the undersigned call on all states and non-state actors to agree to:

1. An immediate moratorium on the use, manufacture, sale, and transfer of cluster bombs, including airdropped cluster munitions, missile launched cluster munitions, and cluster munitions launched by Multiple Launch Rocket Systems and artillery projectiles (Dual Purpose Improved Conventional Munitions).
2. Further regulation or restriction on cluster bomb use, manufacture, sale, and transfer under the Certain Conventional Weapons Treaty or other appropriate international fora.
3. Strong accountability measures for cluster bomb users, related to ordnance clearance and compensation to victims.

**Organizational Endorsements (as of December 7, 2000)**

**Australia**

1. Australia Yearly Meeting of the Religious Society of Friends
2. Australian Campaign Against Arms Trade
3. Australian Network of the ICBL  
Patricia Pak Poy

**Austria**

4. Austrian Aid for Mine Victims

**Canada**

5. Mennonite Central Committee Canada
6. Project Ploughshares
7. Project Ploughshares Calgary
8. WILPF BC
9. Physicians for Global Survival (Canada)
10. Lethbridge Network for Peace

**Egypt**

11. Arab Organization for Human Rights
12. Landmines Struggle Center

**Italy**

13. Xaverian Missionary Institute, Italian Region
14. Mine Action Unit Coordinator

**Laos**

15. Consortium Laos

**New Zealand**

16. Caritas Aotearoa New Zealand
17. New Zealand National Consultative Committee for Disarmament
18. Religious Society of Friends (Quakers) Aotearoa/New Zealand
19. Engineers for Social Responsibility
20. New Zealand Campaign Against Landmines

**United Kingdom**

21. Landmine Action UK

**United States**

22. Mennonite Central Committee US
23. Mennonite Central Committee
24. Friends Committee on National Legislation
25. Human Rights Watch
26. National Council of the Churches of Christ in the USA
27. Church World Service

28. World Policy Institute at the New School
29. Veterans for Peace, NYC Chapter
30. Lombard Mennonite Peace Center
31. Raoul Wallenberg Humanitarian Institute
32. Asia Pacific Center for Justice and Peace
33. Jhai Foundation
34. Council for a Livable World
35. Peace and Security Program
36. American Friends Service Committee
37. Veterans for Peace
38. Federation of American Scientists
39. Restorative Justice

**Second Annual Meeting of the States Parties to the Amended Protocol II of 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**

**Statement of Canada  
Geneva  
11 December 2000**

Mr. President:

It is a fundamental principle of international law that the right of parties to an armed conflict to choose methods or means of warfare is not unlimited. And it is fundamentally important that civilian populations be protected against the effects of hostilities. It is for these reasons and more that Canada attaches a great deal of significance to the Convention on Certain Conventional Weapons (CCW).

This Convention can serve as a vital instrument in addressing the humanitarian impact of weapons deemed to be excessively injurious or to have indiscriminate effects. Of course, it is well known that work with the CCW failed in 1996 to meet the expectations of many States represented here today.

It was felt by many Parties that a lack of consensus within the CCW to effectively address the humanitarian impact of anti-personnel mines meant that extraordinary measures were required to achieve a comprehensive ban on that insidious weapon.

Through the Ottawa Convention we now have a higher standard with respect to anti-personnel mines.

To date the majority of the world's states - 109 as of December 8 - have formally accepted a complete ban on the production, use and transfer of anti-personnel mines as the only sustainable solution to the massive humanitarian impact of these weapons.

While international best practices with respect to anti-personnel mines lie within another Convention that has been accepted by many more States than Amended Protocol II, Canada believes that the Amended Protocol has an important place in international arms control. It is an instrument that Canada continues to support as a means for reducing the humanitarian impact of mines other than anti-personnel mines.

We are pleased that as we meet here today, the energy appears to exist to further improve the Amended Protocol - and other elements of the CCW.

We are grateful that the United States of America has put forward a proposal that would further enhance the protection to civilians from the effects of anti-vehicle mines.

Canada supports these efforts to develop minimal detectability standards for these mines and to require that these mines, when delivered remotely, are equipped with self-destruct and self-deactivation measures.

Canada also supports the idea put forward by the United States of America to consider the development of a compliance mechanism for the Amended Protocol.

If such a mechanism were developed - in a reasonable and balanced manner - it would significantly enhance this instrument and reinforce a spirit of cooperation that could contribute to the long-running success of the Amended Protocol.

Likewise, the entire Convention on Conventional Weapons could benefit from the US proposal to extend the scope of the CCW to cover non-international armed conflicts, just as is the case with the Amended Protocol at present.

Mr. President, while this meeting has been called as part of our obligation to meet annually to review the operation and status of the Amended Protocol, it is within the spirit of our work that I will briefly mention the humanitarian impact of explosive remnants of war.

While the international community has responded with great vigor to the problems caused by anti-personnel mines, other explosive remnants of war - including cluster bomb sub-munitions and anti-vehicle mines - kill or injure significant numbers of civilians, impede humanitarian assistance operations and hinder recovery in war-torn societies.

Canada appreciates that the International Committee of the Red Cross and various non-governmental organizations have brought this issue to our attention.

We believe that the CCW is the appropriate forum to further examine the problems caused by explosive remnants of war and that our initial examination of these concerns could take place as part of the preparatory process leading to the 2001 CCW Review Conference.

Therefore, Canada proposes that a 3-hour session be set aside during preparatory meetings the week of April 2-6, 2001 for an initial discussion on explosive remnants of war.

These initial discussions could be based upon brief paper to be prepared by interested States Parties that would attempt to identify:

(a) possible areas where progress could be made on these issues in the short term; and, (b) areas where further work and examination would be required.

Following the initial three-hour session in April, an agreement could be sought regarding how to proceed with discussions on this matter at the September 2001 preparatory meetings.

Mr. President, while we may celebrate the fact that since we met last year more States have agreed to accept the Amended Protocol, our celebration should be tempered by the fact that each year thousands fall victim to mines.

It is well known that Canada - and many other States here today - deplore any continued use of anti-personnel mines. Such acts exacerbate the humanitarian terror already caused by these weapons.

Canada also implores those who have to date accepted the limited restrictions of either the Amended Protocol - or the original Protocol II of 1980 - to fully comply with your commitments; commitments that include acceptance of the prohibition on the indiscriminate use of mines, booby-traps and other devices.

In the spirit of cooperation, if outstanding questions regarding compliance exist regarding these commitments, Canada encourages relevant Parties to provide clarification.

Mr. President, because Canada believes in the importance of Amended Protocol II, we believe we should be tireless in ensuring its ongoing relevancy.

In this regard, we urge States Parties to consider the full and effective participation of those international and non-governmental organizations which have established expertise in helping us understand the humanitarian impact of mines, booby traps and other devices - and the means used to address these problems in affected areas.

We urge States Parties, in considering the establishment of expert work programs, to avoid the establishment of such programs in areas where work is already being undertaken in an effective and inclusive manner in other forums.

And, in consideration of the fact that reports submitted under Article 13 contain valuable information on mine clearance and rehabilitation programs, we encourage all States Parties to make their reports readily available to all interested organizations.

Mr. President, as we proceed with our deliberations this week, let us also not forget that the decades-long use of landmines has meant that hundreds of thousands of individuals in dozens of States are now living with disabilities caused by these weapons.

While we have not made a legal commitment to these landmine survivors, we have a moral obligation to assist in their care, rehabilitation and socio-economic reintegration.

Let us also respect the memories of those whose lives have been lost as a result of the use of mines by diligently working to ensure that further progress can be made within the Convention on Certain Conventional Weapons.

Thank you.

#### **Appendix 4: Additional NGO responses**

##### **Human Rights Watch**

The Human Rights Watch memorandum issued to delegates at CCW in December 1999, stated:

"Human Rights Watch is calling for a global moratorium on the use of cluster bombs until humanitarian concerns can be adequately addressed [...] On the technical side, HRW believes cluster bombs should not be used until it can be demonstrated that the failure rate of cluster bombs can be reduced to a tolerable level from a humanitarian perspective. That level should be determined by humanitarian and military experts, but should certainly be less than 1%.

"Human Rights Watch asks that governments address this urgent humanitarian issue both domestically and at the international level. Consideration should be given to utilizing the Convention on Conventional Weapons as a means of establishing rules, restrictions, requirements, and/or prohibitions with respect to cluster bombs and their use that would minimize the dangers to and impact on civilian populations."<sup>46</sup>

##### **Amnesty International**

"NATO and its member states should ensure that cluster weapons are not used in the vicinity of civilian concentrations. As a humanitarian matter, NATO member states involved in KFOR should urgently assist the effort to clear unexploded submunitions from cluster weapons used in Operation Allied Force."<sup>47</sup>

##### **International Committee of the Red Cross**

The ICRC stated in their Kosovo report, Explosive Remnants of War, issued in August 2000 that:

"...the ICRC is proposing to governments that a new fifth Protocol on "Explosive remnants of war" be added to the 1980 UN Convention on Certain Conventional Weapons during the second Review Conference of this Convention to be held in late 2001. Such a Protocol would regulate the use and clearance of munitions and submunitions likely to remain after conflicts and assign responsibility for clearance to those who use these devices.

"In order to reduce the risk to civilians in future conflicts, cluster bomb and other submunitions should be fitted with mechanisms which will ensure their self-destruction immediately after the device fails to explode upon impact as designed.

"The use of cluster bombs should be suspended until an international agreement on their use and clearance has been achieved."<sup>48</sup>

##### **New Zealand campaign: CALM**

"We are calling for the ICBL to support a publicity campaign, such as they did for landmines, with the aim of getting those countries that have stocks of cluster bombs to unilaterally withdraw them from service until the producers are able to show that 99.95% of the bomblets will explode before or on hitting the ground.

"We are not in the business of banning a specific type of bomb when so many armaments could or should be banned. Although the horrors of cluster bomb use have been publicised and opposed by many over the last thirty years, New Zealanders should be pleased that CALM was one of the first national campaigns to call for a ban."<sup>49</sup>

---

<sup>46</sup><http://www.igc.org/hrw/about/projects/arms/memo-cluster.htm>

<sup>47</sup><http://www.web.amnesty.org/ai.nsf/index/EUR700182000>

<sup>48</sup>"Explosive Remnants of War: Cluster Bombs and Landmines in Kosovo", ICRC, August 2000.

<sup>49</sup><http://www.protel.co.nz./calm/>

### **UK Working Group on Landmines (Landmine Action)**

"As an immediate first step towards new international law on cluster munitions, there should be an in-depth review of this weapon type, encompassing use, impact and legality. This review should take place under the auspices of a recognised international body and should include input from civil society as well as the United Nations and the International Committee of the Red Cross and Red Crescent. The review should be conducted during a global moratorium on the use, manufacture, sale and transfer of all cluster munitions."<sup>50</sup>

### **Independent International Commission on Kosovo**

"The [International Criminal Tribunal for Former Yugoslavia] view is that cluster bombs are not clearly prohibited by international humanitarian law, and thus are not suitable for an investigation as to individual responsibility for their use. The Commission does not dispute this conclusion, but nevertheless recommends that cluster bombs should never be used in any future undertaking under UN auspices or claiming to be a 'humanitarian intervention'."<sup>51</sup>

Richard Goldstone, chairman of the Kosovo Commission, in responding to a question about whether a new norm was being established against cluster bombs as a result of their use and impact in Kosovo/Serbia, commented:

"We did indeed detect a growing objection to the use of cluster bombs. The ICRC has made its opposition very clear and representatives of some of the European governments we consulted expressed their misgivings about them. There was also criticism at the time delay on the part of NATO in giving details of the whereabouts of cluster bombs in response to repeated requests from the UN who [were] attempting to defuse the bomblets as quickly and effectively as possible."<sup>52</sup>

END

---

<sup>50</sup>Report written by Rae McGrath, with additional research by Richard Lloyd.  
<http://www.landmineaction.org/clusterb/summ4.htm>

<sup>51</sup><http://www.kosovocommission.org>

<sup>52</sup>Email communication, 06 Jan 2001.