

## Cluster munitions: moving toward specific regulation

Louis MARESCA

Calls for greater regulation of cluster munitions began more than 30 years ago. As early as 1976, and without intensive lobbying by international and non-governmental organizations, 13 states called for a ban on anti-personnel cluster weapons. Proposals prohibiting or restricting cluster munitions were also made by several experts during the discussions and development of the prohibition against anti-personnel mines in the early 1990s. More recently, efforts to regulate the use and design of cluster munitions have been part of the ongoing work of the states party to the Convention on Certain Conventional Weapons (CCW).<sup>1</sup>

To date, the pace of progress has been far from overwhelming. Despite the earlier proposals, only now, in 2006, is there a sense that states are giving serious consideration to addressing the problems caused by cluster munitions. Increasing pressure by non-governmental organizations (NGOs) and international institutions has spurred debate in a number of national parliaments, forcing changes in national positions and the adoption of national regulation. There have also been regular calls at the international level to begin negotiations on a new treaty to reduce the humanitarian problems caused by these weapons.

This article hopes to contribute to the discussion on cluster munitions by outlining the current rules of international humanitarian law that relate to these weapons and describing the challenges that cluster munitions pose to implementing these laws. It also offers observations on key points that are emerging in the discussions on how best to make progress toward the development of specific rules on cluster munitions.

### *The concerns about cluster munitions*

Before presenting the rules of international humanitarian law most directly applicable to cluster munitions, it is necessary to highlight the primary effects caused by these weapons—the effects that underlie the calls for new regulations.<sup>2</sup>

One significant concern is the number of civilians that have been killed or injured by submunitions that have failed to explode as intended after their release or dispersal by the cluster-munition canister—although a certain percentage of all explosive ordnance used in a conflict will fail, submunitions are a special concern because of the large numbers used in battle. During the war in Indochina, tens of millions of submunitions are believed to have been dropped in Lao People's Democratic Republic,

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Louis Maresca is Legal Adviser in the Mines-Arms Unit, Legal Division of the International Committee of the Red Cross (ICRC). The views expressed in this article are those of the author and do not necessarily reflect those of the ICRC.

and there are estimates that 8–25 million of them may have failed to explode as intended.<sup>3</sup> Significant numbers of submunitions were also used and failed to explode in Afghanistan, Iraq, Kosovo and other recent conflicts. Predictably, these submunitions have caused large numbers of civilian casualties and posed serious challenges for organizations involved in the clearance of explosive remnants of war.

Even when submunitions do not fail, but explode as intended during conflict, they are cause for concern. By design, submunitions are area weapons, therefore they can pose grave risks when they are used against targets in or near populated areas. Once released from the cluster bomb, rocket or other means of delivery, up to hundreds of submunitions are dispersed over an area of up to several thousand square metres. This wide area of dispersal means that there is a substantial risk of significant numbers of civilians being caught in a submunitions attack, particularly in situations where civilians and military targets are in close quarter.

There are also concerns about the inaccuracy of submunitions, as, once released from the cluster munition, most cannot be precisely targeted and fall to the ground unguided. Moreover, their small size, braking mechanisms (normally parachutes and ribbons) and other features mean that their descent is often “guided” by environmental factors (wind, air density, etc.) and weather conditions, so they can land far from the intended target.

There are therefore various aspects to the cluster-munition problem: in addition to the consequences of submunitions failing to explode as intended, there are serious humanitarian concerns about the weapons when they function as designed. Concerns about cluster munitions have not only been raised by NGOs and international organizations but also by military personnel who have witnessed their impact in armed conflict.<sup>4</sup>

### *The current legal landscape: the relevant rules of IHL*

No treaty specifically prohibits or regulates the use of cluster munitions. Like other weapons, the use of cluster munitions in armed conflict is regulated by the rules of international humanitarian law (IHL). Additional Protocol I (1977) of the Geneva Conventions (cited hereinafter as 1977 Additional Protocol I) is the most recent formulation of IHL applicable to the use of weapons in armed conflict.<sup>5</sup> Many of its provisions reflect customary law and are therefore applicable to all the parties in an armed conflict, irrespective of whether or not they have formally ratified the protocol. There are four principal rules relevant to the use of cluster munitions.

- *Rule of distinction:* the parties to the conflict must at all times distinguish between civilians and combatants and between civilian objects and military objectives. Attacks may only be directed against military objectives. [Art. 48, 1977 Additional Protocol I; Rules 1 and 7, ICRC Customary Law Study.<sup>6</sup>]
- *Rule against indiscriminate attacks:* indiscriminate attacks are prohibited. Indiscriminate attacks are those: a) which are not directed at a specific military objective; b) which employ a method or means of combat which cannot be directed at a specific military objective; or c) which employ a method or means of combat the effects of which cannot be limited as required by IHL and, consequently, in each such case, are of a nature to strike military objectives and civilian objects without distinction. Indiscriminate attacks also include any bombardment which treats as a single military objective a number of clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians. [Art. 51 (4) and (5)(a), 1977 Additional Protocol I; Rules 11–13, ICRC Customary Law Study.]

- *Rule of proportionality*: it is prohibited to launch an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated. [Art. 51 (5)(b), 1977 Additional Protocol I; Rule 14, ICRC Customary Law Study.]
- *Rule on feasible precautions*: in the conduct of military operations, constant care must be taken to spare the civilian population, civilians and civilian objects. All feasible precautions must be taken to avoid, and in any event to minimize incidental loss of civilian life, injury to civilians and damage to civilian objects. [Art. 57, 1977 Additional Protocol I; Rule 15, ICRC Customary Law Study.]

Cluster munitions raise important concerns under all of these rules. The concerns under the rule of distinction and the rule against indiscriminate attacks result from the potential for significant civilian casualties during a cluster-munition attack. As mentioned above, many cluster munitions are designed to disperse their submunitions over large areas. Organizations and some governments have said that this feature raises serious questions as to whether their use in cities, towns and other populated areas can be in compliance with the rules of IHL.<sup>7</sup>

In addition, the use of free-falling submunitions (mentioned above) means that the explosives often land in areas beyond the specific military objective targeted. This inaccuracy is of concern according to most of the definitions of indiscriminate attack outlined above, in particular the prohibition against attacks that employ a method or means of combat that cannot be directed at a specific military objective. These characteristics again raise the question of whether cluster munitions can be used in populated areas in accordance with IHL rules.

Then there are concerns regarding the rule of proportionality. This rule recognizes that civilian casualties and damage to civilian objects may occur during an attack against a military objective, but it requires that the military advantage anticipated outweighs the incidental impact on civilians. An attack that causes excessive incidental casualties or damage in relation to the concrete and direct military advantage anticipated would be disproportionate and prohibited. It is this rule that is most often cited when concerns are expressed about the large numbers of submunitions that fail to explode as intended and remain a danger to civilians after the attack—and in many cases after the end of the conflict.

Recent discussions have highlighted a divergence of views on whether or not military forces must take into account the long-term impact of unexploded munitions when evaluating the potential for incidental deaths and injuries to civilians, and if these will be excessive in relation to the concrete and direct military advantage anticipated. A number of government experts and at least one notable legal scholar do not believe that it is necessary to consider the long-term effects of explosive remnants of war (ERW) in applying the proportionality rule, on the basis that such risks are not reasonably foreseeable to a military commander.<sup>8</sup> However, other experts and international organizations have taken a contrary position and believe that the incidental civilian casualties anticipated from an attack using cluster munitions must include a consideration of the short- and long-term effects of submunitions that fail to explode as intended.<sup>9</sup> This reasoning is based on the fact that such effects are readily foreseeable today, thanks to experience gained from the use of cluster munitions in past conflicts and the work of governments and organizations to address their consequences. In short, past experience has put users on notice about the long-term dangers that cluster munitions cause to civilians.

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These concerns also mean that the rule on feasible precautions is especially important when cluster munitions are used. This rule requires, in particular, that the parties to a conflict minimize the dangers to civilians arising from military operations. It obliges the parties to do everything feasible to

verify that a target is a military objective; take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event minimizing, incidental loss of civilian life, injury and damage; refrain from launching an attack or cancel or suspend an attack if it may be expected to cause excessive civilian casualties in relation to the concrete and direct military advantage anticipated; provide effective advance warning to civilians, unless circumstances do not permit; and, if there are several military objectives offering a similar military advantage, select the objective for attack that may be expected to cause the least danger to civilians.<sup>10</sup>

With regard to cluster munitions, implementing this rule would require, for example, that a party consider the accuracy or inaccuracy of the targeting system, the size of the dispersal pattern, the amount of ERW likely to occur, the presence of civilians and their proximity to military objectives. It could also require that submunitions not be used in populated areas and that alternative weapons be considered. However, evidence that such measures are being taken by the users of these weapons seems scarce and continued civilian casualties prompt the calls for greater restriction of these weapons.

### *Moving toward new regulation*

Efforts to address the problems caused by cluster munitions have led to important developments in supplementing the applicable rules of IHL in recent years. First and foremost is the adoption of the Protocol on Explosive Remnants of War, which was adopted in 2003 and will enter into force in late 2006.<sup>11</sup> This instrument is intended to reduce the threat to civilians from all forms of unexploded ordnance, and its provisions are therefore applicable to cluster munitions that become ERW.<sup>12</sup> In summary, the protocol requires each party to an armed conflict to clear ERW in territory it controls and to take measures to reduce the dangers to civilians until the weapons are removed or destroyed. Each party is also obliged to provide assistance to facilitate the clearance of its munitions that have become ERW outside the territory it controls. The parties must record information on the munitions used in a conflict to facilitate these activities.

Such measures, however, will only partially deal with the problems caused by cluster munitions. The protocol provides a useful framework to facilitate the post-conflict clearance of these weapons and the implementation of measures to protect civilians, but it will not reduce the potential indiscriminate effects of a cluster-munition attack, when submunitions detonate as intended. Moreover, the protocol does not contain significant requirements to prevent the occurrence of ERW in the first place.<sup>13</sup> The absence of specific rules on these issues has increased calls for additional regulation that deals more comprehensively with the concerns about cluster munitions.

Second, there has been an increase in initiatives at the national level and there have been important changes in national positions. Belgium recently became the first country to adopt a national law banning cluster munitions and similar initiatives are being pursued in a number of other European countries—and in most cases, at the initiative of domestic NGOs.<sup>14</sup> In May 2006, Norway introduced a moratorium on the use of cluster munitions while tests were being conducted on its stocks of the weapon; it also said that it would work to ban cluster munitions that cause unacceptable humanitarian problems.<sup>15</sup> Germany has also modified its position to further limit its use of the weapons. Germany has said that it will not procure any new cluster munitions, that it will stop using at least two models because their failure rate has been shown to be greater than 1%, and that it will place an emphasis on alternatives to cluster munitions as weapons of choice against area targets.<sup>16</sup>

These developments have helped mobilize international organizations and NGOs working on the cluster-munition issue and create a growing sense that new international rules on these weapons can be achieved. They have also helped to advance the work on cluster munitions in the CCW's Group of

Governmental Experts. Several states, led by Germany, are working to develop a definition of “cluster munition”; other states have used the Group’s work on international humanitarian law to highlight specific concerns and proposals for cluster munitions.<sup>17</sup> These are the most substantive steps that the CCW has specifically taken on cluster munitions since 2000.

One of the reasons behind the changes in national positions and the increased work within the CCW has been a clarification of what is meant by the term “cluster munition”. The lack of a clear definition was one of the problems preventing progress, as cluster munition is a term that includes many different types of munitions. There are, for example, cluster munitions that are designed to produce smoke or illumination rather than to explode. There are also new types of cluster munitions (often called “advanced munitions”) that, it is claimed, are more technically advanced than earlier models. In general, these weapons contain fewer than 10 explosive submunitions, each of which is programmed to seek out a specific target and self-destruct if it fails to detonate as intended. Neither of these categories of cluster munitions has been shown to be a significant humanitarian problem, although advanced munitions have not yet been extensively used. As a result, calls to restrict or ban the use of all cluster munitions have been perceived by many governments and militaries as too broad and as an attempt to prohibit a range of militarily important weapons.

The breakthrough, if one can call it that, has been in the form of a growing agreement that the regulations proposed are not intended to apply to smoke or illumination munitions or advanced munitions. As a result, work at the national and international levels is moving toward a focus on those cluster munitions that contain large numbers of inaccurate and unreliable explosive submunitions.

However, it may not be easy to draw distinctions between advanced munitions and cluster munitions with the features just referred to. Advanced munitions appear to have important technical features, which go far toward reducing their indiscriminate effects. Yet little is known about the characteristics of these weapons and the reliability of their improvements. A cursory examination of the features of advanced munitions raises many questions that have not been raised or discussed thus far.

A cluster munition with fewer submunitions will certainly reduce the likelihood of creating a large amount of ERW. However, recent tests in Norway have shown that self-destruct features are often not as reliable as manufacturers claim.<sup>18</sup> The reliability of these devices is likely to decrease still further under battlefield conditions.

In addition, individual targeting capabilities may not prove particularly effective. Some advanced munitions free-fall on a parachute while searching for a target; as a result, the weapon may—like traditional submunitions—be susceptible to weather conditions and diverted from its target area.

If the advanced submunition fails to find its target, there is the question of if and how it self-destructs. Does the self-destruct mechanism initiate the full detonation of the submunition or does it prevent full explosion by initiating a smaller or partial detonation? A self-destruct mechanism may prevent the occurrence of ERW, but if the submunition fails to locate a military target and lands unexploded in a populated area, such a mechanism may nevertheless have indiscriminate consequences if it causes a full explosion.

### *Prospects for a new legal instrument*

There is clearly a new momentum and proponents of new rules on cluster munitions are invigorated. At the end of 2005 most organizations were rather sceptical that rapid progress would be made on this issue. This was mostly due to the lack of progress in the CCW’s Group of Governmental Experts. Although the group successfully negotiated the Protocol on Explosive Remnants of War in

2003, it has thus far been unable to make significant headway in developing specific rules to regulate the use of cluster munitions and prevent them becoming ERW.

Yet midway through 2006 there is an increasing belief that positive results are possible and that new regulations on cluster munitions can be adopted. As mentioned above, national parliaments have held debates and forced changes in the national positions of a number of governments. This has in turn prompted several governments to become more proactive on the issue at the international level.

One of the main questions currently being discussed by many proponents of new rules on cluster munitions is whether international work should continue in the context of the CCW's Group of Governmental Experts or if the cluster-munition issue should be taken off its agenda and other avenues explored. The question is particularly relevant this year, as the Third Review Conference of the CCW will take place 6–17 November 2006, and Sweden has proposed that the negotiation of a new protocol on cluster munitions be placed on the agenda of the conference.

In light of recent experience, claims have been made that the CCW is unlikely to produce the strong rules that many feel are necessary to address the cluster-munition problem. It has been pointed out that the Group of Governmental Experts has struggled for nearly five years to develop new rules on anti-vehicle (AV) mines. In several areas, the regulations under consideration for AV mines parallel those proposed for cluster munitions (e.g. self-destruct requirements, prohibitions or restrictions on transfers, restrictions on use). Despite years of work on the legal, technical and military aspects of AV mine regulation, the group has been unable to agree to the start of formal negotiations on a new AV mine protocol. The CCW currently seems unable to take strong action to restrict the use and design of a weapon considered to have significant military value. It therefore seems likely that proposals on cluster munitions will meet a similar fate if left on the CCW agenda.

There is, then, the prospect of expert work and negotiations outside of the CCW, and the likelihood of this will increase if the CCW Review Conference takes no action on cluster munitions or does not renew the mandate for the Group of Governmental Experts. A productive process outside the CCW would, however, require two key ingredients: a core group of states ready to take the diplomatic lead

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in such an initiative, and strong civil society involvement to help build support for the development of strong rules. As recent developments at the national level have shown, NGOs have become increasingly effective in placing the cluster-munition issue on the national agenda and building domestic support for new regulations, and have forced some governments to reconsider their positions.

Their influence is likely to increase as they become active in more countries. However, while countries such as Germany, Norway and Sweden have become proactive and taken a lead role on cluster munitions in the CCW, the potential for the development of a core group to lead a process outside the CCW is unclear and not likely to become apparent until after the CCW Review Conference.

There is concern that a process outside of the CCW may not include some of the international powers that are CCW states parties. There is clearly a value in having the most significant producers of cluster munitions involved in efforts to address the humanitarian problems caused by these weapons. However, as has been learned from the work on anti-personnel mines, countries with small- and medium-sized armed forces can play an important role in developing the rules of international humanitarian law. Many of these countries produce cluster munitions, and are therefore an important force in the design, marketing and trading of these weapons. Some European countries have used the weapons in recent operations, and many have significant stockpiles, which make them potential users. The norms and standards that these states apply, individually or collectively, can have a significant impact and influence, particularly on militaries that possess similar models or cluster munitions with similar characteristics.

These are just a few of the issues being considered in the discussions on how to make progress and strengthen the legal regime applicable to cluster munitions. Although the direction of future work on this issue remains unclear, 2006 is clearly a pivotal year and the prospects for a successful result look considerably more promising than they have in the past.

## Notes

1. Full title: 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, adopted 20 October 1980.
2. These consequences have been highlighted in media reports following the use of cluster munitions in recent armed conflicts and explored in more detail in studies published by international and non-governmental organizations. See, for example, Rae McGrath, 2000 (revised 2001), *Cluster Bombs: The Military Effectiveness and Impact on Civilians of Cluster Munitions*, London, Landmine Action, at <[www.landmineaction.org/resources/Cluster\\_Bombs.pdf](http://www.landmineaction.org/resources/Cluster_Bombs.pdf)>; International Committee of the Red Cross, 2000, *Cluster Bombs and Landmines in Kosovo: Explosive Remnants of War*, Geneva, at <[www.icrc.org/Web/eng/siteeng0.nsf/htmlall/explosive-remnants-of-war-brochure-311201/\\$File/ICRC\\_002\\_0780.pdf](http://www.icrc.org/Web/eng/siteeng0.nsf/htmlall/explosive-remnants-of-war-brochure-311201/$File/ICRC_002_0780.pdf)>; Human Rights Watch, 2002, *Fatally Flawed: Cluster Bombs and Their Use by the United States in Afghanistan*, vol. 14, no. 7G, at <[hrw.org/reports/2002/us-afghanistan](http://hrw.org/reports/2002/us-afghanistan)>; Human Rights Watch, 2003, *Off Target: The Conduct of the War and Civilian Casualties in Iraq*, New York, at <[www.hrw.org/reports/2003/usa1203](http://www.hrw.org/reports/2003/usa1203)>.
3. Lao National Unexploded Ordnance Programme, 2004, *Turning point: UXO Lao Work Plan 2004*, Vientiane, p. 6.
4. One such example was the order of air combat commander Maj. Gen. Michael Ryan during Operation Deliberate Force in Bosnia in 1995 to prohibit the use of cluster munitions due to inherent dangers to civilians. "The problem was that the fragmentation pattern was too large to sufficiently limit collateral damage and there was also the further problem of potential unexploded ordnance." See Human Rights Watch, 1999, *Ticking Time Bombs: NATO's Use of Cluster Munitions in Yugoslavia*, vol. 11, no. 6(D), p. 3, at <[www.hrw.org/reports/1999/nato2/nato995-01.htm](http://www.hrw.org/reports/1999/nato2/nato995-01.htm)>. See also Human Rights Watch, 2004, *World Report 2004: Human Rights and Armed Conflict*, p. 254, New York, at <[hrw.org/wr2k4](http://hrw.org/wr2k4)>, citing a US Air Force post-war study that in the context of the 1991 Gulf War, "an 'excessively high dud rate' due to the high altitude from which cluster bombs were dropped and the sand and water on which they landed."
5. Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, at <[www.unhcr.ch/html/menu3/b/93.htm](http://www.unhcr.ch/html/menu3/b/93.htm)>.
6. "ICRC Customary Law Study" refers to Jean-Marie Henckaerts and Louise Doswald-Beck (eds), 2005, *Customary International Humanitarian Law, Vol. 1: Rules*, Cambridge, ICRC and Cambridge University Press.
7. See Timothy L.H. McCormack, Paramdeep Mtharu and Sarah Finnin, 2006, *Report on States Parties' Responses to the Questionnaire: International Humanitarian Law and Explosive Remnants of War*, Asia Pacific Centre for Military Law, March 2006, at <[www.gichd.ch/fileadmin/pdf/CCW/XIIIth\\_Mtg\\_Mar06/CCW\\_McCormack\\_Report.pdf](http://www.gichd.ch/fileadmin/pdf/CCW/XIIIth_Mtg_Mar06/CCW_McCormack_Report.pdf)>. Also known as the McCormack report.
8. Christopher Greenwood, *Legal Issues Regarding Explosive Remnants of War*, Working Paper submitted to the CCW Group of Governmental Experts, UN document CCW/GGE/I/WP.10, 23 May 2002.
9. McCormack report, op cit., pp. 18–20.
10. See Art. 57, 1977 Additional Protocol I and Rules 16, 19–21, ICRC Customary Law Study. The parties to a conflict are also required to take feasible precautions to protect the civilian population under their control against the effects of attacks by not locating military objectives in or near densely populated areas and removing civilians from the vicinity of military objectives (to the extent feasible) [Art. 58, 1977 Additional Protocol I; Rules 22–24, ICRC Customary Law Study].
11. Protocol V to the 1980 Convention on Certain Conventional Weapons, UN document CCW/GGE/VI/2\*, Annex 2, at <[www.mineaction.org/docs/1850\\_esp](http://www.mineaction.org/docs/1850_esp)>.
12. The protocol does not apply to mines, booby traps and other devices already covered by amended Protocol II of the CCW (Protocol on Prohibition or Restrictions on the Use of Mines, Booby-traps and Other Devices).
13. The protocol contains provisions encouraging states to take "generic preventive measures" (Article 9 and the Technical Annex). These provisions are, however, not legally binding nor do they contain detailed requirements.
14. These include Austria, France, Germany, Italy, Luxembourg, Sweden and Switzerland.
15. Human Rights Watch, 2006, *Survey of Cluster Munition Policy and Practice*, Memorandum for Delegates to the Fourteenth Session of the CCW Group of Governmental Experts, June, pp. 20–21.
16. Statement by Ambassador Bernhard Brasack on "Explosive Remnants of War / Cluster Munitions" to the Group of Governmental Experts of the States Parties to the CCW, 19 June 2006.

17. McCormack report, op. cit.
18. In tests carried out in Norway in late 2005, the failure rates of certain cluster munitions in the stocks of the Norwegian armed forces were double the 1% failure rate expected. See Human Rights Watch, 2006, op. cit.