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Is There a Case for New Law?**

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**CLUSTER BOMBS:
IS THERE A CASE FOR NEW LAW?**

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The views expressed here are those of the author in his personal capacity and are not intended to reflect the views of the United Kingdom Government or of the Ministry of Defense.

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SUMMARY

The numerous unexploded bomblets, or submunitions, discarded on the battlefield as a result of cluster munition attacks have attracted widespread criticism, particularly from non-governmental organizations, prompting suggestions that new international law arrangements should be agreed to address the problem. These 'dud' bomblets may pose a post-conflict risk for troops and civilians alike. The humanitarian concerns raised by this hazard have been recognised for a number of years. An important debate is now under way, however, to try to identify a way of addressing the problem effectively while recognising the essential defense needs of states.

Working out which, if any, developments in the law are appropriate to such a problem necessitates an analysis of existing, relevant law. There are numerous general legal principles that limit the weapons which states are permitted to employ in armed conflict. There are also important treaties applicable to particular technologies. There is, then, the legal obligation accepted by many states to review weapons plans to ensure they comply with applicable law.

Of particular relevance to the cluster munition debate is the Conventional Weapons Convention (CCW), a framework treaty under which individual protocols have been negotiated to address such diverse technologies as mines and lasers. Following a seminal meeting in Nyon, Switzerland in September 2000, CCW member states started to discuss the problem of unexploded and abandoned explosive ordnance. Having clarified the nature of the problem, they negotiated a Protocol to the Convention. Its focus is the marking, clearance, removal, and destruction of explosive remnants of war.

When considering possible approaches to the more specific cluster munition issue, proper account must be taken not only of broader existing international law but also of the clearance, information sharing and other rules in Protocol 5. States party to CCW are currently collecting information from states, academics and scientific analysis, in order to clarify the causes and nature of, and optimum solutions to, the explosive remnant problem.

The debate about cluster munitions has in part focused on the proposal that failure rates of such munitions and the civilian casualties which sometimes result, perhaps long after the conclusion of the conflict, should be considered by commanders and others responsible for deciding on attacks. However, the

proportionality test in Additional Protocol I is based on expectations. It would seem unreasonable to expect commanders and others to base their decisions on possibilities rather than expectations. In this regard, numerous intervening events may be required before an explosive remnant becomes a civilian casualty.

The existing law of targeting in Additional Protocol I has the merit of applying to all conventional attacks. It does not appear to be helpful to seek to vary the wording of those well-established rules in order to seek to cater for the particular issues identified in relation to cluster munitions.

A more promising approach, already discussed within CCW, may be a technical one, which would require future cluster munitions to be equipped with self-destruction, self-deactivation or self-neutralisation mechanisms such that only a certain, limited proportion of submunitions remains live and dangerous after an attack. How prescriptive such a provision should be, whether for example it should prescribe the technical means whereby the required reliability is to be achieved or whether it leaves that issue open, is a matter for negotiation. Moreover, any logic requiring these rules to apply to cluster munitions alone, rather than the full spectrum of explosive ordnance, would need careful thought.

Cluster Bombs: Is There a Case for New Law?

By William Boothby

Cluster Munitions are the subject of continuing controversy. The complaint is that too many of them fail to explode as intended with the result that a hazard in the form of unexploded 'duds' confronts the civilian population, humanitarian workers and, indeed, military personnel in the affected area. The hazard often persists long after the conflict has moved elsewhere or concluded. This, in essence, is the cluster bomb, or cluster munition, problem. The purpose of this article is to examine the current law relating to the use of weapons, consider whether that law can be adapted usefully to address the cluster bomb problem, examine some approaches that have been suggested, and attempt to draw some conclusions.

In order to set the scene, however, it is necessary to look at how the debate about cluster munitions has evolved, and to outline the positions taken by the major participants. This requires us to consider the conflicts in Kosovo and Afghanistan as the experience on the ground in those countries, and elsewhere, has fueled deliberation of the topic. We must also review how the cluster munition discussion was brought within the Conventional Weapons Convention process. First, we should clarify the relevant terminology.

Terminology

It is useful at the commencement of this discussion to identify precisely what sort of weapon is being discussed and its military purpose. Having done this, a glossary of relevant terms will then be given so that the rest of the discussion can then proceed on a linguistically consistent basis.

The United States Air Force, in its legal manual¹, describes cluster munitions in the following terms:

Cluster bombs, or CBUs, are used to attack area targets such as concentrations of military personnel, vehicles or armor. Among other things, the use of cluster munitions reduces the risks to aircrews and equipment by reducing the number of sorties required to effectively attack such military objectives. A CBU munitions (sic) consists of a canister-type dispenser containing submunitions, or bomblets, that disperse in the air after the dispenser opens. The bomblets, in general, arm after dispersal and detonate upon impact.... One dispenser of bomblets may cover an oblong or rectangular area on the ground measuring several hundred feet in length. The dispersal pattern is determined by the type of CBU, the dispenser spin rate (if the particular CBU uses spin to dispense the bomblets), and release parameters.

The USAF Manual then refers to a number of such munitions, noting that the most common cluster munition in the USAF inventory is the CBU-87, designed for use against troop concentrations, materiel and armor. Each dispenser contains two hundred and two submunitions weighing three pounds, with a fragmentation case for light armor and a forward firing shaped charge for armor. The bomblets have no self destruct or other safety feature should they fail to operate as intended.

In a United Kingdom paper² presented to an international conference in March 2005, Cluster munitions are described as follows:

Cluster munitions are area effect weapons, which may be either air-delivered or ground-launched. In both cases a carrier munition releases a number of bomblets onto the battlefield to cause the destruction, neutralisation or suppression of personnel or materiel.

¹ Air Force Operations and the Law, The Judge Advocate General's Department, United States Air Force, First Edition, 2002 ("USAF Manual"), at page 296.

² *Working Paper on the Military Utility of Cluster Munitions*, prepared by the United Kingdom Delegation to the Conventional Weapons Convention Group of Governmental Experts Meeting in Geneva, March 2005 ("UK March 2005 paper").

The same paper describes the UK air delivered cluster bomb, the RBL 755, which contains one hundred and forty-seven bomblets and produces an area of effect of roughly one hundred metres by two hundred metres. Ground launched cluster munitions comprise tube artillery launched and rocket launched weapons. The tube launched shell disperses forty-nine munitions with a similar area of effect. In both cases the bomblets are unguided, impact-fuzed and combine blast and fragmentation to produce the military effect. The tube-launched weapons are designed to self-destruct within fifteen seconds if the impact fuse does not detonate the bomb, thus leaving fewer unexploded bombs after the attack.³

The title of this article refers to cluster bombs, but in the debate to which reference is made below use is also made of the terms 'cluster munitions', 'bomblets', 'CBUs', and 'sub-munitions'. It is important to establish at the outset clear meanings for the terms used and to adopt consistent language for the discussion. For the purposes of this article, therefore:

- 'cluster munition' means any form of munition which is designed to fire or otherwise release unguided explosive sub-munitions, usually in considerable numbers.
- 'cluster bomb' means a composite bomb, usually, though not invariably, delivered from the air and which is designed to release unguided explosive sub-munitions, usually in considerable numbers. It is essentially a sub-set of cluster munitions.
- 'sub-munition' and 'bomblet' mean individual unguided explosive bombs which are released by a cluster munition and which are usually fused to detonate on impact, normally with the ground.

In what follows, 'cluster munition' will therefore be used to characterise the composite munition, while 'submunition(s)' will refer

³ UK March 2005 paper at page 1.

to the individual explosive bomb(s) scattered by it. For the avoidance of doubt, this article does not consider multiple mine systems.

Cluster munitions can be considered area weapons in the sense that the sub-munitions will be spread over an area of land. Objects and persons within that area, or footprint, of the weapon will tend to be damaged, destroyed, injured or killed by the blast and fragmentation effects of the detonating sub-munitions.

Kosovo and Afghanistan experiences: Genesis of the modern debate

In the present section it is not intended to conduct detailed case studies of the Kosovo and Afghanistan campaigns, nor of cluster munition use within them, neither is it intended to review in detail the case studies conducted by others. Rather, the purpose of what follows is to note the conclusions reached as a result of certain investigations as these form part of the basis of the broader international discussions that are currently under way. Thus, criticism by non-governmental organizations (NGOs) will be summarised and the findings of official investigations reviewed in order to indicate how the ground was laid for the legal debate that was to follow.

The Prosecutor of the International Criminal Tribunal for the Former Yugoslavia established a committee to examine the North Atlantic Treaty Organization (NATO) bombing campaign which had taken place from March 24 to June 9, 1999. The committee would advise the prosecutor whether there was a sufficient basis to proceed with an investigation under Article 18 of the Tribunal's statute. In its final report,⁴ the committee considered among other matters the use by NATO of cluster munitions. Having confirmed that such munitions were in fact used, they noted that no particular treaty provision prohibits or restricts the use of such weapons, although general principles applicable to the use of all weapons must be complied with. The report notes the view of Human Rights Watch that the failure rate among submunitions converts them into anti-personnel mines and that

⁴ *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia*, June 19, 2000 ("ICTY Report").

such munitions are now prohibited under customary international law. The committee took the view that “there is, however, no general legal consensus that cluster bombs are, in legal terms, equivalent to anti-personnel land mines”.⁵

Significantly, the report then draws attention to the Martić Rule 61 Hearing Decision of Trial Chamber 1 on March 8, 1996.

In that decision the Chamber stated that there was no formal provision forbidding the use of cluster bombs as such (paragraph 18 of the judgment) but it regarded the use of the Orkan rocket with a cluster bomb warhead in that particular case as evidence of the intent of the accused to deliberately attack the civilian population because the rocket was inaccurate, it landed in an area with no military objectives nearby, it was used as an anti-personnel weapon launched against the city of Zagreb and the accused indicated he intended to attack the city as such (paragraphs 23-31 of the judgment).⁶

The report notes that there is no indication that cluster munitions were used in such a fashion by NATO, concluding “it is the opinion of the committee, based on information presently available, that the [Prosecutor] should not commence an investigation into use of cluster bombs as such by NATO”.⁷

The Kosovo Conflict was the subject of hearings before the United Kingdom House of Commons Foreign Affairs Select Committee. In its report⁸ dated June 7, 2000 the Committee considered specifically the use of cluster munitions in Kosovo. After briefly reciting the essential characteristics and purpose of such munitions, the Committee dealt with the issue as follows:

Cluster bombs are regarded by some as, of their nature, indiscriminate weapons whose use ought to be prohibited. Certainly their use in an urban environment where civilians

³ Ibid, at page 8.

⁶ Ibid, at page 9.

⁷ Ibid, at page 9.

⁸ www.publications.parliament.uk/pa/cm199900/cmselect/cmfaaff/28/2814.htm.

live might well fall foul of the prohibition on indiscriminate weapons under the 1977 Protocol, though the Government has said that the weapons “are not proscribed by any of the international agreements to which the United Kingdom is a party”. There is no easy solution in attempting to outlaw the weapons. Asked whether cluster bombs should be specifically banned, Professor Lowe told us that “the only result of outlawing a particular species of weapon will be to get people to design around the prohibition.” However, Ministers have said that they will examine the proposition that cluster bombs should be banned.⁹

The Committee then recommended further consideration of the issue.

Afghanistan

In a document dated December 2002, Human Rights Watch reported on ‘after the event’ bomb damage assessments in Afghanistan from March 9 to April 3, 2002, the purpose of which was to evaluate the impact of the United States bombing campaign during ‘Operation Enduring Freedom.’¹⁰ While one might have numerous reservations about the appropriateness of a process which looks largely at what is to be seen after the event on the ground and then draws conclusions as to the appropriateness of the action taken earlier, that is, during the conflict, that aspect lies outside the scope of this paper and will not be considered further.

Nonetheless, it is helpful to consider the conclusions that Human Rights Watch reached. Their report drew attention to the civilian casualties and socioeconomic harm caused by unexploded submunitions in Afghanistan and the consequent need to reduce the ‘dud’ rate substantially. They suggested that such after-effects should be considered in the proportionality evaluation of attacks, suggesting that “in some circumstances, the long-term harm to the civilian population of cluster bomb use may outweigh the short term military

⁹ United Kingdom House of Commons Select Committee on Foreign Affairs, *Fourth Report*, June 7, 2000. Paragraph 150.

¹⁰ *Fatally Flawed, Cluster Bombs and their use by the United States in Afghanistan*, Human Rights Watch, Vol. 14, No.7, December 2002 (“Fatally Flawed”).

benefit".¹¹ The report calls on the US and other countries to discontinue cluster munition use until the development of a very low failure rate weapon, noting that the United States has adopted a one per cent failure rate or less as a reasonable goal for future production. With regard to existing cluster munitions with high failure rates, if modification is not possible, the report suggests that such munitions should only be used where they are viewed as the only appropriate weapons for the mission and target and that they should not be used in or near populated areas or in areas "to which civilians are likely to return post-conflict." The report also considers the possibility of technical improvement of the weapons.¹²

The possibility of developing new law based on a requirement to improve the technical performance of cluster munitions is considered later in this article. Similarly, the question whether planners and those responsible for executing attacks should be required to consider the longer term, or reverberating, effects of such attacks as part of proportionality analysis is also considered in some detail later. The reference by Human Rights Watch, cited above, to "short term military benefit" is of course potentially misleading. While indeed the benefit in some cases may be short term, in others it may prove significant, lasting and possibly decisive to a part of the campaign.

More to the point, given the way in which the relevant law is expressed, significant, long-lasting, and decisive consequences may well have been expected and intended by the commander who ordered the attack. Moreover, while all states will strive to develop ever more reliable weapons, limitations on military budgets make it unrealistic to expect them to discard sizeable numbers of munitions which are lawful to possess and, depending on the circumstances, to use. These are, however, all issues which this article will discuss in greater detail below.

¹¹ Ibid, Conclusions and Recommendations.

¹² Ibid, Conclusions and Recommendations.

The military perspective

The military position, e.g. in the United States and the United Kingdom, throughout the debate to date has been that these are lawful weapons, that they have clear military utility and that, provided a particular use does not conflict with generally applicable targeting principles, that use will not be unlawful. It is instructive to see how the matter is dealt with by the United States Air Force in its operations law manual. In the section addressing weapons in aerial warfare, the following explanation in relation to cluster munitions is given:

There have been recent attempts by some non-governmental organizations to rally support for a moratorium or ban on the use of cluster munitions. Cluster munitions consist of canisters that open at a pre-determined altitude and dispense a number of small sub-munitions or bomblets. They are particularly suited for attacks against armored columns, supply dumps, and airfields. The most common complaint concerning cluster munitions is the problem of unexploded submunitions. For example, the most common Air Force cluster munition, the CBU-87/B, contains 202 BLU-97/B submunitions. The historical dud rate of the BLU-97/B is around five per cent, yielding an average of around ten unexploded submunitions from each canister. The position of the United States and most of its allies is that when employed against appropriate military objectives and without significant risk of disproportionate civilian collateral casualties or damage, the use of cluster munitions does not violate the law of aerial warfare.¹³

A United Kingdom Working Paper in March 2005 observed that in a recent conflict in Iraq the United Kingdom used air delivered cluster munitions predominantly against military vehicles, both armored and soft-skinned, in the open and in revetments.¹⁴ Much of the discussion of these issues has been conducted within the framework of a particular treaty, namely the Conventional Weapons Convention. We must therefore now examine the origins, purpose and systems

¹³ USAF Manual at page 37.

¹⁴ Ibid, UK March 2005 paper, page 1.

associated with that treaty. Thereafter, the events which brought the cluster munition into the ambit of that Convention will be reviewed.

The Conventional Weapons Convention

The 1981 United Nations 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, hereafter referred to as CCW,¹⁵ and its Protocols, constitute a highly significant body of weapons law. Concerns about weapons with apparently excessively injurious effects had been increasing since the mid-1960s. Particular weapons that had been discussed included herbicides, delayed action weapons, incendiaries, anti-personnel mines, small calibre bullets and certain fragmentation weapons including cluster bombs. The first and second Preparatory Conferences for the “Special United Nations Diplomatic Conference” that would negotiate the Convention took place in Geneva in August 1978 and March/April 1979, followed by two formal sessions in September 1979 and September 1980.

As Mathews notes,¹⁶ “the weapons covered by the various proposals included incendiary weapons, fuel-air explosives, small calibre bullets, anti-personnel fragmentation weapons, non-detectable fragment (sic) and APLs.” As negotiations proceeded, it became clear that agreement would be limited to a small list of weapons, so, pursuant to a proposal from Mexico later superseded by a United Kingdom/Netherlands formulation, an umbrella convention was agreed “which would be dynamic and allow the possibility of allowing new protocols based on future developments”.¹⁷ The result is that the 1980 Convention itself is, essentially, an enabling treaty. Thus, it does not contain weapons, restrictions or prohibitions in its Articles but, rather, consists of a procedural framework under which Protocols addressing particular weapons issues can be negotiated.

¹⁵ The Convention was opened for signature in New York on April 10, 1981 and entered into force on December 2, 1983.

¹⁶ *Reviewing the 1980 Convention on Certain Conventional Weapons: An Australian Contribution to the Law of Arms Control and Disarmament*, R. J. Mathews, 2002, (“Mathews”).

¹⁷ *Ibid*, at page 6.

Article 8 of the Convention provides a mechanism for the negotiation of additional protocols. It stipulates that proposals for additional protocols can be referred to a conference “to which all states shall be invited”.¹⁸ Further,

such a conference may agree, with the full participation of all states represented at the conference, upon additional protocols which shall be adopted in the same manner as this Convention.¹⁹

It is therefore necessary, if a new Protocol on any subject within the competence of CCW is to be adopted, for consensus among the states party present at the conference to be achieved. This principle of consensus is most important for reasons that will be discussed later in this paper. Mathews considers that “decision-making on the weapons-related issues ... was made difficult because decisions were taken by consensus”.²⁰ However, at a meeting in Lugano in 1976, the Vice-President of the International Committee of the Red Cross (ICRC) remarked:

I think [that] relatively minor results which meet with general agreements are far better than projects which look dazzling on paper but which are worthless in practice and likely, when all is said and done, to undermine humanitarian law as a whole.²¹

So some may see the consensus basis for decision-making within CCW as a hindrance, while others regard it differently. This will be an important factor to bear in mind when considering how to take forward evolving proposals in relation to cluster munitions and that issue is discussed in more detail below.

¹⁸ CCW, Article 8(2)(a).

¹⁹ CCW, Article 8(2)(b).

²⁰ Mathews, at page 5.

²¹ Ibid at footnote 21, citing *Report of Conference of Government Experts on the Use of Certain Conventional Weapons (Second Session – Lugano, 28.1 – 26.2.1976)*, published by the ICRC (Geneva 1976), at page 78.

When the Convention was adopted in 1980, it was only possible to agree on protocols in relation to three types of weapon. Thus the first three protocols under CCW were as follows:

- Protocol 1 on Non-Detectable Fragments;
- Protocol 2 on Mines, Booby-Traps, and other devices; and
- Protocol 3 on Incendiary Weapons.

At a Review Conference in 1996, more stringent provisions in relation to mines, booby traps and other devices were agreed upon in the form of an amended version of Protocol 2. During the same diplomatic conference the states party to the Convention also agreed a protocol on blinding laser weapons. Thus, by the end of the review conference in 1996, the list of CCW protocols was as follows:

- Protocol 1 on Non-Detectable Fragments;
- Protocol 2 on Mines, Booby-Traps, and other devices;
- Amended Protocol 2 on Mines, Booby-Traps, and other devices;
- Protocol 3 on Incendiary Weapons; and
- Protocol 4 on Blinding Laser Weapons.

The CCW states party had been unable to agree a total ban on anti-personnel landmines. The reasons for this, and the details of the process that gave rise to the Ottawa Convention 1997, lie outside the scope of this article. However, there is an important point to note. It is that the dangers posed by the explosive munitions of different sorts that remain in the former conflict zone after hostilities have come to an end were causing the international community increasing anxiety. The degree and extent of this international concern is most clearly shown by the fact that within the space of seventeen years, three multilateral treaties were negotiated to address, to a greater or lesser extent, this issue. As we shall see shortly, within a further six years a fourth treaty, devoted specifically to unexploded ordnance issues, was to follow.

It is therefore unsurprising that by the time of the preparatory discussions leading to the 2001 CCW Review Conference, the adverse post-conflict consequences for humanitarian missions and for civilians of unexploded ordnance, including unexploded cluster munitions, had become a major issue. While, as we have seen, the narrower issue of mines and similar devices had already been addressed in three treaties,

the aftermath of the Kosovo Conflict brought the wider question of unexploded remnants of war, and responsibility for their clearance, into starker relief. It is now therefore necessary for us to consider the process which led to the negotiation of a sixth CCW protocol on Explosive Remnants of War.

Addressing the explosive remnants of war problem

The concern of NGOs and others centers on the unintended civilian casualties caused by bombs, mortars, sub-munitions, and general ammunition which either failed to explode as intended or which have been abandoned (hereafter referred to as explosive remnants of war, or ERW). For the purposes of the current discussion, it is helpful to take the Expert meeting arranged by the ICRC and others in Nyon on September 18-19, 2000 as the effective start of current activity in this area. Numerous experts, including the author, attended in their personal capacities and discussions addressed the nature of the ERW problem.

In his presentation to the meeting, Colin King, a munitions disposal expert, noted the widespread use of cluster munitions by industrialised countries, acknowledged their military utility and drew attention to factors that may contribute to failure rates in such munitions.²² He noted that estimated sub-munition failure rates vary from five to twenty to thirty per cent and that “the difference between failure rates of sub-munitions as compared with that of other weapons such as artillery shells, mortar bombs and rockets is not significant, as they are equipped with the same sort of fusing mechanism”. He suggested that the incorporation of self-destruction and self-neutralisation mechanisms may serve to diminish the threat to civilian populations and, given the choice, preferred self-destruction.

By this, Mr. King meant that the fusing mechanism of the submunitions should be equipped with a facility, whether in the form of a specific device or some other mechanism or electronic circuit, the

²² For example, poor design and quality control, unrealistic testing against targets which fail to replicate combat conditions – ICRC Summary Report on the Meeting.

effect of which would be to cause the munition which fails to explode as intended on impact either to destroy itself, or to become inoperative. He preferred the self-destruction option because there would then be no explosive device to present a hazard, however reduced, after the event. Other presentations to the meeting reported on the scale of suffering occasioned by cluster bomb 'duds'²³ dating from past conflicts.²⁴

On the second day of the conference the ICRC put forward a set of four proposals for addressing the wider ERW problem. A number of these were reflected in what later became Protocol V to CCW. With more particular reference to cluster munitions, however, the first proposal noted that more reliable fusing mechanisms and introducing self-destruction systems may help states to fulfil ERW clearance obligations. The proposals suggested a prohibition on the use of sub-munitions against military objectives located within a concentration of civilians, citing language in Protocol III to CCW. Some NGOs represented at the meeting demanded a moratorium on the use of sub-munitions, but many participants felt this would be hard to "achieve in light of the fact that cluster bomb sub-munitions had a clear military utility".²⁵

The report of the meeting encapsulated the current debate when, at page 18, it noted, in the context of cluster munition use, that some "participants thought that existing legal norms were sufficient while others thought that there should be a total prohibition on the use of the weapons in areas of civilian concentration". The meeting agreed that the CCW process was a natural forum to address the various issues that had been discussed.

²³ The term 'dud' is used in the present context to denote an explosive munition which has for whatever reason failed to detonate and which is therefore left on the ground in a dangerous, or apparently dangerous, condition.

²⁴ S. Maslen noted that among four hundred and ninety-two casualties reported to the UNMACC database in Pritistina, CBUs and anti-personnel mines were the leading cause of death and injury, accounting for approximately thirty-six per cent each. He quoted NATO estimates of approximately thirty thousand cluster bomb sub-munitions occasioned by the Kosovo conflict. See pages 4 and 5 of ICRC Nyon Meeting Report.

²⁵ See ICRC Nyon Meeting Report at page 15.

Protocol V to CCW

After a considerable period of discussion and negotiation by a Group of Governmental Experts convened under the auspices of the CCW, states party were in due course able to agree Protocol 5.²⁶ The first important point to note is that this Protocol addresses unexploded ordnance which, by virtue of Article 2, is defined as

explosive ordnance that has been primed, fused, armed, or otherwise prepared for use and used in an armed conflict. It may have been fired, dropped, launched or projected and should have exploded but failed to do so.²⁷

The term ‘explosive ordnance’ is defined by the same article as

conventional munitions containing explosives, with the exception of mines, booby-traps and other devices as defined in Protocol 2 of this convention as amended on May 3, 1996.²⁸

Article 1 of the Protocol specifies that the document is concerned with explosive remnants of war on land. So it is clear that cluster munitions and their associated submunitions are affected directly by the provisions contained in the Protocol.

The main purpose of the protocol is to set out arrangements for the clearance, removal or destruction of all explosive remnants of war, including similar munitions that have been abandoned.²⁹ States are, however, also obliged to record and retain information on the use of explosive ordnance to facilitate the rapid marking and clearance, removal or destruction of the explosive remnants. There is an equally important obligation on states to make the same information available to those in control of affected territory, subject to the security interests of the providing state, without delay after the end of active hostilities,³⁰

²⁶ Protocol 5 on Explosive Remnants of War adopted in Geneva on November 28, 2003. At the time of writing sixteen states have ratified the protocol.

²⁷ Protocol 5, Article 2(2).

²⁸ Protocol 5, Article 2(1).

²⁹ Protocol 5, Article 3.

³⁰ Protocol 5, Article 4(2).

and provision is made in Article 7 for international assistance “in dealing with the problems posed by existing explosive remnants of war.”

Somewhat unusually for this area of public international law, Protocol 5 contains both legally binding provisions and other voluntary arrangements. The status of the latter elements, all of which are to be found in the Technical Annex to the treaty, is described in an opening paragraph to that Annex in the following terms:

This Technical Annex contains suggested best practice for achieving the objectives contained in Articles 4, 5, and 9 of this Protocol. This Technical Annex will be implemented by High Contracting Parties on a voluntary basis.

It seems that one merit in pursuing this sort of ‘voluntary best practice’ approach is that states are prepared frequently to agree more detailed arrangements than would be the case if the whole of the document were to be legally binding on them. This certainly appeared to be the case in relation to Protocol 5 and a perusal of the Technical Annex reveals extensive arrangements to cover the following discrete aspects:

(i) recording, storage and release of information, including details as to what information should be recorded, what information should be released and which mechanisms might be used to facilitate that release;³¹

(ii) the provision of warnings to the civilian population about the hazards presented by explosive remnants, risk education in relation to those hazards, marking, fencing and monitoring of areas affected by explosive remnants;³² and

(ii) generic measures designed to prevent munitions becoming explosive remnants. These cover the management of munitions manufacture, of storage, transport, field storage and handling of explosive munitions, the training of personnel involved in these activities, the transfer of explosive

³¹ Protocol 5, Technical Annex, Part 1.

³² Protocol 5, Technical Annex, Part 2.

munitions and improving the reliability of future production.³³

Clearly, the main focus of Protocol 5 is on the clearance of explosive remnants that have already been created. While the protocol does, as we have seen, contain some limited voluntary preventive arrangements, it does not define required reliability rates for cluster munitions nor, for that matter, for other munitions. Neither does it contain specific rules on the use of cluster munitions. The proposal that such rules should be formulated and agreed will be discussed later in this essay. The significance of Protocol 5, however, lies in its clarification of the clearance obligations of states and in the detailed guidance in the annex. Any evaluation of the adequacy of existing law to address the cluster bomb problem and any consideration of the proportionality rule in relation to cluster munitions use must therefore take this important and relatively recent development in the law carefully into account.

Arguably, Protocol V is something of an 'odd man out' among CCW protocols in the sense that it does not address a specific weapon or technology. This may appear to sit rather uncomfortably with a strict interpretation of Article 8 of the Convention referred to earlier. States party were, however, clear that the ERW problem needed to be addressed and that CCW was the appropriate venue. The emergence of such an important piece of new law as Protocol 5 would seem to the author at least to have entirely vindicated that judgment.

Since Nyon, there have been numerous discussions of the cluster munition problem within CCW. The continuing purpose of these is to determine the most appropriate solution to that problem. Discussion to date has centered on whether new technical rules as to permitted submunition failure rates are needed or whether *ad hoc* restrictions on targeting would be preferable, or, for that matter, whether a combination of such measures would be a better approach. The adequacy of existing rules of international law is being examined and states will in due course also assess whether the existing law is the best

³³ Protocol 5, Technical Annex, Part 3.

that can be achieved. In the next section these discussions will be outlined.

CCW Discussions of the CBU issue

A succession of annual mandates has underpinned CCW work to analyse the cluster munition problem. Each mandate tends to be agreed upon at the meeting of states party to the Convention in the late autumn and sets out the purpose and limitations on the work of the CCW Groups of Governmental Experts in relation to a particular topic during the ensuing year. Each major topic under current consideration is the subject of its own mandate, and the cluster bomb issue has to date been discussed under the terms of a mandate relating to the broader topic of Explosive Remnants of War. That mandate does not at present authorise the Group of Governmental Experts to negotiate a protocol. Rather, it authorises them to discuss the matter and report their conclusions to the ensuing meeting of states party. The text of the 2006 mandate, so far as relevant, is as follows:

To continue to consider, including through participation of legal experts, the implementation of existing principles of International Humanitarian Law and to further study, on an open-ended basis...possible preventive measures aimed at improving the design of certain specific types of munitions, including sub-munitions, with a view to minimising the humanitarian risk of these munitions becoming explosive remnants of war³⁴.

The work undertaken pursuant to this mandate comprises three distinct elements. In 2004 and pursuant to the first of these, the relevant Co-ordinator suggested a three step approach. Steps one and two would identify which principles of international humanitarian law are regarded by states as relevant to the explosive remnant issue and would assess their implementation by states party to CCW. The purpose of this exercise is to assess whether some deficiency in application of the existing law may lie at the root of the explosive

³⁴ *Procedural Report of the Twelfth Session of the CCW Group of Governmental Experts, Geneva, November 14-22, 2005.*

remnant problem. A questionnaire³⁵ was developed by eight states³⁶ working with the International Committee of the Red Cross. It asks states to provide the following information:

- What existing principles of IHL applicable to the use of force during an armed conflict are considered relevant to the use of munitions which may become ERW?
- What measures have been taken by the state to implement these principles?
- Are the principles reflected in military doctrine, military manuals, and rules of engagement?
- Are the principles considered in planning military operations, in targeting procedures and is legal advice available at appropriate levels of command?
- Are members of the armed forces trained in the principles, does the state legally review new weapons and what other measures are taken to implement the principles?

An academic international law expert considered the responses to the questionnaire, both written and in oral interventions, and submitted a report to the March 2006 CCW Conference of the Group of Governmental Experts. The purpose of this work stream is therefore to determine what states consider to be the relevant law and to find out whether inadequacies in its implementation may lie at the root of the ERW problem. The existing law does, for these purposes, include Protocol 5 to CCW.

As a second element of activity, presentations by acknowledged international law experts focusing on the law relating to the use of weapons and on legal issues that are relevant to the ERW issue have been delivered to these CCW meetings. This gives subject matter

³⁵ CCW/GGE/X/WG.1/WP.2, March 8, 2005.

³⁶ Australia, Canada, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States.

experts the opportunity to supplement what states have to say about the body of existing law that bears upon the issue. The purpose again is to increase understanding of, and to assess, the relevant law already in existence.

The third element in the process comprises a scientific analytical methodology developed to enable research to determine objectively which sorts of weapon cause the ERW problem, and which types of ERW represent the greatest humanitarian hazard. The proposed methodology for this work was presented by the United Kingdom delegation at the November 2005 Conference of the CCW Group of Governmental Experts.³⁷

By using all of these analytical tools, the nature, extent and, hopefully, causes of the remaining ERW problem, and thus the contribution of cluster munitions to that problem, can be clarified. It is clear to the author that, before embarking on proposed remedies, the states party to CCW have demonstrated that they wish to be convinced not only as to the nature and extent of the problem, but also as to its precise causes and the likelihood that particular proposed solutions will indeed resolve it.

Existing law

A recently published report lists thirty nations where cluster munitions are produced,³⁸ and professor Wiebe³⁹ draws attention to the supply to over thirty-nine countries of just one such weapon system, namely the Russian 'Grad' MLRS system which can be equipped with cluster warheads. Cluster munitions are held in operational use by, or at least held in the arsenals of, numerous military forces. This would not be the case if states did not recognise cluster munitions as having military utility.

³⁷ *Assessment of the relative risk of categories of explosive ordnance becoming Explosive Remnants of War: 1. Methodology*, A C Baker, November 2, 2005.

³⁸ See *Cluster Munitions; Necessity or Convenience*, Pax Christi, Undated, Appendix IV.

³⁹ Presentation by V. Wiebe to Group of Governmental Experts, Geneva, November 22, 2005.

The development and use of all weapons is subject to legal limitation. There are general principles of law and targeting which apply irrespective of the weapon that is used, regardless of the nature of the legal justification for the resort to force in the first place and many of which are customary in nature and thus of universal application notwithstanding the identity of the user state. There are additional specific rules that apply only to certain munitions. Many of these additional rules are to be found in weapon-specific treaties. In what follows, it is intended to examine both the principles of general application to all weapons and any weapon specific rules that are, or that are alleged to be, relevant to the cluster munition debate. This method of analysis is adopted because, as has been noted, part at least of the current debate centers on whether existing general rules are adequate to address the problems which sometimes arise from their use.

General rules

In a sense there are two dimensions to the law concerning the use of weapons. The first of these consists of the rules and principles concerned with the weapons and associated technologies which states are permitted to develop and use in armed conflict. The fundamental rule is that in any armed conflict, the right of its parties to choose methods and means of warfare, and thus by extension to select types of weapon, is not unlimited.⁴⁰ It is not intended to deal with this aspect of the law in any detail here. For the present purposes, it is sufficient to note that certain further principles bind all states when selecting new weapons for development, acquisition or use. These are:

- that it is prohibited to employ weapons, material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering;⁴¹ and

⁴⁰ For a modern formulation of this essentially customary rule, see Art 35(1) of Additional Protocol I.

⁴¹ This is also a customary principle which is to be found in Article 35(2) of Additional Protocol I.

- that it is prohibited to employ weapons, methods or means of combat which cannot be directed at specific military objectives or whose effects cannot be limited as required by law and which as a result strike without distinction military objectives and civilians or civilian objects.⁴²

States which are party to Additional Protocol I are also prohibited from employing methods or means of warfare which are intended, or which may be expected, to cause widespread, long-term and severe damage to the natural environment.⁴³

In addition to these basic principles, there are numerous legal rules derived from particular treaties or from customary law and which prohibit or regulate a selection of individual weapons types or technologies ranging from certain fragmentation weapons to chemical weapons, from anti-personnel landmines to biological weapons, from poison to certain types of bullet. To the extent that states have acceded to, or ratified, particular treaties and in the light of any declarations or reservations they may have deposited when doing so, states are bound to implement those obligations.

Linked to this duty is Article 36 of Additional Protocol I, which obliges the one hundred and sixty-three states that are party to Additional Protocol I to review new weapons to ensure that they are lawful. The obligation on each of these states is to determine whether the employment of weapons it is studying, developing, acquiring, or adopting would be prohibited by the international law applicable to that state. While many states have ratified the treaty and, thus, are bound by this requirement it is understood that very few have an established system for discharging this obligation. The important point to note, however, is that the law not only prescribes rules to limit the techniques of war that may be employed and thus the suffering that may be caused, but it also requires states to ensure, in a self-policing sort of way, that they comply with the legal obligations they have accepted.

⁴² The prohibition on indiscriminate attack is founded in customary law. This expression of the rule is based on Article 51(4) of Additional Protocol I.

⁴³ Articles 35(3) and 55 of Additional Protocol I.

The wider law of targeting

Indiscriminate attacks

A frequent complaint about cluster munitions charges is that they are 'indiscriminate' by nature. It is therefore important to examine the legal meaning of that term in this context. Paragraph (4), Article 51 of Additional Protocol I, prohibits indiscriminate attacks, which it defines as follows:

- a. those which are not directed at a specific military objective;
 - b. those which employ a method or means of combat which cannot be directed at a specific military objective; or
 - c. those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol;
- and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.

To understand this rule, one must first consider the definition of military objective in Article 52 of AP1. This is as follows:

In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture, or neutralization, in the circumstances ruling at the time, offers a definite military advantage.

When ratifying this treaty, the United Kingdom entered a statement of interpretation in relation to Article 52, which, so far as relevant, states:

It is the understanding of the United Kingdom that a specific area of land may be a military objective if, because of its location or other reasons specified in this article, its total or partial destruction, capture or neutralisation in the circumstances ruling at the time offers definite military advantage.⁴⁴

⁴⁴ Statement made by the United Kingdom when ratifying Additional Protocol I on January

It is an often-heard allegation that cluster munitions are indiscriminate because they are area weapons. Certainly, so far as the United Kingdom interpretation is concerned, this is plainly not the case. The mere fact that a cluster munition is used to engage objects, for example, spread over an area of land does not render its use indiscriminate. Such a group of objects taken together is plainly capable of being a military objective and, by virtue of the cited United Kingdom statement, the area of land on which it sits can also properly be seen as a military objective the whole of which may be attacked using an area effect weapon such as a cluster munition. More recently, Landmine Action put the point in a subtly different way as follows:

“Indiscriminacy at the time of use”

Cluster munitions are ‘area-effect’ weapons; the target area of the cluster munition strike can contain multiple objects – both military and civilian.⁴⁵

The statements made in the narrative under this heading, that it is an area effect weapon, that the target area may contain multiple objects and that these may be both military and civilian are all accurate as written. In this regard it is, for the reasons already explained, highly significant that the authors use the word ‘objects’ not ‘objectives’ as by doing so they avoid the point that the group of vehicles or other objects may, as a group, constitute the military objective. The statement in the Landmine Action report may mislead the reader, of course, because of the sub-title ‘Indiscriminacy at the time of Use’. The reader is invited to conclude that because the cluster munition has an area effect and because the target area can contain multiple objects, therefore it is indiscriminate. As we have seen, this reasoning is simply incorrect.

While Article 51(4) of Additional Protocol 1 gives a definition of indiscriminate attack, the following paragraph of the article gives examples. It is, as an aside, curious that while the main rule is not particularly known widely, the second of the examples is understood broadly and discussed frequently. In the context of the current discussion, it seems sensible to take each of these examples in turn.

28, 1998.

⁴⁵ *Out of Balance*, Landmine Action, November 2005, section 2.1, at page 5.

Indiscriminate attacks – first API example

The first example in the Protocol of an indiscriminate attack is as follows:

an attack by bombardment by any methods or means 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 or civilian objects.⁴⁶

The ICRC Commentary on API notes that the attacking forces can use their own judgment, taking into account the weapons available and the circumstances, as to whether the individual objectives are too close together to be attacked separately. The Commentary notes the interpretation of the words ‘clearly separated and distinct’ leaves some degree of latitude to those mounting an attack; in case of doubt they can refer to sub-paragraph (b).⁴⁷ This language clearly suggests that in cases of doubt as to whether the objects are ‘clearly separated and distinct’, if the test in paragraph (b) is satisfied the attack would not, as a result of the doubt, be considered indiscriminate.

What is separate and distinct will be a function of the technical capabilities of the weapons actually available to the commander at the time when the attack is planned and/or executed. While this rule and wider targeting law⁴⁸ require that all feasible precautions be taken in the choice of methods of attack with a view to avoiding or at least minimising civilian losses, the rider ‘feasible’ is most significant. The United Kingdom interprets the term in this context to mean “that which is practicable or practically possible, taking into account all circumstances ruling at the time, including humanitarian and military considerations.”⁴⁹ Hence, if it is feasible in the stated sense to use a weapon which involves less risk to civilians, that weapon should be used. If, however, military or humanitarian considerations dictate that the particular weapon, or weapons of that description, must be saved

⁴⁶ Article 51(5)(a), Additional Protocol I.

⁴⁷ *Commentary on API*, ICRC, paragraphs 1971 and 1972.

⁴⁸ For example, Article 57 to API.

⁴⁹ Statement (b) made by the United Kingdom on ratifying API on January 28, 1998.

for future anticipated requirements, then the use of some other weapon which may involve greater risk to civilians in relation to the attack under consideration is lawful provided that it does not breach the rule in Article 51(5)(b) described below.

Military considerations may consist, for example, of the need to attack particular types of target especially suited to the weapon being used and on some future occasion. Humanitarian considerations may arise if, for example, it is anticipated that the use against expected future objectives of the more precise munition will save more civilian life than would be saved by its use in the instant attack.

The word 'feasible' also points to another, more obvious, potential limiting factor. Thus, technology may not be developed sufficiently to enable the individual attack of objects within a group. While it may seem obvious, it would also seem worth stating that the law does not require commanders to use weapons or methods which are not feasible either for logistic or for technical reasons.

Indiscriminate attacks – second API example

Article 51 of AP1⁵⁰ gives a further example of indiscriminate attacks. The paragraph, which reflects customary law, is as follows:

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.

This 'proportionality' test as it is known is founded clearly in the reality of military operations. It recognises that civilian casualties are likely to result from attacks, notwithstanding the extensive precautions that are taken to avoid them. This may be due to an almost infinite range of causes, from attempts by the enemy to shield his military objectives by the use of civilian human shields to technical malfunction, incorrect intelligence or the confused situation often characteristic of an armed conflict. The fact that civilian losses do occur

⁵⁰ Article 51(5)(b) of Additional Protocol I.

does not therefore, in and of itself, mean that the attack was unlawful. Rather, commanders, planners and so forth are placed under an obligation to avoid civilian casualties if this can be done. If it cannot, they are obliged 'in any event' to minimise them and, having selected the method of achieving the desired military purpose involving least risk to the civilian population, they are obliged to "carefully weigh up the humanitarian and military interests at stake".⁵¹

It will be noted that it is the expected collateral loss which must be balanced with the anticipated military advantage. This again, in the view of the author, is a recognition of military reality. The commander, planner and executor of the attack are concerned with meeting deadly threats and with prosecuting operations on which the survival of the state, of sections of its population or of its armed forces may depend. To expect a commander to agonise over remote philosophical chances is clearly unrealistic. The law recognises this and requires him essentially to balance the expected consequences of his planned attack.

'Future damage' dimension to proportionality

An important element in the cluster munition discussion centres on the extent to which commanders, planners and those who execute attacks are required to consider casualties arising in the medium to long term after the attack. Christopher Greenwood,⁵² in this connection, drew attention to the use of the word 'expected' in Article 51(5)(b) of API:

In its normal meaning, a consequence is said to be expected if it is thought more likely than not that that consequence will result. A lesser degree of risk is not sufficient.⁵³

Professor Greenwood then notes the stated preference of some delegates to the Diplomatic Conference which negotiated Additional Protocol I for the term "which risks causing," rather than "which may

⁵¹ *Commentary on Additional Protocol I, ICRC*, para 2208. See paragraph 2219 for a balanced assessment of the import of this rule.

⁵² See Observations dated November 13, 2003 circulated by the United Kingdom Delegation to the CCW Group of Governmental Experts November 17-24, 2003.

⁵³ *Ibid*, at page 2.

be expected to cause,” and observes that the former language was rejected in favor of the higher standard set by the term ‘expected’. Greenwood then explains:

The longer the time which elapses after the attack, the more events beyond the control of the commander may intervene and the more difficult it is to predict what the threat to the civilian population will be on the basis of the information reasonably available to the commander at the time the attack was ordered.⁵⁴ Moreover, it becomes increasingly difficult in those circumstances to say that any particular harm to the civilian population may be ‘expected’.⁵⁵

Landmine Action in its report *Out of Balance* cites a paper presented by Professor Greenwood to the CCW Group of Governmental Experts in May 2002⁵⁶ as follows:

If, for example, cluster weapons are used against military targets in an area where there are known to be civilians, then the proportionality test may require that account be taken both of the risk to the civilians from sub-munitions exploding during the attack and of the risk from unexploded sub-munitions in the hours immediately after the attack. It is an entirely different matter, however, to require that account be taken of the longer term risk posed by ERW, particularly of the risk which ERW can pose after a conflict has ended or after civilians have returned to an area from which they had fled. The degree of that risk turns on too many factors which are incapable of assessment at the time of the attack, such as when and whether civilians will be permitted to return to an area, what step the party controlling that area will have taken to clear unexploded ordnance, what priority that party gives to the protection of civilians and so forth. The proportionality test has to be applied on the basis of information reasonably available at the time of the attack.

⁵⁴ This is no doubt a reference to statement (c) made when the United Kingdom ratified Additional Protocol I, the terms of which are: “Military commanders and others responsible for planning, deciding upon or executing attacks necessarily have to reach decisions on the basis of their assessment of the information from all sources which is reasonably available to them at the relevant time.”

⁵⁵ See Greenwood, *ibid* at page 3.

⁵⁶ CCW/GGE/1/WP.10, May 23, 2002.

The risks posed by ERW once the immediate aftermath of an attack has passed are too remote to be capable of assessment at that time.⁵⁷

The author of the Landmine Action report then observes:

It is noticeable that in Greenwood's formulation the 'factors incapable of assessment' are all factors that might serve to reduce the risk. So Greenwood suggests a situation where the information 'reasonably available' is that an ERW threat will be created, and the unknown factors are the extent to which that threat would be mitigated by other interventions. He then suggests that the known threat should not be factored into the proportionality assessment because of the unknown nature of possible mitigating factors.⁵⁸

This does not seem to the author to be an entirely fair analysis of what Professor Greenwood has said. He is pointing out that the commander has to base his decision on the information available to him, that risks posed by ERW in the immediate aftermath of an attack in areas where there are known to be civilians may also need to be considered, but that thereafter those risks are too remote to be capable of assessment at that time. If, for example, a de-populated village is the subject of such an attack because of military assets moved into it by the enemy, the attacking commander will consider the military advantage to be anticipated from the attack. He will also consider the damage to be expected to the civilian buildings in the village and their contents, so far as is known. He will consider, too, whether any civilian persons are known to have stayed in the village and the losses they may be expected to suffer during and in the immediate aftermath of the attack, including from unexploded munitions. In relation to these tangible factors he will make a balanced judgment.

The extent, indeed the existence, of longer-term ERW risks, however, depends on numerous factors including the following:

- whether the civilian population wishes to return early to the village,

⁵⁷ Cited in *Out of Balance*, Landmine Action, November 2005 at page 12.

⁵⁸ See *ibid*, note 22 on page 13.

- whether it will be permitted to do so and whether the civil authorities can and do influence the behaviour of the population,
- what proportion of the civilian population will return and precisely when,
- whether UXO will be marked, cleared by the party in control of the territory in conformity with Protocol V, CCW norms before such return is permitted,
- whether the civilian population will receive ERW risk education as contemplated in Protocol V, CCW,
- whether the civilian population will heed and implement that advice, and
- whether particular members of the civilian population will have contact with ‘dud’ munitions so as to cause them to explode.

The obligations to mark and clear, remove or destroy ERW arise “after the cessation of active hostilities and as soon as feasible”⁵⁹ in territory under the control of a state party. Article 3(3) of Protocol V spells out the action to be taken with some clarity. Moreover, paragraph 1 of the Article requires states to take certain action where they do not control the relevant territory, again subject to a feasibility test.

The commander, it therefore seems to the author, is entitled to note that international law makes provision for marking, clearance, removal, destruction, assessment of the risk, prioritisation of the action to be taken and the deployment of associated resources. He may, of course, assume that his own nation will comply with its Protocol 5 obligations both as to territory it controls and otherwise. He may also be entitled to assume that the adverse party will comply with its obligations to mark, clear, warn, and so on. Even if, somewhat curiously, he is not entitled to assume these things, it would not appear to be reasonable to require him to assume that those involved will not discharge their obligations and that the associated ERW risks will remain un-addressed for any specific period into the future. The obligations arise after the cessation of active hostilities. It would appear to the author to be both onerous and unrealistic to require the

⁵⁹ Protocol 5 to CCW, Article 3(2).

commander to consider when this may happen in relation to re-population of the area by civilians.

Some of the factors noted earlier would, of course, mean that there is no risk at all to the civilian population, e.g. because there is no such population present. Furthermore, all of these factors would seem to be highly relevant to the question of whether any particular level of civilian loss can properly be regarded as 'expected'.

The issue here is encapsulated neatly in the citation in *Out of Balance* from Professor McCormack's presentation to the CCW Group of Governmental Experts in August 2005:

The balancing test requires commanders and planners to take into account the expected damage to civilian property and the expected loss of civilian life; it should be both the short term as well as the long term expectation that ought to be part of the equation.

The reader might conclude that, essentially, professors Greenwood and McCormack are saying substantially the same thing. McCormack's repeated use of the word 'expected' is in this respect significant. No one disputes that the commander is required to take into account civilian losses expected to result from the attack. What Greenwood is saying is that in the immediate aftermath of the attack, there are so many variables at work that the risks are too remote to form the basis of an expectation, and the clear inference from McCormack is that what cannot be described as the medium to long-term 'expectation' ought not to be part of the 'equation'.

In his presentation to the CCW Group of Governmental Experts in Geneva on November 22, 2005, however, Professor Wiebe⁶⁰ suggested that "long term effects of unreliable cluster submunitions must be included in proportionality considerations." He felt that past experience with such submunitions puts users on notice as to their failure rates and that post-conflict civilian hazards are foreseeable. He argued:

⁶⁰ *Ongoing Humanitarian Considerations in Cluster Munition Regulation*, V. Wiebe, a presentation to the CCW Group of Governmental Experts, Geneva, November 22, 2005.

Suggestions that effects are too distant and indeterminate are belied increasingly by IHL position statements by governments and the ICRC, national targeting doctrine, the development of 'effects based planning' and the recognition by field commanders of the dangers of unexploded submunitions to civilians and soldiers alike in the post-conflict environment.

In the author's view, when a commander is making an attack decision, the only rational basis on which he can be expected, and thus required, to approach that decision is by considering its expected consequences. As the discussion has demonstrated, to require him to consider possibilities which depend, often, on a multiplicity of other events which may or may not occur is to impose indecision in a conflict environment where decisiveness is essential.

Obligations of the defender

There is another dimension to the proportionality aspect of the cluster munition issue and Professor Charles Garraway drew attention to it in his valuable and informative presentation to the CCW Group of Governmental Experts Conference in November 2005.⁶¹ It is an essential requirement in any armed conflict that military commanders and forces engage the enemy in as structured and co-ordinated a manner as possible in the circumstances and with the objective of destroying enemy military capability. The accomplishment of this fundamental military goal involves the application of destructive force, the imposition of casualties on the enemy military force and thus obliges commanders to seek out the enemy wherever he may be. Equally, an enemy liable to suffer attack will seek to conceal and/or defend himself in any way that the tactical situation permits.

The law, however, places limits on the defender just as it limits the activities of the attacker. For states party to Additional Protocol I, the parties to the conflict shall, to the maximum extent feasible, endeavor

⁶¹ Paper submitted by Professor Charles Garraway to the Meeting of CCW Group of Governmental Experts meeting in Geneva, November 16, 2005.

to remove the civilian population, individual civilians and civilian objects from the vicinity of military operations, shall avoid locating military objectives within or near densely populated areas and shall take other measures to protect civilians and civilian objects from the dangers arising from military operations.⁶² Sadly, there are numerous occasions when states flout deliberately this legal requirement and site military hardware, such as tanks, in villages. Such unscrupulous and, indeed, illegal⁶³ behavior does not absolve the attacking commander of his obligations under international law. A number of international law scholars consider, however, that in such a situation the attacking commander is permitted to factor in the deliberate breach of Article 58 when conducting the proportionality assessment.

In the remainder of this article, possible solutions to the cluster munition problem that have been put forward will be considered. In the next section, the law relating to precautions in attack is examined to determine whether varying the language of any of the existing rules would be a suitable approach to the problem.

Precautions in attack

Those who plan or decide upon attacks are required by law to take certain precautions to facilitate compliance with the principles explained earlier. In this section, the precautions of greatest apparent relevance to the cluster munition problem are examined to see if they cater effectively for that problem. These precautionary requirements are to be found in Article 57, Additional Protocol I.

In the conduct of military operations, constant care shall be taken to spare the civilian population, civilians and civilian objects.⁶⁴

⁶² Article 58, Additional Protocol I. These principles would appear to the author to be customary in nature and thus to be binding on all states whether party to Additional Protocol I or not.

⁶³ Article 8(2)(b)(xxiii) of Rome Statute of the International Criminal Court.

⁶⁴ Article 57(1) of Additional Protocol I.

This rule reminds us that irrespective of the detailed rules that follow, constant care is a requirement. In the context of cluster munitions, this principle is of equal applicability and it is difficult to see how the rule could usefully be either adapted, expanded or improved with particular reference to that weapon type. Indeed, it would seem to the present author that there is much benefit to be derived from keeping this as a rule of general application.

Those who plan or decide upon an attack shall do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection but are military objectives within the meaning of paragraph 2 of Article 52 and that it is not prohibited by the provisions of this protocol to attack them.⁶⁵

This rule translates the principle of discrimination into a precautionary requirement and is under existing law equally applicable to cluster bomb attacks as to attacks using other munitions. It does not appear to require revision with particular reference to cluster munition use as it is essentially a self-standing principle. Again its adaptation or expansion in the specific context of cluster munitions may serve to detract from the general applicability of the principle and thus to undermine rather than reinforce wider protection of the civilian population.

Those who plan or decide upon an attack shall take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimising, incidental loss of civilian life, injury to civilians and damage to civilian objects.⁶⁶

This requires commanders and planners to fit the weapon to the planned attack. They must try to avoid causing any civilian loss. If some civilian loss is inevitable, the way in which the attack is prosecuted, the weapons that are used, the time when the attack takes place and other relevant factors must, as far as practically possible,⁶⁷ be

⁶⁵ Article 57(2)(a)(1) of Additional Protocol I.

⁶⁶ Article 57(2)(a)(ii) of Additional Protocol I.

⁶⁷ United Kingdom statement (b) on ratification of Additional Protocol I.

so arranged that civilian losses are kept to a minimum. As has been noted earlier, logistic availability of certain weapons and, for that matter, prohibitions on the use of certain weapons in particular circumstances, may limit the possibilities available to the commander.

This rule should not be altered in relation to cluster munitions. It is a fundamental legal principle of universal application, recognises the military realities facing a commander and properly balances these with the need for him to protect the population. The danger in qualifying the rule in relation to a particular weapon such as cluster munitions is that its universality, and thus its capacity to protect, may be called into question.

Those who plan or decide upon an attack shall refrain from deciding to launch any 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.⁶⁸

Proportionality has already been discussed. This precaution will therefore be dealt with briefly. It is important, however, to observe that expectation, on which this rule centres, is not the same as reasonable foreseeability. An outcome may be foreseeable but undesired. Precautions may be taken with a view to that outcome being prevented, but it may remain a possibility, even though undesired and indeed unlikely. It must therefore be regarded as reasonably foreseeable, but is definitely not the expected outcome.

The question then is whether this interpretation represents a shortcoming of the present law. Should commanders, planners, and executors of attacks be required to consider these reverberating, not necessarily likely, not desired, but foreseeable or conceivable effects of an attack? There can be no doubt that the more remote a consequence is from the moment of attack, the less likely it is that commanders will actually consider it, whatever the law may be written to require. A consequence is remote for these purposes if there are other intervening factors that will also contribute to determining whether it materialises.

⁶⁸ Article 57(2)(a)(iii) of Additional Protocol I.

The more numerous these intervening factors become, the more remote the consequence is. The consequence we are considering here is not the existence of 'dud' munitions but, rather, the adverse consequences listed above, that is, that casualties to civilians will be caused by them. Whether there will be any such civilian casualties and if so, the number of such casualties is likely to be very difficult to determine for the reasons noted before. It thus seems to the author to be a rather remote outcome in the sense given earlier.

Other proposed solutions

In the next section, other possible approaches to the cluster munition problem that have been considered during the debate to date will be assessed in turn. The purpose is to try to determine which of these approaches seems most likely to provide an effective solution to the problem.

Weapon-specific targeting rules

It is suggested frequently that the use of cluster munitions against military objectives located in concentrations of civilians should be prohibited. The term 'concentration of civilians' is used in the Incendiaries Protocol.⁶⁹ It is defined there as follows:

'Concentrations of civilians' means 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.

This definition is less than clear. In practice in war, elements of the civilian population may be expected to move away from the fighting. Villages and towns may well become partly depopulated. Individuals and groups may, however, decide for whatever reason to stay, such that it may be difficult to conclude that a particular village or town in which the enemy chooses to seek to conceal its tanks, other military hardware or armed forces personnel is, in truth, wholly uninhabited.

⁶⁹ Article 1(2) of Protocol III to the Conventional Weapons Convention.

The language cited above is such that parts of cities may be regarded as depopulated for these purposes, and thus that the use of the munition there becomes lawful, whereas the status of towns or villages must apparently be considered as a whole. In such circumstances, the partially inhabited status of a perhaps substantial town or, for that matter, of a dispersed village, would deny the use of the weapon. That in turn would mean that a commander who decides that destruction of these enemy military assets is required militarily will seek to use alternative munitions to do so.

Those alternative means may well comprise unitary munitions of sufficient size to destroy the dispersed military objective. Self-evidently, such munitions may be expected to cause significantly greater destruction and, no doubt, collateral casualties at the time of the attack than is likely to have been the case with a cluster munition. While any such attack can only proceed if discriminating and proportionate, the fact remains that it may involve collateral loss greater than that which may be expected to follow a cluster munition attack.

The point, therefore, remains that an attack using unitary munitions and occasioning more collateral loss than would arise from a cluster munition attack may nevertheless be proportionate and thus discriminate and lawful. While casualties occurring after the conclusion of hostilities from unexploded munitions are a matter for serious concern, it would be most unfortunate if efforts to address that aspect of the matter were to result in an increase in collateral casualties as a whole.

Is Incendiaries Protocol language relevant to cluster munitions?

The term 'concentration of civilians' is used in Protocol III to address radically different risks. During or in the immediate aftermath of an attack, incendiary weapons, when used in civilian areas, produce a serious danger of a firestorm, which is incapable of being restricted to the area of the military objective of the attack, and which has enormous destructive potential in those civilian areas. That destructive potential is, moreover, directly linked to the technical purpose for which the weapon was used, namely to cause fire. The position in relation to unexploded cluster munitions would appear to be rather different.

The design purpose is that they explode on impact. That purpose does not give rise directly to the same enormous destructive potential in civilian areas. The unexploded sub-munitions will remain usually in the location where the military objective of the attack was and will not produce an exponentially increasing degree of direct civilian damage due to the effects of meteorological activity, specifically wind. It therefore seems to the author that a number of the significant features of the firestorm attacks of World War Two are absent in relation to cluster munitions.

If it is accepted that incendiary weapons do not supply a suitable precedent for our analysis of the cluster munition problem, perhaps we should nevertheless consider an altered version of the Protocol III definitional language to address that problem. For example, it may be possible to revise the definition of the areas in which it would be prohibited to attack military objectives using cluster munitions. A conceivable approach might be to permit use in depopulated parts of towns and villages. This would imply the amendment of the Protocol III language to something along the following lines:

‘Concentrations of civilians’ means any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads.

Although superficially attractive, such a formulation, however, would also seem likely to create confusion. What, for a start, does a “part of a town or village” mean for these purposes, and must that part be completely devoid of all remaining inhabitants to come within the definition? If so, how is this necessarily to be known to an attacker before the attack?

It would seem to the author that what is really required is a proper application of the principle of distinction. The danger in formulating special rules to prohibit the use of cluster munitions in particular cases is that, as Charles Garraway pointed out,⁷⁰ to achieve a necessary military purpose, greater civilian collateral loss may well result from the use of alternative methods and means. This may result in a greater

⁷⁰ Garraway, *ibid.*

effective value in the proportionality balance being accorded to collateral civilian casualties occasioned by 'dud' sub-munitions as opposed to collateral casualties occasioned more directly during the attack or its immediate aftermath. That would appear to be an undesirable and potentially illogical outcome. All collateral civilian casualties are a matter for deep regret and, if they are the expected consequence of the attack, all should, in this respect, count equally.

Requirement to consider failure rates

Alternatively, it might be possible to amend existing general law, say by specifically requiring that, when determining the appropriateness of an attack using cluster munitions, decision makers must consider the civilian casualties 'dud' sub-munitions may be expected to occasion in the medium term, though how that term would be defined is not clear. Commanders, planners, and so forth might be required to consider failure rates as established from tests and other sources, as well as all relevant circumstantial and other factors. Any such requirement would, however, need to be formulated in terms of the information reasonably available to the decision maker at the relevant time⁷¹ and to be based on what may be expected to happen.

As we have seen, to require commanders to assess possible outcomes short of that to be expected is effectively to require them to speculate. That would be undesirable because there are, of course, any number of possible outcomes from a particular piece of activity and the process of weighing up all such possibilities is likely to be onerous and impractical.

If, on the other hand, a rule were devised such that only the 'dud casualty' aspect must be considered on the basis of possible outcomes but all other aspects of the decision must be addressed on the basis of expectation, the result is likely to be a distorted decision making process. Clearly, any requirement to consider in isolation the number of 'dud' submunitions likely to result from an attack is unlikely to make a positive contribution to the commander's decision making

⁷¹ Statement c, United Kingdom statements on ratification of Additional Protocol I on January 28, 1998.

process. In the end, the discussion will always revert to the requirement of that commander to balance the expected consequences, with the result that considering failure rates in isolation does not appear to take us materially forward.

Technical improvement to submunition design

It has been suggested by the Swiss delegation during CCW meetings that a technical solution might seek to achieve reduced failure rates in cluster munitions.⁷² This certainly seems to be the most promising suggestion that has so far been discussed. Such an approach may have the merit of addressing the root cause of the difficulty in a direct way. Clearly and self-evidently, if standards of fuse and wider munition design, manufacture, delivery arrangements, storage systems, deployment and firing protocols, and all other relevant factors including training and maintenance can be improved so as to reduce significantly the numbers of the munitions which fail to operate as intended, the quantities of ERW will diminish, casualties among the returning civilian population will also fall and there will have been a distinct improvement.

It will be for the scientists, engineers, and operators to advise how this is achieved best. Improvements in fuse design, which may include the fitting of self-destruction, self-deactivation, or self-neutralization facilities or perhaps combinations of these things will need to be considered, debated and eventually agreed. It will be important to ensure that proposed technical solutions are available readily to all states, both technically and financially, as this will be an important factor in securing international agreement to any proposed solution. That implies the need for broad consultation in advance of the tabling of any concrete proposals, so that what is put forward starts with a large measure of support.

Some states, indeed the majority of affected states, will need time to adjust their inventories to ensure compliance. The proposals will need to reflect this. A number of possible approaches can be adopted to achieve this, but the most likely will be time periods during which it

⁷² Personal knowledge of the author.

will be lawful for states ratifying a future Protocol on the subject to continue to possess and use non-complying munitions but unlawful for them to transfer such weapons. Initial information suggests that the re-engineering of cluster munitions with improved fusing for each submunition is likely to prove prohibitively expensive and, quite possibly, hazardous. This suggests that disposal of existing stocks and the purchase of new weapons to replace the capability will be necessary for most states wishing to adhere to the new instrument. The logistic, financial and technical difficulty associated with such a process should not be underestimated and suggests that time periods taking into account the needs of all, or at least most, states will have to be built carefully into any proposals that are put forward.

As noted, Protocol 5 to CCW includes both legally binding provisions and voluntary best practice, the latter being set forth in an annex to the treaty. Some of the technical aspects which appear to affect failure rates and which were listed earlier in this section, may be considered more appropriate for such best practice guidance. Evidently, Protocol 5 already contains some voluntary guidance, for example on weapons storage and transportation. Perhaps a future instrument could build on those arrangements while including guidance of specific relevance to storage, transportation, fitting, delivery parameters, maintenance and testing of cluster munitions. These will, however, all be matters for negotiation.

Conclusions

Before any proposals are tabled, however, it is important that the technical aspects of the problem are analysed fully, that a logical, technically accurate, and widely accepted basis for the proposals is established and that the evidence to support the chosen approach, and indeed the existence and nature of the underlying problem, are properly presented. This is why the current CCW work to clarify the nature and causes of the ERW/cluster munition problems is so important. If it is pursued to its logical conclusion, the likelihood is that the resulting proposals will earn 'buy in' from the bulk of affected or relevant states given, as noted earlier, that these weapons have broadly accepted military utility.

By clarifying the nature and causes of the humanitarian concern, including the relevant science, and by examining all of the available options for addressing that concern with a view to identifying the most appropriate approach, there is a better chance that the proposals that emerge will gain support. Making a practical difference requires not just the development of progressive law, but also ratification of that law by relevant, that is, affected, states and, vitally, adherence by those states to the rules they have ratified. It will therefore be important that, in addition to providing a sound basis for any proposed course of action, the practical deliverability of that suggested course be thought through adequately.

Given that international law is and will remain a matter for states to agree and to implement, it will always be necessary to balance military requirements with humanitarian concerns. Law which fails to do so is likely to be and to remain ineffective. The CCW process provides the best approach yet developed for achieving this goal, but it can only operate on the basis of consensus. One interpretation of events at the Group of Governmental Experts meeting in Geneva in November 2005 and at the associated meeting of States Parties in the same month,⁷³ is that progress, and specifically the negotiation of new Protocols, will not be possible because consensus will not be achievable.

If that were to be the case, and discussions in 2006 are likely to clarify the issue, then if progress on weapons related matters is to be achieved, some alternative method or venue is likely to be required. It would be essential, however, that in designing any such new process, its rules or underlying principles should require the greatest possible degree of agreement among specially affected states before legal instruments can be agreed. The need is that progress in this field be real, and broad support from the states which are involved actively in relevant activities is the means of achieving such real progress. To abandon a negotiation process founded on broadly based consensus in favor of one rooted in narrower, somewhat exclusive groupings of the

⁷³ In November 2005, and after extensive discussion by a CCW Group of Governmental Experts, proposals that might have led to a Protocol on Mines other than Anti-Personnel Mines failed even to achieve support for a mandate to negotiate such a Protocol in 2006. Such an outcome was seen by a number of those present as disappointing.

like-minded risks the creation of substantive law suited to the requirements of the few, not the many.

There can be no doubt that cluster munitions cause unintended casualties among the civilian population long after the conclusion of the hostilities. Those, and indeed all unintended casualties are a matter for profound regret and sorrow. In an ideal world, there would be an inexhaustible supply of perfectly precise weapons which technology would allow to be targeted individually against every kind of military objective in all circumstances and which would operate with absolute reliability on all occasions. Technology does not yet permit us to achieve this high standard, and not all states are at the same stage in this development process.

Moreover, munition supply during an armed conflict is often problematic. Indeed, military effort is often directed at limiting the availability to an adversary of weapons of choice or at interfering in any available way with the precision of his military strikes. Thus, wished-for precision will not always be available to the most developed military force and the actions of the enemy may degrade the intended effect of a particular military activity. Current procurement decisions, however, already seek ever-improving standards of weapons design and performance to ensure that collateral losses are kept to a reducing minimum. In the view of the author, it is important that any law that is developed with particular reference to cluster munitions acknowledges the military, technical, and financial realities and limitations.

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