

**GROUP OF GOVERNMENTAL EXPERTS OF
THE STATES PARTIES TO THE CONVENTION
ON PROHIBITIONS OR RESTRICTIONS ON
THE USE OF CERTAIN CONVENTIONAL
WEAPONS WHICH MAY BE DEEMED TO BE
EXCESSIVELY INJURIOUS OR TO
HAVE INDISCRIMINATE EFFECTS**

CCW/GGE/XIII/WG.1/WP.12/Add.1
27 March 2006

Original: ENGLISH

Thirteenth Session
Geneva, 6-10 March 2006
Item 7 of the Agenda
Explosive Remnants of War

Working Group on Explosive Remnants of War

**REPORT ON STATES PARTIES' RESPONSES TO THE
QUESTIONNAIRE ON INTERNATIONAL HUMANITARIAN LAW &
EXPLOSIVE REMNANTS OF WAR, CCW/GGE/X/WG.1/WP.2,
DATED 8 MARCH 2005¹**

Prepared by the Asia Pacific Centre for Military Law, University of Melbourne, Australia,
presented at the request of the Coordinator on ERW

Addendum

ANALYSIS OF EMPIRICAL DATA ON APPLICABLE PRINCIPLES OF IHL

1. This Addendum summarises the answers provided by Respondent States to the first part of the questionnaire and includes an analysis of the responses and the implications which flow from them. The Report does not attribute statements or responses to identified States but do refer to the numbers of Respondent States where relevant.
2. In Part One of the IHL questionnaire States Parties were asked to identify existing principles of IHL applicable to the use of force during an armed conflict which they consider to be relevant to the use of munitions, including submunitions, that may become ERW. A summary of those responses follows, showing the percentage of Respondent States that identified particular IHL principles and rules.

¹ Prepared by Professor Tim McCormack on the basis of the questionnaire responses and compiled oral intervention transcripts by States Parties received by 13 January 2006, in response to the questionnaire prepared by Australia, Canada, New Zealand, Norway, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland and United States of America in consultation with the International Committee of the Red Cross.

Military Necessity	88%
Humanity	42%
Distinction	88%
Discrimination	70%
Proportionality	97%
Superfluous Injury or Unnecessary Suffering	76%
Precautions in Attack	55%
Environmental Protection	48%
Limitation	18%
Reciprocity	9%
Equality	3%

3. The questionnaire invited States Parties to identify the source of these principles, and to indicate to the GGE whether they considered the obligations to be founded in customary international law or treaty provisions. In the case of the latter, States were asked to specify which treaty provisions are considered relevant.

4. One of the most significant findings in analysing Respondent States' answers to Part One of the questionnaire is the overwhelming consensus as to the importance and applicability of general 'principles' of IHL to the use of weapons and, in particular, to munitions or submunitions that may result in ERW. All Respondent States note the importance of IHL principles in guiding decisions relating to the deployment of military force. With only 33 responses received it is impossible to state categorically that all States Parties to the CCW accept this fundamental proposition; however, it is the case that not one Respondent State explicitly challenges it. Consequently, the prevailing consensus does offer an optimistic basis for advancing common understanding of the ways in which the general 'principles' of IHL can be applied and implemented more rigorously in the future to ameliorate the tragic consequences of ERW.

5. Despite this demonstrable consensus, however, it is obvious that there are significant inconsistencies in approach between Respondent States: in understanding the relevant principles; in articulating how they apply to the problem of ERW; and in explaining the approaches adopted for the national implementation of these legally binding obligations.

6. It is clear that there is widespread confusion about the distinction between general principles of IHL and specific and binding legal rules. The analysis seeks to clarify that distinction. The distinction has important practical consequences; it is not an esoteric academic discussion with no practical effect. General principles of IHL guide the behaviour of parties to armed conflicts but those general principles have been given specific content in the articulation of binding legal rules. Violations of these binding legal rules may constitute war crimes such that both physical perpetrators and commanders who either order the commission of the crimes or fail to exercise their authority to stop those crimes will be criminally responsible and may be subject to trial proceedings.

7. These rules apply to the use of weapons which may result in ERW as much as they do to the use of any particular category of weapon. These specific binding rules of IHL are much more than nebulous principles lacking real content and providing some convenient smokescreen for States to hide behind when it comes to the problem of ERW. Demands for strict adherence to

these binding rules are unrelenting and violations of the rules will rightly be met with condemnation and calls for transparent accountability of those responsible.

8. The analysis reviews the ‘principles’ of IHL and attempts to clarify the ways in which they should regulate the use of weapons which may result in ERW. The previous work of the ICRC, the GICHD and academic commentators is fundamental to the Report’s attempts to provide clarity and assistance to Respondent States.

9. The Report also attempts an analysis of Respondent States’ approaches to the national implementation of legally binding rules of IHL as they relate to the problem of ERW. There is great diversity in approach to national implementation due, in part, to differing treaty obligations on the part of different States. While international law is never prescriptive as to the manner in which States implement their legal obligations domestically, there is no doubt much to learn from the approach of other States Parties to the CCW.

Military Necessity & Humanity as General Principles

Empirical Data on Principles of Military Necessity and Humanity

10. Eighty-eight per cent of Respondent States considered the principle of military necessity to be relevant to the use of weapons which may result in ERW. Forty-six per cent of these States used their response to indicate the basis for this obligation. Responses show that States consider the principle of military necessity to derive from both customary and treaty based law.

Customary International Law	31%
1907 Hague Regulations, ² Article 23	23%
1949 Geneva Conventions ³	8%
Additional Protocols to the Geneva Conventions ⁴	8%

11. The ICRC and academic commentators have characterised military necessity as a general principle which must be balanced against the principle of humanity. In its 2005 paper to the

² Convention (IV) respecting the Laws and Customs of War on Land and its Annex: Regulations concerning the Laws and Customs of War on Land, opened for signature 18 October 1907, 205 ConTS 277 (entered into force 26 January 1910) (‘Hague Regulations’).

³ Geneva Convention for the Amelioration of the Condition of the Wounded and the Sick in Armed Forces in the Field, opened for signature 12 August 1949, 75 UNTS 31 (entered into force 21 October 1950) (‘Geneva Convention I’); Geneva Convention for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, opened for signature 12 August 1949, 75 UNTS 85 (entered into force 21 October 1950) (‘Geneva Convention II’); Geneva Convention Relative to the Treatment of Prisoners of War, opened for signature 12 August 1949, 75 UNTS 135 (entered into force 21 October 1950) (‘Geneva Convention III’); Geneva Convention Relative to the Protection of Civilian Persons in Times of War, opened for signature 12 August 1949, 75 UNTS 287 (entered into force 21 October 1950) (‘Geneva Convention IV’) (collectively, ‘Geneva Conventions’).

⁴ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, opened for signature 8 June 1977, 1125 UNTS 3 (entered into force 7 December 1978) (‘Additional Protocol I’); Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts, opened for signature 8 June 1977, 1125 UNTS 609 (entered into force 7 December 1978) (‘Additional Protocol II’).

GGE,⁵ the ICRC refers to the Preamble to the 1868 St Petersburg Declaration⁶ as demonstrative of the interaction between the general principles of military necessity and humanity in an early legal instrument regulating the conduct of warfare. The Preamble to the Declaration states in relevant part:

“Having by common agreement fixed the technical limits at which the necessities of war ought to yield to the requirements of humanity ... The contracting or acceding parties reserve to themselves to come hereafter to an understanding whenever a precise proposition shall be drawn up in view of future improvements which science may effect in the armament of troops, in order to maintain the principles which they have established, and to conciliate the necessities of war with the laws of humanity.”

12. The principle of humanity was considered relevant by 42 per cent of Respondent States. Approximately half of these States indicated the source of this principle to be a mixture of both customary and treaty based law.

Customary International Law	14%
Additional Protocol I to the Geneva Conventions	14%
Protocols I, Amended II, III & IV ⁷ to the CCW	14% for each
1907 Hague Regulations, Martens Clause	14%

13. The ICRC has noted that the general principle of humanity limits actions during armed conflicts in circumstances where there is no specific IHL rule. The ICRC is of the view that the principle of humanity is reflected most notably in the Martens Clause, a provision inserted into the Preamble of the 1907 Hague Convention (IV) Respecting the Laws and Customs of War on Land which provides that:

“Until a more complete code of the laws of war has been issued, the High Contracting Parties deem it expedient to declare that, in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the laws of nations, as they result from the usages established among civilised peoples, from the laws of humanity, and the dictates of the public conscience.”

14. The original articulation of the Martens Clause in 1907 has been reiterated in Article 1(2) of Additional Protocol I to the Geneva Conventions:

“In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.”

⁵ ICRC, *Existing Principles and Rules of International Humanitarian Law Applicable to Munitions that May Become Explosive Remnants of War*, CCW/GGE/XI/WG.1/WP.7 (28 July 2005).

⁶ Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight (Saint Petersburg, 11 December 1868).

⁷ Additional Protocol IV to the CCW entitled Protocol on Blinding Laser Weapons, opened for signature 13 October 1995, CCW/CONF.1/16 (Part I) (entered into force 30 July 1998).

Military Necessity and Humanity as Related Principles

15. Military necessity and humanity are two guiding principles contained within international humanitarian law. The principle of **military necessity** justifies the use of lethal military force for legitimate military purposes — against enemy combatants and against military objects. In contrast, the principle of **humanity** forbids the infliction of suffering, injury or destruction not actually necessary for the accomplishment of legitimate military objectives. These two principles co-exist, sometimes in tension with one another, and the most concise encapsulation of the relationship between the two general principles is the general rule in Article 22 of Hague Convention IV of 1907 and reiterated in Article 35(1) of Additional Protocol I to the Geneva Conventions that ‘in any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited’. The limitations which apply to choice of methods and means are derived from notions of humanity. In the 1868 St Petersburg Declaration which banned explosive bullets under 400 grammes in weight, the negotiating States claimed in the Preamble to the instrument that they had ‘by common agreement fixed the technical limits at which the necessities of war ought to yield to the requirements of humanity’. The International Court of Justice in its 1996 Advisory Opinion on the Threat or Use of Nuclear Weapons reaffirmed these fundamental principles of IHL applicable, according to the Court, not only to nuclear weapons but to every weapons category.⁸

16. The general principles of military necessity and humanity are also balanced in the articulation of specific obligations upon States. In effect the principle of humanity acts as a constraint on the principle of military necessity by aiming to ameliorate the suffering of victims of armed conflict and to minimise the effects of such conflict on the civilian population. In the case of the formulation of specific rules and obligations such as the prohibitions on the wilful targeting of civilians, the prohibitions on indiscriminate attacks, the rule on proportionality and the obligations to take precautions in attack, the principle of military necessity has been tempered by the principle of humanity. However, as was already seen from the ICRC’s statements above, even in situations where there is no specific rule or obligation, the principle of humanity imposes a general constraint on an unbridled notion of military necessity to justify lethal force.

17. Respondent States have characterised the general principles of military necessity and humanity slightly differently. Some emphasised the relationship between military necessity and humanity stating that ‘IHL reflects a compromise between military necessity and humanity for the purpose of alleviating human suffering and minimising negative effects on protected persons’. A number of other Respondent States appear to consider them as individual and separate principles.

(i) *Interpretation and Application of the Principle of Military Necessity to ERW*

18. Eighty-eight per cent of Respondent States to the IHL questionnaire noted the relevance of applying the principle of military necessity to the use of munitions or submunitions that may become ERW. Such a high percentage of responses affirm the value given to this principle by States when planning or executing attacks using explosive ordnance.

⁸ Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion) [1996] ICJ Rep, paras 77 and 78. Opinion available at <<http://www.icj-cij.org>>.

become ERW. Such a high percentage of responses affirm the value given to this principle by States when planning or executing attacks using explosive ordnance.

19. No Respondent State ruled out the applicability of the principle of military necessity. However, some did not specifically mention it as being pertinent to the issue of ERW. Responses indicated a general understanding of military necessity as a principle which permits States engaged in armed conflict to use the kind and degree of lethal force necessary to achieve the legitimate purpose of the conflict. The legitimate purpose of the conflict is the complete or partial submission of the enemy as quickly as possible by means of legally regulated armed force. The implication here, for example, is that for some Respondent States, cluster munitions are such a militarily effective weapon that any expected or anticipated problem of ERW from dud submunitions does not outweigh the expected military advantage from their use. No Respondent States challenged the notion that the killing of enemy combatants and others whose death is unavoidable might be considered necessary to accomplish the military objective and is therefore justified by the principle of military necessity.

20. One response also indicated that the destruction of property may be permitted if that destruction is imperatively demanded by the necessities of war but that the wanton destruction of property as an end in itself is a violation of IHL and is not permitted. Destruction of property will only be justified where there is a reasonable connection between the targeting of the property (or some military target in close physical proximity to it) and the overcoming of enemy forces in order for the attack to be justified by this principle.

21. Many Respondent States clarified that military necessity does not justify any derogation or deviation from the laws of armed conflict in order to gain military advantage. Responses indicate the belief that the principle of military necessity must be read in conjunction with other rules and obligations of IHL, as it does not justify any use of force that would violate other IHL principles.

(ii) *Interpretation and Application of the Principle of Humanity to ERW*

22. Forty-two per cent of Respondent States identified the applicability of the principle of humanity to the problem of ERW. Some Respondent States noted the relationship between military necessity and humanity stating that IHL reflects a compromise between military necessity and humanity. Other States indicated their belief that the principle of humanity is an individual principle and that the principle forbids infliction of suffering, injury or destruction not actually necessary for the accomplishment of legitimate military objectives.

23. One Respondent State identified the two ways in which the principle of humanity can be understood: first as the foundation upon which IHL was developed; and secondly, as an additional principle which must guide the decisions and actions of military forces in cases not covered by rules of customary or treaty law. That particular Respondent State articulated its understanding of the principle of humanity as including both of the aforementioned.

Protection against ERW Afforded by Military Necessity and Humanity

24. Responses to the questionnaire highlight the fact that certain weapons themselves may not be illegal by nature, however, the effects of the weapons could be deemed illegal if their use cannot be justified by legitimate military necessity.

25. Specifically in relation to cluster munitions, one Respondent State argued that the use of such munitions in a way that inflicts unnecessary suffering, injury or destruction must be prohibited, regardless of whether the humanitarian catastrophe is caused by the direct impact of munitions at the time of the attack or by the ERW effect. In the absence of a specific treaty regime either banning cluster munitions or at least regulating their use States will obviously rely upon general principles in support of their view on these weapons. Some States Parties to the CCW wish to continue to use cluster munitions on the basis of their alleged military utility and so will argue very much in favour of the significance of the principle of military necessity as a *permissive* general principle in the absence of a specific prohibition. Other States who oppose the use of cluster munitions will rely upon the general principle of humanity to argue against the deleterious humanitarian consequences of the use of such weapons — particularly arising from the problem of ERW. The relevant specific rules and obligations of IHL are themselves the product of a sensitive balancing of the general principles of military necessity and humanity. The Report turns to consider those relevant rules and to offer its own analysis of their adequacy to deal with the problem of ERW or whether new ERW-specific treaty law is required.

Distinction & Discrimination

Empirical Data on the Rules of Distinction & Discrimination

26. Of the 88 per cent of Respondent States that indicated the applicability of the principle of distinction to the ERW problem, three quarters reported the source of their obligation. Once again responses showed a combination of sources including both customary and treaty based law.

Customary International Law	14%
1907 Hague Conventions and Regulations	14%
Additional Protocol I, Article 44	5%
Additional Protocol I, Article 48	24%
Additional Protocol I, Article 51	19%
Additional Protocol I, Article 52	5%
Additional Protocol I, Article 57	5%
St Petersburg Declaration	5%
UN General Assembly Resolution 2444 ⁹	5%
UN General Assembly Resolution 2675 ¹⁰	5%

⁹ GA Res 2444 (XXIII), UN Doc A/RES/2444 (XXIII) (19 December 1968).

¹⁰ GA Res 2675 (XXV), UN Doc A/RES/2675 (XXV) (9 December 1970).

27. The ICRC Customary Law Study states the content of the customary law rule of distinction as follows:

Rule 1. “The Parties to the conflict must at all times distinguish between civilians and combatants. Attacks may only be directed against combatants. Attacks must not be directed against civilians.”

Rule 7. “The parties to the conflict must at all times distinguish between civilian objectives and military objectives. Attacks may only be directed against military objectives. Attacks must not be directed against civilian objects.”

28. The ICRC notes that this customary rule of distinction between civilians and combatants was first articulated in the St Petersburg Declaration, which states in its Preamble that ‘the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy’. The ICRC also notes that the Hague Regulations do not expressly specify that a distinction must be made between civilians and combatants, but Article 25, which prohibits ‘the attack or bombardment by whatever means, of towns, villages, dwellings or buildings which are undefended’, is based on this principle. The customary law rule of distinction is reaffirmed in treaty law in Articles 48, 51(2) and 52(2) of Additional Protocol I to the Geneva Conventions, Article 13(2) of Additional Protocol II to the Geneva Conventions, and Amended Protocol II and Protocol III to the CCW (Articles 3(7), 2(1)).

29. Seventy per cent of Respondent States indicated their belief that the rule of discrimination, closely related to the rule of distinction, is also applicable to the use of munitions which may cause ERW. Seventy-one per cent of those responses clarified the origin of the principle indicating that States believe, again, that the rule exists in both customary and treaty based law.

Customary International Law	35%
Additional Protocol I, Article 51	18%
Additional Protocol I, Article 51(4)	29%
Additional Protocol I, Article 51(5)	6%
Amended Protocol II to the CCW, Article 3(8)	12%
Rome Statute of the ICC, ¹¹ Article 8(2)(b)(xx)	6%

30. The ICRC characterises the rule as one of customary international law in rules 11–13 and 71 of their Customary Law Study. These rules provide that:

Rule 11. “Indiscriminate attacks are prohibited.”

Rule 12. “Indiscriminate attacks are those:

- (a) which are not directed at a specific military objective;
- (b) which employ a method or means of combat which cannot be directed at a specific military objective; or
- (c) which employ a method or means of combat the effects of which cannot be limited as required by international humanitarian law;

¹¹ Rome Statute of the International Criminal Court, opened for signature 17 July 1998, 2187 UNTS 3 (entered into force 1 July 2002).

and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.”

Rule 13. “Attacks by bombardment by any method 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 are prohibited.”

Rule 71. “The use of weapons which are by nature indiscriminate is prohibited.”

31. The ICRC shares the view of the majority of States that the prohibition on indiscriminate attacks is codified in Article 51(4)–(5)(a) of Additional Protocol I to the Geneva Conventions, as well as Article 3(8) of Amended Protocol II to the CCW.

Interpretation and Application of the Rules of Distinction and Discrimination to ERW

32. The rule of distinction requires that parties to a conflict must, at all times, distinguish between civilians and combatants and also between military objectives and civilian objects. It is prohibited to target deliberately, or to attack wilfully, the civilian population or civilian property.

33. One trend apparent from the responses in relation to the rule of distinction was the States’ perception of the close relationship with the so-called ‘principle’ of discrimination, which is in fact a strict prohibition on indiscriminate attacks. Responses show many States believe that distinction is central to the prohibition against indiscriminate attack. One Respondent State argued that distinction and discrimination should be considered as one principle. Perhaps the more accurate characterisation is that the obligation on all parties to a conflict to distinguish between civilians and combatants encompasses two strict prohibitions — the prohibition on deliberate attacks on the civilian population and the prohibition on indiscriminate attacks.

34. It is clear that any attack involving munitions deliberately intended to create an ERW threat to the civilian population would be in violation of the prohibition on deliberate targeting of civilians and would constitute a war crime.¹² This hypothetical scenario is an extreme one. The overwhelming majority of unexploded ordnance that has created the ERW problem was not wilfully targeted at civilians. Nevertheless, it should not be assumed that such wilfulness is unimaginable. It is important to recognise that any such atrocity should be labelled as such and that those responsible should be brought to criminal accountability.

35. The much more common scenario is the creation of an ERW problem incidental to legitimate targeting of enemy combatants and military objects. The real issue is whether the prohibition on indiscriminate attacks applies to those weapons which can be expected to result in ERW. One Respondent State contended that munitions or submunitions that may become ERW should not be used when a distinction between military objectives and protected persons or objects cannot be made at the time of attack. Another response indicated that in the case of doubt, it should be assumed that any object which is normally dedicated to civilian purposes will not make an effective contribution to military action.

¹² See, eg, Rome Statute of the International Criminal Court, Articles 8(2)(b)(i)–(ii) and 8(2)(e)(i).

36. The choice of munitions employed during a conflict must be such as not to undermine the distinction between military objectives and civilians and civilian objects. One Respondent State claimed that a ban should be placed on the use of weapons which cannot be controlled by the user. Cluster bombs and their submunitions were highlighted as being particularly relevant to the prohibition on indiscriminate attacks. Cluster bombs are difficult to control because they are designed to impact on a wide area and, therefore, carry a great risk of impact on civilians and civilian objects — particularly if they are used to target military objectives in civilian areas and also once hostilities cease and civilians attempt to return to the area of military operations. The use of munitions which are likely to fail or are known to have a high dud rate in the vicinity of civilians and civilian objects contradicts the prohibition on indiscriminate attacks. It cannot be guaranteed that such munitions will affect targeted military objectives only — especially when such munitions are used in areas where civilians are present or in areas known to be frequented by civilians when hostilities are not occurring.

37. In contrast, one Respondent State argued that the use of submunitions constitutes no breach of the principle of distinction. This particular response argued that the number of submunitions that fail is a ‘negligible percentage’ of submunitions used in military operations. And once submunitions fail and become ERW they are only dangerous when volitionally *handled* by civilians, unlike anti-personnel landmines which kill and maim indiscriminately when detonated by unknowing victims after the end of hostilities. One Respondent State argued that ‘it would be a mistake to claim that the use of submunitions systematically breaches the principle of discrimination, in view of the fact that at the very time of the use of this type of weapon, the targets aimed at — and principally affected — are indeed military’.

38. However, a number of responses highlighted that the use of submunitions still presents a large humanitarian risk even when aimed at military targets. One Respondent State claimed that the use of submunitions poses a problem even when used against military targets because their wide footprint may strike civilian personnel and objects close to military objects. Another considered the use of cluster weapons in densely populated areas as highly problematic, even more so where submunitions with high dud rates are concerned, because they are designed to impact on a wider area and therefore carry a greater risk of impact on civilians or civilian objects as well as on military targets.

39. The ICRC is of the view that the characteristics of submunitions make them an immediate danger to civilians at the time of the attack. The ICRC refers in particular to cluster munitions, which have wide dispersal, release high numbers of submunitions, and are influenced by conditions of launch such as wind, altitude, and airspeed. These factors make it difficult, if not impossible, in the ICRC’s view, to distinguish between military objectives and civilians in a populated target area.¹³ One Respondent State argued that the high percentage of duds and the inability to target precisely poses a constant risk thus strengthening the need to replace these weapons with weapons that have less deleterious impact on the civilian population.

40. The **effects** of attacks on military targets using submunitions also present a large humanitarian risk, even when the attack has been directed at military objectives. This is due to high rates of malfunctioning submunitions causing large amounts of unexploded ordnance which

¹³ ICRC, CCW/GGE/XI/WG.1/WP.7 (28 July 2005).

pose a ‘long lasting, indiscriminate and uncontrolled threat’ to civilians. Two Respondent States argued that the possibility of malfunction does offend the principle of discrimination because the middle and long term effects of such weapons are indiscriminate. A number of Respondent States acknowledged the problem presented by the effects of submunitions which malfunction. One Respondent State acknowledged the problem and highlighted the need to restrict these effects to military targets alone. This State advocated measures such as limiting the area of use, and limiting the length of useful life of munitions and submunitions which are likely to become ERW.

41. One response stated that the rule against indiscriminate attacks is of particular importance with regard to the use of cluster munitions because it prohibits ‘an attack by bombardment by any methods or means which treats as a single military object 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’.¹⁴ This Respondent State suggested the establishment of a general prohibition on the use of cluster munitions against military targets located in civilian areas.

42. If cluster munitions were only deployed against military targets far removed from civilian areas there would be no argument about their relationship to the prohibition on indiscriminate attacks. The fact that such use is theoretically possible will lead some States to continue to argue forcefully that these weapons are not prohibited under existing principles of IHL and should not be subject to a specific treaty ban. Unfortunately the hypothetical exclusive use of cluster munitions against ‘purely’ military targets is simply not the reality and many cluster munitions have been used in recent conflicts against military targets in close physical proximity to civilian residential areas. The debate about cluster munitions and the prohibition on indiscriminate attacks is at the heart of the question whether existing principles of IHL are adequate to deal with the problem of ERW. Those States which consider cluster munitions to have a high military utility seek to emphasise the importance of military necessity and those States (and international and non-governmental organisations) concerned about the deleterious humanitarian consequences of the use of cluster munitions seek to emphasise the importance of the general principle of humanity.

Proportionality

Empirical Data on the Rule of Proportionality

43. The rule of proportionality was identified by 97 per cent of Respondent States (the highest response for any of the so-called principles of IHL) as being relevant to the use of munitions that may result in ERW. However, only 45 per cent of these responses clarified the source of this obligation. Responses identified that States consider both customary and treaty law to provide the basis for the ‘principle’ of proportionality.

Customary International Law	21%
Additional Protocol I, Article 51	36%
Additional Protocol I, Article 57	29%

¹⁴ Additional Protocol I to the Geneva Conventions, Article 51(5)(a).

Amended Protocol II to the CCW, Article 3	7%
1907 Hague Regulations, Article 23	7%

44. The ICRC Customary Law Study articulates the customary law rule of proportionality as follows:

Rule 14. “Launching 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, is prohibited.”

45. The ICRC stated that the customary law rule of proportionality in attack is codified in Article 51(5)(b) of Additional Protocol I, and repeated in Article 57, and is also contained in Article 3(8) of the Amended Protocol II to the CCW.

Interpretation and Application of the Rule of Proportionality to ERW

46. The rule of proportionality is used to judge the lawfulness of any armed attack that may cause civilian casualties. While the principle recognises that there might be damage or injury to civilians or civilian property during attacks against military objectives, it requires that parties refrain from launching attacks in which the expected incidental impact on civilians outweighs the military advantage anticipated. Any attack that ‘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’¹⁵ constitutes a war crime for which perpetrators should be held criminally responsible.¹⁶

47. Although the rule on proportionality attracted such widespread acknowledgement, responses to the questionnaire indicate inconsistencies in the interpretation and application of this principle to the problem of ERW.

48. One response highlighted the view that the principle of proportionality need only be applied when an attack has the possibility of affecting civilians. If the target is purely a military one then no proportionality analysis need be conducted. Several Respondent States also indicated that, in applying the rule of proportionality, military commanders are not expected to measure the *actual* loss against the *actual* direct military advantage gained. Instead, they are expected to measure the *expected* loss of civilian life and damage to civilian property against the *expected* direct military advantage to be gained. This raises questions as to what variables may arise and what factors should be taken into account in the proportionality assessment — particularly in relation to ERW.

49. Applying the principle of proportionality raises questions about the quantity of munitions that are to be deployed. One Respondent State indicated that the use of munitions must be restricted to that amount which is needed to ensure the success of the military action. It would be disproportionate to use munitions or submunitions in excess of the amounts needed to ensure the success of a mission.

¹⁵ Additional Protocol I to the Geneva Conventions, Article 51(5)(b).

¹⁶ See, eg, Rome Statute of the International Criminal Court, Article 8(2)(b)(iv).

50. Responses indicated that, in order to apply the proportionality rule properly, military planners must have knowledge of the characteristics of the weapon. Information such as the likely dud rate and, consequently, the likelihood of creating ERW should be made available as should information on whether the munitions contain any self-neutralising or self-destructing mechanisms.

51. ICRC Research into cluster munitions has illustrated the high percentage of ERW caused by the use of such weapons. The use of cluster munitions in any close proximity to civilians or in an area to which civilians are expected to return after the cessation of hostilities pose a particular challenge for the rule of proportionality. In such circumstances the expected dud rate and the expected dispersal area of the submunitions will be highly relevant to the test to be applied. Some Respondent States were of the view that it can be anticipated, and must be expected, that any ERW left behind after an attack will lead to a loss of civilian life, injury to civilians, damage to civilian property, or a combination thereof. A weapons system that has a high failure rate, such as a cluster bomb, is likely to cause a much higher rate of ERW thereby generating higher levels of collateral damage as the duds subsequently explode. Whether this outweighs the military advantage depends on the situation and must be assessed on a case by case basis. In relation to the expected military gain, one response indicates that the greater the importance of the military target, the greater the collateral damage allowed.

52. The issue of whether a military commander should take any anticipated longer term humanitarian effects into account in applying the proportionality rule was raised by a number of Respondent States. One State noted that this issue is still a matter of international debate, and expressed the need for further discussion on this issue in order to establish whether existing principles of IHL constitute adequate protection for the civilian population. A number of Respondent States expressed the belief that the expected long term humanitarian problems caused by ERW should be taken into account when considering the principle of proportionality. One response went further to indicate that if the expected long term effects of ERW are not considered as relevant when applying the proportionality principle then it is difficult to conclude that existing IHL is sufficient to deal with the ERW problem.

53. The GGE has heard academic debate surrounding the issue of whether long term effects should be taken into consideration when determining the anticipated civilian damage. Professor Greenwood suggests that it is only the immediate risk from ERW which can be an issue because there are far too many factors which are incapable of assessment at the time of the attack. He asserts that the proportionality test has to be applied on information available at the time of the attack:

54. If 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 submunitions exploding during the attack and of the risk from unexploded submunitions 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 steps 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. 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.

55. Timothy McCormack argued that since both the longer term and short term expected military advantage will be considered prior to attack it is reasonable to insist that the expected longer term as well as the expected short term damage to civilian populations should also be considered.¹⁷ Professor McCormack did not disagree with Professor Greenwood's assertion that, when planning an attack, the military are not expected to foresee 'the unknowable'. However, after years of experiencing the effects of ERW including the collation of data on the humanitarian effects of ERW, parties to an armed conflict cannot simply ignore the likely longer term effects of the use of cluster munitions in civilian residential areas or in other areas civilians are expected to return to after the cessation of hostilities. The proportionality test obligates military planners to take account of all expected consequences for the civilian population to be sure that the expected military advantage is significant enough to justify the anticipated incidental civilian loss of life.

56. Specifically relating to cluster munitions, the ICRC took a similar stance: implementing the rule of proportionality during the planning and execution of an attack using cluster munitions must include an evaluation of the foreseeable incidental consequences for civilians during the attack (immediate death and injury) and consideration of the foreseeable short and long term effects of submunitions that become ERW.¹⁸

57. The ICRC noted that Professor Greenwood's argument, that it is not necessary to consider the long term effects of ERW in applying the proportionality rule on the basis that such risks are not reasonably foreseeable to a military commander, is outdated in light of the experience gained from the use of cluster munitions and the research that has been conducted into their effects.

58. Again it is clear that Respondent States take different positions on the rule of proportionality as it applies to the problem of ERW. Charles Garraway asserted that 'there is no mathematical formula' for the rule of proportionality. The test which States have agreed to is intentionally elastic and allows for some 'margins of error'. It is true that application of the principle of proportionality 'requires a good faith assessment' based on the 'information from sources which are reasonably available to [the commander] at the relevant time'.¹⁹ The point the ICRC has made though is that it will be increasingly difficult for military planners to argue that the longer term effects of the use of cluster munitions in civilian areas could not have been anticipated. Those States keen to continue using cluster munitions in civilian areas will undoubtedly be subject to ever more strident criticism that the ERW effects of its choice of weapons are in violation of the rule of proportionality.

¹⁷ Timothy McCormack, *International Humanitarian Law Principles and Explosive Remnants of War*, CCW/GGE/XI/WG.1/WP.19 (25 August 2005).

¹⁸ ICRC, CCW/GGE/XI/WG.1/WP.7 (28 July 2005) para 20.

¹⁹ Charles Garraway, *How Does Existing International Law Address the Issue of Explosive Remnants of War?*, CCW/GGE/XII/WG.1/WP.15 (15 December 2005) para 21.

Precautions In Attack

Empirical Data on Precautions in Attack

59. Fifty-five per cent of Respondent States indicated their belief that the obligation to take precautions in the conduct of military operations should be applied to the use of munitions which could result in ERW. The responses indicate that both treaty and custom form the basis for this so-called principle.

Customary International Law	8%
Additional Protocol I, Article 57	42%
Additional Protocol I, Article 58	8%
Amended Protocol II to the CCW	8%
Hague Convention IX, Article 2	8%
Hague Convention IV, Articles 25, 26, 27	8%

60. The ICRC Customary Law Study articulates the customary law obligations to take precautions in attack as follows:

Rule 15. “In the conduct of military operations, constant care must be taken to spare the civilian population, civilians and civilian objects. All feasible precautions must be taken to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects.”

Rule 17. “Each party to the conflict must take all feasible precautions in the choice of means and methods of warfare with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects.”

Rule 19. “Each party to the conflict must do everything feasible to cancel or suspend an attack if it becomes apparent that the target is not a military objective or that the attack 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.”

Rule 21. “When a choice is possible between several military objectives for obtaining a similar military advantage, the objective to be selected must be that the attack on which may be expected to cause the least danger to civilian lives and to civilian objects.”

Rule 22. “The parties to the conflict must take all feasible precautions to protect the civilian population and civilian objects under their control against the effects of attacks.”

61. The ICRC indicated that the customary obligation to take precautions in attack was first set out in Article 2(3) of the 1907 Hague Convention (IX),²⁰ and is now more clearly codified in

²⁰ Hague Convention (IX) respecting Bombardments by Naval Forces in Time of War, opened for signature 18 October 1907, 205 ConTS 345 (entered into force 26 January 1910).

Articles 57 and 58 of Additional Protocol I to the Geneva Conventions and also in Article 3(10) of Amended Protocol II to the CCW.

Interpretation and Application of the Obligation to Take Precautions in Attack and ERW

62. A common view of the application of this obligation is that parties to a conflict should choose weapons systems least likely to create ERW²¹ because ERW, once produced, remain and continue to kill and maim civilians long after the cessation of hostilities. It has been argued that the post-conflict effects of unexploded munitions and submunitions ought to affect the test for determining whether or not precautions have been taken to minimise damage to the civilian population.

63. In contrast, one Respondent State argued that the obligation to take precautions in attack does not necessarily lead to the conclusion that weapons more likely to cause ERW should never be selected. In some circumstances, weapons likely to leave ERW may be considered to cause less damage to the civilian population than a larger weapon that may cause significantly greater incidental damage to civilians and civilian property even though that same weapon may leave no ERW. This theoretical possibility that the use of weapons which are expected to cause ERW may, nevertheless, pose less of a threat to the civilian population demonstrates the reality that the taking of precautions in attack does not automatically preclude the selection of ERW-producing weapons.

64. In addition to weapons selection, parties must also cancel or postpone any attack if new information comes to light making the objective one which may cause incidental loss of civilian life, injury to civilians or damage to civilian property which is excessive in relation to the concrete and direct military advantage anticipated. For example, if it is discovered that there are a significantly greater number of civilians in the area than first calculated, then the attack must be cancelled. One Respondent State indicated its view that precautions in attack not only have to be taken in regard to the immediate effects of an attack but also in relation to expected or anticipated subsequent effects. This obligation is redolent of the test for the rule on proportionality already outlined above.

65. Parties to a conflict are also required to take all *feasible* precautions to ensure that effective advance warning is given to civilian populations about attacks which may affect them. One Respondent State suggested that this obligation applies only when circumstances permit. Another Respondent State supported this qualified interpretation of the obligation stating that ‘when a military task so allows, proper notification must be given to the civilian population exposed to danger which is located close to the direction of attack or the objectives and targets of the attack’. Another Respondent State indicated that parties also have an obligation to provide effective advance notice of any area containing mines, booby traps and other objects which may affect the civilian population. Presumably this obligation would extend to effective advance notice of the likelihood of ERW following the cessation of hostilities.

66. A number of Respondent States posed questions such as ‘how is the word “feasible” to be interpreted?’ and ‘what constitutes feasible protection?’ Delegations at the drafting of Additional

²¹ Timothy McCormack, CCW/GGE/XI/WG.1/WP.19 (25 August 2005) para 13.

Protocol I to the Geneva Conventions discussed this issue at length. Some delegates were of the opinion that these words meant ‘everything practicable or practically possible, taking into account all the circumstances at the time of attack, including those relevant to the success of the military operation’. Responses to the IHL questionnaire indicate that this interpretation is inadequate in the context of ERW. One Respondent State stressed its opinion that precautions in attack have to be taken with regard to the immediate effects of an attack. But also, since all feasible precautions are required to be taken, this State asserted that parties are required to take into account information on expected subsequent effects. Another Respondent State viewed the word ‘feasible’ as imposing a restriction or qualification on the rule of taking precautions in attack.

67. It is clear that the use of the term ‘feasible’ qualifies the extent of the obligation to take precautions in attack — in terms of the selection of weapons, the choice of targets and the likely creation of ERW. It is important to note that the failure to take all ‘feasible’ precautions in attack does not constitute a war crime under Article 8 of the Rome Statute for the International Criminal Court. Perhaps the States participating in the Diplomatic Conference to negotiate and adopt the Court’s Statute recognised that individual criminal responsibility would be difficult to prove in circumstances where the accused can claim they had taken all ‘feasible’ precautions and that any measures not taken were simply not feasible in the prevailing situation. The lack of penal sanction does not, of course, render the legal obligation superfluous and military planners still must take whatever decisions they reasonably can to minimise the risk of civilian casualties in any attack undertaken.

Superfluous Injury Or Unnecessary Suffering

Empirical Data on the Rule against Superfluous Injury or Unnecessary Suffering

68. Responses to the IHL questionnaire indicate that 76 per cent of Respondent States consider the rule on superfluous injury or unnecessary suffering to apply to the use of weapons which may result in ERW. Responses demonstrate disparate customary and treaty law bases for the so-called ‘principle’. A summary of those responses reflects the following sources for the rule:

Customary International Law	11%
Additional Protocol I, Article 35	22%
Protocols I, Amended II, III and IV to the CCW	17% for each

69. The ICRC Customary Law Study articulates the customary law prohibition as follows:

Rule 70. “The use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited.”

70. The ICRC states that the customary prohibition on the use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is reaffirmed in a large number of treaties, including early instruments such as the St Petersburg Declaration and the Hague Conventions and Regulations. The prohibition has also been reaffirmed in recent

treaties, including Article 35 of Additional Protocol I to the Geneva Conventions, the Preamble to the CCW and Article 3(3) of Amended Protocol II to the CCW.

Interpretation and Application of the Rule on Superfluous Injury or Unnecessary Suffering and ERW

71. Some Respondent States indicated that the application of this rule should be achieved *before* the actual use of the equipment through the legal review of new weapons.²² Some Respondent States also noted that precautions should be taken against superfluous injury or unnecessary suffering before an attack commences.

72. Two Respondent States noted that there are two elements to this rule. The first element is the prohibition on the use of arms that are *per se* designed to cause unnecessary suffering. These weapons are prohibited due to their inherent nature. Examples include biological weapons, chemical weapons, projectiles filled with glass, blinding laser weapons and dum dum bullets — all of which have been deemed to inflict unnecessary suffering upon combatants. Each of these categories of weapons is prohibited under treaties such as the Biological Weapons Convention;²³ the Chemical Weapons Convention;²⁴ the 1925 Geneva Protocol,²⁵ and the Protocols to the CCW.

73. The second element is the prohibition on the use of otherwise lawful arms in a manner that causes unnecessary suffering. Several kinds of weapons are not categorised as illegal *per se*, but are prohibited to be deployed so as to cause superfluous injury or unnecessary suffering. Examples include the prohibition on the use of incendiary weapons which may affect the civilian population. It is this second element of the principle that many Respondent States considered to be of particular relevance to the use of weapons that may result in ERW.

74. Other responses suggested that this rule is related to the basic notion of humanity. The rule requires that if several weapons or methods can be used to achieve the same military advantage, the one causing the least injury or suffering must be used. One Respondent State claimed that this rule is unlikely to arise in respect of weapons expected to produce ERW claiming that there is no reason to assume that such weapons are inherently crueler than all others. However, if the same expected military advantage could be gained by the use of weapons not expected to cause ERW, it may be possible to mount an argument to the effect that the deployment of a weapon which produces ERW causes unnecessary suffering and is in violation of the prohibition. Some Respondent States argued that limitations on the zone in which certain munitions or submunitions may be used, limitations on the useful life of those munitions and submunitions, and a special focus on technical improvements in those munitions and submunitions could all reduce the likelihood of the creation of ERW which may offend the rule.

²² See Section IV of this Report for a detailed discussion of the legal review of weapons.

²³ Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, opened for signature 10 April 1972, 1015 UNTS 163 (entered into force 26 March 1975).

²⁴ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, opened for signature 13 January 1993, 1974 UNTS 45 (entered into force 29 April 1997).

²⁵ Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, opened for signature 17 June 1925, 94 LNTS 65 (entered into force 8 February 1928).

75. It is important to acknowledge that the rule on superfluous injury or unnecessary suffering is primarily intended to protect combatants rather than the civilian population. Civilians are protected by the rule of distinction, the prohibition on indiscriminate attacks and the rule of proportionality. If those obligations are properly implemented it can be argued that this rule on superfluous injury or unnecessary suffering adds little to the protection of civilians from the effects of ERW.

Environmental Protection

Empirical Data on the Obligation to Protect the Environment

76. The rule on environmental protection was also considered relevant to the issue of ERW by Respondent States. Forty-eight per cent of Respondent States gave positive responses to the applicability of rules of environmental protection to the use of munitions or submunitions that may result in ERW. Again, responses demonstrated the view that the obligation emanates from both customary and treaty law.

Customary International Law	7%
Additional Protocol I, Article 35	20%
Additional Protocol I, Article 55	7%
Rome Statute for the ICC, Article 8(2)(b)(iv)	7%
ENMOD ²⁶	7%

77. The ICRC Customary Law Study articulates the customary obligations with respect to environmental protection as follows:

Rule 43. “The general principles on the conduct of hostilities apply to the natural environment:

- A. No part of the natural environment may be attacked, unless it is a military objective.
- B. Destruction of any part of the natural environment is prohibited, unless required by imperative military necessity.
- C. Launching an attack against a military objective which may be expected to cause incidental damage to the environment which would be excessive in relation to the concrete and direct military advantage anticipated is prohibited.”

Rule 44. “Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions.”

²⁶ Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques, opened for signature 10 December 1976, 1108 UNTS 151 (entered into force 5 October 1978).

Rule 45. “The use of methods or means of warfare that are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment is prohibited. Destruction of the natural environment may not be used as a weapon.”

78. The ICRC states that the customary obligations with respect to protecting the environment are derived from the general principle of distinction between military objectives and civilian objects, and are codified more specifically in Articles 35(3) and 55(1) of Additional Protocol I to the Geneva Conventions, and Article 2(4) of Protocol III to the CCW.

Interpretation and Application of the Obligation to Protect the Environment to ERW

79. Respondent States indicated different interpretations of the obligation to protect the environment. Many responses stated that the principle of environmental protection prohibits the employment of methods or means of warfare which are intended or may be expected to cause widespread, long term and severe damage to the natural environment. One Respondent State explained its understanding that the environment is protected from the effects of war in two ways. Firstly there is a prohibition on the means and methods of warfare which cause *unnecessary damage* to the natural environment. Secondly there are prohibitions on the use of means and methods of warfare which cause *disproportionate damage* to the natural environment.

80. One Respondent State simply noted that the natural environment must not be a military target as such. Another agreed and took this further, stating that the natural environment, or part of it, may not be the object of attack, unless it forms a military objective due to its use or location and if its partial or complete capture or destruction offers a definite military advantage under the circumstances ruling at the time.

81. Another Respondent State noted that it is obvious that armed conflicts always result in damage to and pollution of the natural environment, but IHL currently only prohibits such means and methods which have a long-lasting and widespread negative effect on the environment or which result in casualties for protected persons and objects. The rule provides that those responsible for planning and conducting military operations have an obligation to ensure that the natural environment is protected from the militarily unnecessary creation of ERW. One Respondent State took the view that the applicability of the environmental protection principle to ERW can be inferred from the nature of Protocol V.

82. Professor McCormack suggested that if the consequences of:

- (a) a particular weapon being used, or
- (b) the amount of weapon deployed, or
- (c) the area of deployment selected

is likely to cause an ERW problem resulting in widespread, long term and severe damage to the environment, then this obligation becomes absolutely relevant. These issues should be considered by parties before launching the attack. Will the weapon cause widespread, long term and severe harm to the environment? Will the amounts of ordnance being deployed lead to widespread, long term and severe effects upon the environment? Will the area over which these weapons are deployed cause widespread, long term and severe damage to the environment? It is conceivable that the use of cluster munitions may be in violation of this obligation in some

circumstances where unexploded submunitions take the damage to the natural environment caused by those submunitions which explode upon impact over and above the three-fold legal test. One Respondent State argued that it would have to be truly extraordinary for the ERW effect of a weapon to offend this principle. Perhaps that is the correct analysis but it is also the case that a large majority of Respondent States have recognised the possibility of a violation of the rule in relation to ERW.

Other Principles

83. The principles of limitation, reciprocity and equality were also referred to by Respondent States as applicable to the use of munitions that could result in ERW. Responses did not clarify the source of these legal obligations or explain the circumstances in which the principles might relate to the specific problems of ERW.
