

**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**

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Consideration of the results of the

ICRC Meeting of experts on cluster munitions

**EXCERPTS FROM THE REPORT OF THE EXPERT MEETING ON THE
HUMANITARIAN, MILITARY, TECHNICAL AND LEGAL
CHALLENGES OF CLUSTER MUNITIONS
HELD IN MONTREUX, SWITZERLAND, 18 TO 20 APRIL 2007**

Submitted by the International Committee of the Red Cross at the request
of the Chairperson of the Group of Governmental Experts

1. This document contains excerpts from the report of the Expert Meeting on the Humanitarian, Military, Technical, and Legal Challenges of Cluster Munitions. This meeting was organized by the International Committee of the Red Cross (ICRC) to examine the cluster munitions problem and to consider all possible means of reducing their negative impact on civilian populations. The meeting brought together a representative group of governmental and independent experts for frank and in-depth dialogue. More than 80 experts participated in the event. The issues addressed in the meeting included the following:

- (i) An historical overview of the use and humanitarian impact of cluster munitions;
- (ii) The military role of cluster munitions and their technical evolution;
- (iii) Possible future alternatives to cluster munitions;
- (iv) Potential technical developments to improve reliability and accuracy;
- (v) The adequacy or inadequacy of existing international humanitarian law;
- (vi) Potential restrictions on the use of cluster munitions; and
- (vii) Next steps foreseen at the national and international levels.

2. Included in this document are two items: 1) the summaries prepared by the rapporteurs on three key themes of the meeting: military aspects and possible alternatives, technical approaches, and international humanitarian law (with a synthesis of participants' reactions); and 2) the closing comments of the ICRC. Together, these papers provide an overview of key trends in the expert discussions on cluster munitions in Montreux.

3. A much more detailed summary of discussions on specific issues is contained in the full ICRC report on the Montreux meeting which will be issued under the symbol CCW/GGE/2007/WP.4.

RAPPORTEURS THEMATIC SUMMARIES

I. ASPECTS AND POSSIBLE ALTERNATIVES

A. Summary on Military Aspects and Possible Alternatives¹

4. The three opening presentations of the meeting, by Colin King, Simon Conway and Mark Hiznay, provided essential information on the history and characteristics of cluster munitions and on cluster munition stockpiles. These presentations clearly demonstrated the serious humanitarian damage, which has arisen from the use of cluster munitions over the past 60 years. They posed a challenge to users to demonstrate the military utility of these munitions and to demonstrate how it was proposed to fix the defects which have caused such humanitarian damage. In particular I would commend Mark Hiznay's concise summary paper as a source of accurate statistical information.

5. It was somewhat depressing to note that the same problems identified in successive conflicts continue to cause excessive hardship to civilian populations. On a personal level I disposed of my first submunition a BLU 63 in Lebanon in 1985. That munition had been delivered in 1978 and my colleagues had been locating and disposing of unexploded submunitions for the previous seven years. I disposed of my last BLU 63 in Lebanon late in the year 2000, 22 years after it was delivered. Given this widespread and long-term ERW problem it is difficult to understand why the mistakes of 1978 and 1982 were repeated in the same small area of Lebanon, to a far greater order of magnitude, in 2006, 28 years later. There is an argument that this represents a failure not merely for the user and its suppliers, but for all of us in failing to take adequate action to prevent a recurrence.

Military utility

6. Therefore it was of crucial importance for this meeting to hear a military perspective on cluster munition use. It is true that much criticism of cluster munitions has ignored the problems faced by military commanders and has appealed to emotional responses to civilian injuries and hardships. If there is a case for prohibition or regulation or both, the military argument must be understood and deconstructed in a logical fashion. Otherwise we will have a classic dialogue of the deaf and civilian populations will continue to suffer.

7. Mark Hiznay informed us that 75 countries have stockpiled these munitions and 34 states have produced 210 different types of cluster munitions. Therefore one would think that there has

¹ Rapporteur: Lt. Colonel Jim Burke

to be a strong argument for their military utility. Yet this argument has not to date been made with any degree of success.

8. The presentation which opened the debate on military utility in session II reminded us that complex decisions and trade-offs are necessary in modern war. However if this trade-off involves sacrificing civilians in pursuit of a military objective it would be difficult for many at this meeting to accept. It was clear from the discussion that many would prefer that any trade-off would prioritise the saving of civilian lives by delaying mission accomplishment or even accepting own force military casualties.

9. Six common misconceptions regarding cluster munitions were postulated in the presentation. Remarkably however, every one of the suggested misconceptions was at least partially vindicated in the subsequent presentation, interventions and responses by speakers:

- (i) Cluster munitions, at least in their classic form, are **outdated** and derive from methods of warfare increasingly unlikely in the modern conflict spectrum.
- (ii) **Long term effects after use are not likely to be considered.**
- (iii) They **are indeed used as area attack weapons.**
- (iv) Their use has been frequently **indiscriminate and inaccurate.**
- (v) Their use has presented a **major and complex ERW problem.**
- (vi) Finally **there are other alternatives** as demonstrated by the German presentation.

10. However the most compelling part of the presentation on military utility was the calculus of employment, which constrained cluster munition use. This begged the question of how could such weapons be considered legitimate if significant civilian casualties were being caused even after such an exhaustive target assessment process. Either we accept that such casualties are inevitable, given the competing principles of humanity and military necessity, and that the commanders were aware that cluster munition use could create such humanitarian damage **or** we accept that there is a need for clearer guidelines and regulations on how such weapon systems might be deployed, if at all.

11. The military roles proposed for cluster munitions were very broad and comprised tasks common to many weapon systems. This audience needed far greater clarity on the circumstances in which cluster munitions might confer a significant advantage over other available weapon systems.

12. A number of speakers recognised a need for a thorough analysis of military utility. In this context it should be recognised that other speakers stressed the importance of national defence which they felt had been ignored by many other participants and that too much emphasis was placed on cluster munition use in foreign wars. A large proportion of available munitions in many states are now in cluster form and it would be costly and time consuming to replace them with alternatives. In the process leading to Amended Protocol II of the Convention on Certain Conventional Weapons and to the Ottawa Convention there was considerable discussion of military utility. A similar analysis is now required on the military utility of cluster munitions.

Possible alternatives and future developments

13. In session II we learned that the German Government has concluded after exhaustive research that the present generation of cluster munitions can be replaced by more humane alternatives and that this can be accomplished in a period of not more than 10 years. This was encouraging information. Germany agrees with many cluster munition users that there is a continuing military necessity to engage area targets. However, German experts feel they can achieve this capability with a dramatic reduction in the quantity of explosive munitions delivered to such a target, a consequent reduction in the ERW hazard and a reduction in the footprint of such weapons. There are two main components of this capability.

14. First, in line with other users Germany proposes the use of cargo munitions with a greatly reduced number of submunitions, less than 10, which will be sensor fuzed, thereby greatly increasing accuracy and greatly reducing the quantity of submunitions deployed.

15. The second element of the German proposal was more interesting and innovative and involved the delivery of non-explosive kinetic energy rods from cargo munitions to tightly defined target areas of approximately 60 square metres. Such rods would be of 83 mm in length and would be completely inert after use. Also, they would not be considered excessively injurious to humans and injuries, although often fatal, would be no more severe than those arising from 9mm ball ammunition. They would not leave an ERW footprint and, in Germany's view, would be in compliance with Article 36 of Additional Protocol 1 of 1977.

16. While this is an encouraging beginning, a great deal of work remains to be done to convince both the military and humanitarian communities that these options represent a viable alternative while significantly reducing the adverse humanitarian impact.

Other matters

17. Throughout the session a certain confusion was apparent in the use of terminology. Terms including "smart munitions", "dangerous duds" and "unacceptable harm" seemed to be interpreted differently by different speakers. There would seem to be a need for all of us to use language with greater precision. Smart is a relative term to most people. If we mean sensor fuzed we should say sensor fuzed. If we mean self-destruct we should say self destruct. Most of us will remember the old ICBL slogan 'smart Mines are a dumb idea'. It is difficult to convince public opinion that any weapon, which kills civilians, is 'smart'.

18. It is important to recognise, as many speakers have said, that improper use can occur of any weapon. However, it is also true that certain weapons lend themselves to indiscriminate use, which is why we have the CCW and other weapon-specific instruments such as the Anti-personnel Mine Ban Convention.

Conclusion

19. The evidence of humanitarian damage caused by cluster munitions is compelling. In the view of many colleagues at this meeting, there is an irrefutable argument that this category of

weapon systems needs to be addressed in a specific regulatory manner either within the CCW or elsewhere. However this session also reinforced the view that if problems arising from cluster munition use are to be addressed successfully the military and technical realities cannot be ignored. While any such process must of course be directed and driven by a coherent political will, IHL instruments are of little value unless they are credible and capable of being implemented by military planners, commanders, weapons designers and procurement experts. Clarity is a vital component of any such instrument and clarity should not be confused with simplicity.

20. Any future instrument on Cluster Munitions should take into account the military and technical issues raised at this meeting in order to achieve such clarity. However, if this is to happen the military argument will need to be made in a more focused and proactive manner than was done here:

- (i) in terms of clarifying accurately the real military utility,
- (ii) in terms of identifying the tactical circumstances where cluster munitions confer a real military advantage over other munitions,
- (iii) in terms of taking meaningful actions to address the humanitarian damage caused, and
- (iv) in terms of applying serious resources to the search for viable alternatives to cluster munitions.

21. International humanitarian law is based on the fundamental principles of humanity and military necessity. This balance is frequently presented as an adversarial conflict between two very different viewpoints and can be used as an excuse for inaction. The humanitarian lobby needs to listen to the military view and to try to understand the military uses of these weapons and the dilemmas faced by commanders in the field seeking speedy mission accomplishment while minimising own force casualties. This lobby should also accept that in dealing with weapons used in warfare there will not be an environmentally friendly, biodegradable solution to the problem of submunitions or indeed any other type of munitions. Nevertheless, in the aftermath of last summer's Lebanon war, the onus has shifted decisively to the users and producers of these weapons to justify the legitimacy of their use, to demonstrate their military utility to the extent possible and to move quickly to address the serious humanitarian damage which is being caused.

B. Comments of Participants on the Rapporteur's Oral Summary Military Aspects and Possible Alternatives

22. A military participant commented that the rapporteur's synthesis gave a good overview of the issues discussed during the meeting. However, he reiterated his view that the military's concerns must be addressed in the debate on cluster munitions, and the right balance between military considerations and humanitarian aspects must be found. He recalled that several participant's interventions underlined that cluster munitions have a military utility and that every country would need to look at their specific needs with regard to cluster munitions. Another participant expressed strong agreement with this last point.

23. Concerning the six common myths outlined in the presentation on the ongoing military utility of cluster munitions, the same participant felt that many of these issues are not black and white and that discussion is useful to clarify and examine them in more detail. It was pointed out that many of these issues have been raised in other *fora*.

24. Another military participant generally endorsed the comments made by the rapporteur. He wanted to stress that, despite the changing nature of warfare with wars no longer being just about territory, the utility of cluster munitions has not changed, and they are still relevant in today's contexts. Cluster munitions will continue to provide military commanders with operational flexibility, responsiveness, and operational cost-effectiveness in certain combat conditions. He stressed that, when comparing what unitary munitions and cluster munitions would achieve in an area of 600m x 600m, the choice could be made in favour of cluster munitions.

25. The same participant recognized that there were concerns about these weapons, but he questioned whether a ban would really solve the problems found on the ground today. He explained that every weapon has 'pre and post-conflict' issues and that these are covered by IHL rules. For example, the Protocol on Explosive Remnants of War, which has been ratified by his country, has the potential to address all post-conflict issues arising from unexploded submunitions. He was surprised that participants at this meeting had not focused more on what is currently available and on how greater adherence to these rules might be achieved. This would, in his view, address at least part of problem.

26. More broadly, the speaker thought that aspects of national security and geopolitics, such as alliances between countries, had to be taken into account. In addition, the technological and economical differences between countries also need to be considered. In his view, any solution had to work within this geopolitical, technological and economical framework. He went on to question whether precision munitions could be a solution in light of their costs, suggesting further work is needed in this area.

II. SUMMARY ON TECHNICAL APPROACHES²

Performance and Reliability

General

27. There are many potential causes for the failure of cluster weapons and their submunitions. There was broad consensus that, while technology might help, it could never 'solve the problem'.

² Rapporteur: Colin King

28. Key elements of reliability include:

- (i) Sound design, manufacturing standards and quality assurance processes;
- (ii) Good equipment husbandry (storage and maintenance);
- (iii) Proper employment, including decision-making, target reconnaissance, accurate delivery and the controlled release of submunitions.

Ageing

29. Designers and manufacturers agreed that the effects of ageing are unpredictable and that regular inspection was necessary to confirm the condition of stored weapons. Some components lasted beyond their expected life span, while others deteriorated far sooner than expected. The effects of ageing often proved to be a significant factor in the high failure rate of cluster munitions. With some recently-used munitions being more than 30 years old, it was hardly surprising that they suffered excessively high failure rates.

Electronic v. mechanical

30. Mechanical fuzes incorporate a number of components and generally involve a sequence of events in which failure might occur at any stage. Only a small percentage of components and assemblies can be inspected and tested and most are vulnerable to the effects of ageing. These include not only mechanical components (casings, springs, pins etc) but also explosive and pyrotechnic compositions, adhesives and lubricants. In contrast, every manufactured electronic circuit can be tested individually and, once assembled, there are fewer potential causes of failure. This means that well-designed electronics should be more reliable than the equivalent mechanical fuze. [Rapporteur's comment: this is borne out by the increasing use of electronic fuzes to replace mechanical versions in other ammunition.]

Redundancy

31. The duplication of fuzing components was suggested as an option to improve reliability. In principle, this makes good sense; however, the rapporteur commented that the BLU-97 submunition incorporates a back-up fuzing system that has not improved reliability, and has caused countless accidents through unpredictable functioning. Redundancy cannot, therefore, compensate for poor design.

Testing

32. It is widely accepted that testing produces optimistic indications of performance; this is because the broad range of operational conditions are not replicated in the tests, and other factors (such as stress-induced human error) come into play in combat. Designers pointed out that more comprehensive testing was possible, so long as the resources were made available. The rapporteur suggested that this was a case for industry regulation, and suggested the automotive industry as a possible model where a compulsory range of realistic tests have led to major safety innovations and prevented the production and sale of vehicles with inherently unsafe designs.

III. SAFETY

33. It was agreed that Self-Destruct (SD), Self-Neutralisation (SN) and Self De-Activation (SDA) could all contribute to increased safety although, once again, they were not solutions *per se*.

Self-Destruct

34. For example, the Israeli M85 bomblet incorporates a well-designed SD system, which results in a significantly lower failure rate than similar non-SD types. However, Lebanon demonstrated that the failure rate is still unacceptably high, and that it is substantially higher than was achieved during testing. Pyrotechnics (often used in SD delays) apparently require great care in design, manufacture and storage to achieve high reliability.

Self-neutralisation

35. SN in electronic fuzes can be achieved by the isolation of the power source. 'Reserve batteries', in which the cell is activated only when the weapon is deployed, can achieve this by discharging fully after a short period. However, the unknown status of an unexploded munition means that disposal teams must treat it as live, and it may still be hazardous to the local population under some circumstances, since the complete explosive train is still present.

Self de-activation

36. SDA entails the removal of part of the explosive train to irreversibly disarm the munition. A new US design apparently achieves this by destroying the primary explosive - the most sensitive and dangerous component. However, it was pointed out that under some circumstances, such as where unexploded munitions are salvaged for scrap and explosive, SDA was still an unsatisfactory solution.

"Non-hazardous duds"

37. The term "non-hazardous duds" was used repeatedly during the conference - mainly by designers and manufacturers attempting to draw a distinction between different categories of failure. Most felt that this term was potentially misleading and dangerous. It was pointed out, for example, that many so-called non-hazardous bomblets could become dangerous if mis-handled; this might occur under circumstances such as handling by a curious child, excavation or transportation.

IV. TECHNOLOGY INNOVATION

"Smart" / sensor-fuzed munitions

38. The term "smart" is ill defined and should be avoided; in most cases it refers to sensor-fuzed munitions, which is the name that should be used. It was considered completely misleading to refer to refer to bomblets with a self-destruct mechanism as "smart".

Availability

39. While sensor-fuzed weapons are likely to inflict less harm on civilians than mechanically fuzed bomblets, there was some concern that the technology and price involved would put them beyond the reach of developing countries. The replacement of old mechanical systems with sensor-fuzed munitions may be a logical step for advanced nations, but delegates should consider whether the technology goals and standards they set are realistic for poorer countries.

Alternatives

40. The German delegation proposed that sensor-fuzed munitions should be redefined as "alternatives" to distinguish them from other submunitions. This fits with their acquisition strategy for future systems, which would incorporate all available technology in order to maximise reliability and minimise humanitarian impact. One German proposal involves the use of kinetic energy to inflict damage rather than an explosive warhead (although the use of explosive charges to accelerate the rods was also mentioned). Further details are not available at this time.

V. CONCLUSIONS

41. The overall view was that technology had a role to play in increasing reliability, and consequently reducing the harmful post-conflict impact of cluster munitions. However, it would be wrong to expect it to provide a full "solution" to the problem; technology could do little to reduce the effects from the types of cluster munitions that continue to cause unacceptable harm to civilians.

Comments of Participants on the Rapporteur's Oral Summary on Technical Approaches

42. Several participants commended the rapporteur's report and his summary of the discussions. One participant stressed again that technology could contribute to solving the cluster munitions problem, but admitted that it would not be the entire or only solution. He very much appreciated the analogy made by the rapporteur on the testing of vehicles by the automobile industry. Automobiles cause deaths and injuries, but, thanks to technology (e.g. seat-belts and airbags), these risks have been lowered over time. Like cluster munitions, automobiles have a utility and, rather than being taken away from the road, they have been made more

reliable. He felt that an improved understanding of the design and manufacturing of submunitions could contribute to reducing the problem on the ground.

43. It was pointed out by another participant that rigorous testing is not the only impetus for the automobile industry to improve its products. There is also the principle producer liability, an idea that should be seriously considered for cluster munitions.

44. In response, the rapporteur recalled that certain types of cars had been taken off the road because they were either unsafe or did not meet required technological standards. A very similar approach, he thought, should be taken for cluster munitions.

45. In response to the report, several points were made on the differences between self-deactivation and self-neutralization mechanisms. In response to an earlier comment, a participant explained that self-deactivation is a passive system whereby the battery life of a system comes 'irreversibly' to an end. Self-neutralization, on the other hand, is an active system through which a mechanism is triggered in order to 'neutralize' the fuze. However, this process could fail. It was thought by some participants that further work on these mechanisms might prove useful for efforts on cluster munitions. It was nevertheless highlighted by one participant that cost is an important factor in any technical work and that, if new technological requirements are to be considered for future cluster munitions, transfer of technology would also need to be taken into account.

46. One participant expanded on an idea that had been introduced the previous day concerning limits on the active life of cluster munitions. He proposed to introduce a maximum lifespan for cluster munitions whereby the weapons would be systematically withdrawn from service after they reached a certain age. This lifespan would be linked to the date upon which the weapon entered into operational service, and not to the date of its production or the conditions under which it was stored. It would apply to the shelf life of all cluster munitions, independent of whether these were considered "smart" or "dumb". Such a measure would also prevent the transfer of very old cluster munitions.

47. A participant highlighted that the Cluster Munitions Coalition is opposed to an approach which prohibits munitions based on a quality standard. It was argued that any future instrument identifying a specific dud rate as the basis for a prohibition would be difficult to implement and monitor in an effective way. It was felt that, whether or not this standard is achieved would be left to the "best intentions" of States, as has been the case for many past decades. Furthermore, technically improved cluster munitions would not really improve the current problem on the ground. A prohibition based on percentages, even a 1% failure rate, would still create large numbers of duds.

VI. INTERNATIONAL HUMANITARIAN LAW

A. Summary on International Humanitarian Law³

48. This summary highlights the main themes arising from the presentations and discussions in Session IV: Cluster munitions and International Humanitarian Law.

Adequate rules or a need for new law?

49. The presentations and discussion on IHL crystallized two views for dealing with the problems caused by cluster munitions.

50. One view was that the existing law on targeting contains adequate tools to deal adequately with the situation, as it already contains rules prohibiting direct attacks on civilians and civilian objects and prohibiting indiscriminate attacks, as well as obligations to take feasible precautions in and against the effects of attacks. In order to address the humanitarian consequences of cluster munitions, it was argued that there must be stricter application, implementation and enforcement of the existing law. With regard to enforcement, it was highlighted that international jurisdiction can have a role to play in controlling use which may be in violation of IHL.

51. Proponents of this view also emphasized that the Protocol on Explosive Remnants of War is an essential tool in minimizing the post-conflict problems caused by cluster munitions. This being said, many participants sharing this view recognized the humanitarian problems associated with these weapons and did not exclude an evolution of existing law.

52. The second view stressed the need for the development of new rules and emphasized that the existing law establishes only a basic framework to govern the use of cluster munitions. It was highlighted that the current rules of IHL are not sufficiently precise and, as a result, allow diverse interpretations of many key provisions. In addition, it was highlighted that the application of these rules does not sufficiently take into account the special features of cluster munitions. It was strongly argued that the current IHL framework needs to be supplemented and improved.

53. It was also observed that, even if existing rules were to be fully applied, the humanitarian impact of cluster munitions would remain significant and be an argument in favour of new rules. To some, the use of such weapons against military objectives in populated areas would necessarily cause excessive incidental losses to the civilian population. It was also pointed out that while the Protocol on Explosive Remnants of War will, if strictly implemented, reduce the dangers posed by unexploded submunitions after the end of active hostilities, it will not prevent the consequences during or shortly following an attack using these weapons.

³ Rapporteur: Knut Doermann

54. Although the discussions were often divided along the lines described, it was widely recognized by participants that the foreseeable effects of cluster munitions must be taken into account when determining the proportionality of the incidental civilian casualties or damage that may result from the use of these weapons. Many participants also recognized that the immediate and longer-term incidental effects of cluster munitions used against military targets in or in the vicinity of populated areas are generally foreseeable and are an integral part of assessing proportionality.

55. It is important to note that the development of specific rules to regulate weapons of particular concern is an integral part of IHL. This approach has been used in the past for certain weapons, *e.g.* chemical and biological weapons, incendiary weapons, landmines and booby traps. In each instance, the general rules of IHL provided a basic framework regulating the use of these weapons, but the international community perceived that specific rules were needed in response to the particular effects certain weapons could have on combatants or civilians.

56. On the basis of the presentations and discussions at this meeting, there are several issues which would benefit further explanation and analysis.

57. Firstly, is the use of cluster munitions against military objectives in populated areas to be reconcilable with the obligation not to use means or methods of warfare that cannot be directed against a specific military objective (see Art. 51 (4) (b) 1977 Additional Protocol I and similar customary international law)?

58. Secondly, how are the dangers to civilians (both during and after an attack), which arise from the use of cluster munitions, integrated into the proportionality equation? What kinds of factors are taken into account during military operations and how concretely are commanders able to implement the proportionality rule when deciding on the use of cluster munitions? As highlighted by some participants, the response to this question is often limited to generalities and does not focus on the operational elements. As a result, and in light of the persistent humanitarian problem posed by cluster munitions use, it is often difficult to analyze in any detail the argument that the existing general rules of IHL are adequate to respond to the humanitarian consequences of cluster munitions and that it is merely a problem of implementation and enforcement.

59. Thirdly, how can the largest number of users, producers and stockpilers of cluster munitions be engaged in the development of robust rules to address the problems associated with these weapons? Can the humanitarian objectives of other relevant treaties be maintained and strengthened through the development of new rules?

60. Fourthly, how can the potential for increased horizontal proliferation be addressed in the absence of specific rules? Cluster munitions have thus far been used by a limited number of States and non-State armed groups. However, given the fact that over 70 States stockpile cluster munitions, there is a strong probability that the weapons will proliferate, leading to increased use and higher risk for the civilian population.

61. Finally, it must be noted that the discussions in this session highlighted the need for a robust implementation of the obligation under Article 36 of the 1977 Additional Protocol I to the 1949 Geneva Conventions requiring that all weapons developed or acquired be subject to a legal

review. The strict implementation of this requirement may help minimize the dangers to civilians that may arise from the efforts to improve the design of cluster munitions or the development of alternatives.

Definitions of cluster munitions

62. The importance of the issue of definitions was highlighted by the fact that it was raised many times throughout the meeting, but various approaches and their implications were discussed in more detail during this session. It is evident that agreement on definitions will be central in the efforts to develop new and more specific rules. An assessment of existing definitions indicated that different approaches have been chosen for different functions (*e.g.* military operations, ERW clearance, national moratoria on use; etc.) but they are not all intended or appropriate for international regulatory purposes.

63. While a number of participants did not see a need to attempt to develop a precise definition for cluster munitions at this stage, most who spoke felt that there is a value in identifying more precisely the kinds of munitions which could be covered by future regulations. In addition to clarifying which munitions are to be the object of scrutiny in ongoing work, there is also a benefit in knowing what is excluded.

64. Many specific definitional elements were proposed by participants. These included factors related to the age of the munition; the common features of the types found in affected countries; technical features related to self-destruction and accuracy; and elements of IHL. A range of views were exchanged on these and other areas.

65. However, the discussions on definitions were very much a review of what approaches exist and a testing of ideas. It would be premature to draw any final conclusions as the work in this area will continue and more detailed proposals are likely to evolve as discussions progress on a potential regulatory framework.

B. Comments of Participants on the Rapporteur's Oral Summary on IHL

66. Several participants commented that the rapporteur's report was quite balanced in light of the range of views expressed at the meeting. One participant, however, thought that the oral summary had not quite captured the possible consequences for IHL if nothing is done with regard to cluster munitions. It was his view that the proliferation of cluster munitions would undermine IHL, as these weapons would be used by an increasing number of both States and non-State actors. The humanitarian impact of cluster munitions is likely to increase because certain regimes or non-State actors do not respect IHL, human rights law, or are not concerned about the security of their people. Another participant also recalled that the discussions over the last two days had indicated that any new IHL instrument should include aspects of assistance, compensation and sanctions and that it would be useful to include these in the report.

67. One participant thought that the comment about what would happen to IHL if the international community did nothing on the issue of cluster munitions ignored the fact that proliferation has already occurred. At least 80 countries, as well as non-State actors have stockpiles of these weapons. Thus, it is unclear how the creation or absence of new law would

affect proliferation. He added that, if the current problem was "non-compliance" with existing law, then any new law would still leave the issue of non-compliance unresolved.

68. It was the view of one participant that it is unfortunate that the meeting had dealt separately with the technical, military, and IHL aspects of cluster munitions. He advocated for a more integrated approach in future discussions, as the three aspects would interact when the weapons are used.

VII. CLOSING COMMENTS BY THE ICRC

69. The ICRC is grateful to the rapporteurs for their excellent synthesis of discussions on the main themes of this meeting and for the comments on these reports by participants. These closing reflections by the ICRC are therefore not intended as a further summary of the proceedings. Instead we would like to make some observations about what we have heard and what we take away from this dialogue.

70. When the ICRC's Director, Dr. Philip Spoerri, opened this meeting he expressed the hope that all participants would "be ready to ask new questions, to listen and to leave with deeper insights, more informed views and better solutions than we came here with". The quality, depth, and frankness of the discussion over the past three days give us reason to believe that these objectives have been achieved.

71. The work of this meeting was not aimed at the production of a set of conclusions by participants. It has rather been to provide information on the effects of cluster munitions on civilian populations, to facilitate better understanding of the military role of these weapons and their technical evolution, and to evaluate possible solutions. It is now primarily the responsibility of States to weigh what they have heard here, to make political judgements about what is acceptable, and to take action. The ICRC hopes that the insights gained from this meeting will inform both the development of national policy on the cluster munitions issue as well as the work of upcoming multilateral meetings. To this end, the ICRC will make the content and insights generated by this meeting available, in the form of a public report, to a much wider circle of interested States and organisations.

72. For the ICRC, a theme which permeated every discussion in this meeting was the need for a "reality-based" approach to addressing the long-standing problem of cluster munitions and to finding possible solutions. The reality of the severe human costs of these weapons was laid out in considerable detail in the first two presentations and in the interventions by experts dealing with the problem on the ground. However, the discussions and rapporteurs' summaries have highlighted that a similar "reality-based" approach needs to be applied to other issues under consideration:

- (i) The relative military value of cluster munitions needs to be further examined. This examination needs to be based not only on the doctrine and theory underlying the use of such weapons but also on the actual military effectiveness and consequences of the use of cluster munitions in past conflicts.

- (ii) Proposed technical solutions, such as improvements in reliability and accuracy and the integration of self-destruct features, need to be examined not only on the basis of how these technologies are designed to function (or function under testing conditions), but also need to take into account how they will function under actual conditions of use.
- (iii) New norms of international humanitarian law intended to resolve the problems caused by cluster munitions need to integrate legitimate military needs and be clearly stated so they will be effectively implemented by military forces. Clear rules will also facilitate broad adherence to a new instrument.
- (iv) If urgent action to address this problem is not pursued, the potentially horrific consequences of the proliferation and use of existing cluster munition stockpiles needs to be constantly borne in mind.

73. It has also become clear that there will be challenges in arriving at a precise but generic legal definition of those cluster munitions which have caused the greatest humanitarian problem. On the other hand, it has been pointed out that both military and clearance experts are well aware of the serious problems of reliability and accuracy of many specific models. It is these which have littered the landscapes of many of the countries in which they have been used. Getting rid of what has been called "the bad stuff", through decommissioning and destruction, should be the first step by countries which recognize the humanitarian problem. Progress in addressing this problem does not need to wait for the negotiation of a new treaty. Rather, such a treaty should solidify and extend the progress already made.

74. In considering the potential role of independent national actions we would like to commend the decisions by several countries to enact moratoria on the use of cluster munitions and the commitment of others to eliminate those models in their stockpiles which they consider to be inaccurate or unreliable. These are just the types of actions which can and should be taken by additional States.

75. In his presentation, the rapporteur on military aspects presented us with a sober choice. Reflecting on the argument that the rules of IHL are adequate and have been stringently applied to the use of cluster munitions, he arrived at the logical conclusion about the high level of civilian casualties we have so often witnessed:

"Either we accept that such casualties are inevitable, given the competing principles of humanity and military necessity, and that the commanders were aware that cluster munition use could create such humanitarian damage **or** we accept that there is a need for clearer guidelines and regulations on how such weapon systems might be deployed, if at all."

76. This is indeed the choice before us now. How we answer it will say a lot about who we are, as individuals, as States, and as an international community with a responsibility to protect civilians in the face of the horrors of war.

Annex I

[ENGLISH ONLY]

**Expert Meeting
on Humanitarian, Military, Technical and Legal Challenges
of Cluster Munitions**

**Montreux, Switzerland
18 to 20 April 2007**

PROGRAMME

Time periods indicated include presentations and discussion.

Tuesday, 17 April

5-8pm Registration of participants open at Hotel Eden Palace au Lac
Dinner in Montreux at participants' leisure

Wednesday, 18 April

9:00-10:00 Registration open

10:00-10:30 **Opening remarks and introductory comments**

- **Opening remarks**
Philip Spoerri, Director for Law and Cooperation within the
Movement, ICRC
- **Introductory comments**
Peter Herby, Head of the Arms Unit, Legal Division, ICRC

10:30-11:15 **Session I - The military role and human costs of cluster munitions**
Chair: Peter Herby, Head of the Arms Unit, Legal Division, ICRC

- **Historical overview of the military role of cluster munitions and their technical evolution**
Colin King, Explosive Ordnance Disposal Consultant,
C King Associates Ltd., UK
- **Historical overview of use and human impacts**
Simon Conway, Director, Landmine Action, UK

- 11:15-11:45** Coffee Break
- 11:45-13:00** **Session I continued**
- 13:00-14:30** Lunch
- 14:30-16:00** **Session II - Military aspects and possible alternatives**
Chair: Dominique Loye, Deputy-Head, Arms Unit, Legal Division, ICRC
- **Survey of the variety of cluster munitions produced and stockpiled**
Mark Hiznay, Senior Researcher, Human Rights Watch, USA
 - **The ongoing military utility and role of cluster munitions**
Stephen Olejasz, Lieutenant Colonel, US Army, US Department of Defence, The Joint Staff (presentation prepared by Ernest Carbone, Chief Scientist, Joint Staff, Department of Defence, USA)
- 16:00-16:30** Coffee Break
- 16:30-18:00** **Session II continued**
- **Possible alternatives to cluster munitions**
Commander Thomas Frisch, Deputy Head, Arms Control Division, Ministry of Defence, Germany
- 19:00** Dinner

Thursday, 19 April

- 9:00-10:30** **Session III - Technical approaches to minimising the human costs of cluster munitions**
Chair: Dominique Loye, Deputy-Head, Arms Unit, Legal Division, ICRC
- **Achieving high reliability rates**
Philipp Marti, Director, ARMASUISSE, Switzerland

Leon Springer, Director, Army Fuze Management Office, US Army, Picatinny Arsenal, USA
 - **"High reliability" cluster munitions: clearance perspectives**
Chris Clark, Programme Manager, UN Mine Action Coordination Centre, South Lebanon

10:30-11:00 Coffee Break

11:00-12:30 **Session III continued**

- **The reliability of reliability testing**
Ove Dullum, Chief Scientist, Norwegian Defence Research Establishment

12:30-14:00 Lunch

14:00-16:00 **Session III continued**

- **Achieving higher accuracy**
Franz Jüptner, Director, Ground Systems & Technical Safety, Federal Office for Defence Technology, Bundeswehr, Germany
- **Increasing reliability and accuracy: how technically and economically feasible?**
Sun Tao, Military Expert, Ministry of National Defence, China

16:00-16:30 Coffee Break

16:30-18:30 **Session IV – Cluster Munitions and International Humanitarian Law**
Chair: Peter Herby, Head of the Arms Unit, Legal Division, ICRC

- **The case for new rules**
Annette Bjørseth, Senior Adviser, Section for International and Military Law, Ministry of Defence, Norway
- **Taking account of IHL protecting civilians in military operations: the case of cluster munitions**
Eric Steinmyller, Head, Office of Law in Armed Conflict, Direction of Legal Affairs, Ministry of Defence, France

19:30 Dinner

Friday, 20 April

9:00-10:30 **Session IV - continued**

- **Cluster munitions: overview of existing and proposed definitions**
Vera Bohle, Evaluation and Disarmament Specialist, Geneva International Centre for Humanitarian Demining

10:30-11:00 Coffee Break

- 11:00-12:30** **Session V – Thematic summaries and discussion**
Chair: Peter Herby, Head of the Arms Unit, Legal Division, ICRC
- ***Rapporteur on military aspects and possible alternatives***
 Lt. Col. Jim Burke, Ireland
 - ***Rapporteur on technical approaches***
 Colin King, Explosive Ordnance Disposal Consultant,
 C King Associates Ltd., UK
 - ***Rapporteur on international humanitarian law issues***
 Knut Doermann, Deputy Head, Legal Division, ICRC
- 12:30-14:00** Lunch
- 14:00-16:00** **Session VI – Challenges and Solutions**
- **Discussion on ways forward by participants**
- 16:00-16:30** Coffee break
- 16:30-17:00** **Closing remarks by the ICRC**

Annex II

[ENGLISH ONLY]

LIST OF PARTICIPANTS

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Mr. Khaled Ahmad Zekriya
Assistant Minister for the Fifth Political
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