Cluster Munition Development and Timeline
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1868
Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight
Declaration of St. Petersburg

This declaration restricted the “employment of arms which uselessly aggravate the suffering of disabled men or render their deaths inevitable.”1 Austria-Hungary, Bavaria, Belgium, Denmark, France, Great Britain, Greece, Italy, the Netherlands, Persia, Portugal, North German Federation, Norway, Russia, Sweden, Switzerland, Turkey and Württemberg2 all attended the conference and were party to this declaration.

1899
Prohibiting Launching of Projectiles and Explosives from Balloons
Hague Convention IV

Because of the great response three decades earlier, this convention officially codified the St. Petersburg Declaration. This declaration was only binding when two or more countries both party to the treaty were at war.3

1907
Laws and Customs of War on Land
Hague Convention IV

These laws codified what a military can and cannot do during the time of war. The second section of this convention specifically states that poisoned weapons are strictly forbidden. In addition “to kill or wound treacherously individuals belonging to the hostile nation or army” is prohibited.4

Laying of Automatic Submarine Contact Mines
Hague Convention VIII

Controlling international waters was very difficult. This was especially troublesome during the time of war. This convention tried to minimize damage done with mines to peaceful and commercial shipping. Countries had the responsibility of removing their own mines when the war or conflict was over. Only countries who were party to the convention and who were at war were bound to this declaration.5

1925
Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare
Geneva Protocol to Hague Convention
This protocol was added to prohibit the use of chemical and biological weapons. The protocol declared that states party to this convention should coerce non-party members to join.\(^6\)

**1939-1945**  
*World War II*

In March 1945, clusters of napalm bombs were dropped on Tokyo. The fire spread and destroyed 15.8 square miles of the city center.\(^7\)

**1964-1975**  
*Vietnam War*

Cluster bombs made great advancements since the time of World War II. The “bomblets” were smaller, could fit more in a single canister and could cover a wider area once dropped. Imbedded in the shell of the bomblets were about 300 steel balls and when the cluster bomb hit the ground, these steel balls would explode and shoot in all directions.\(^8\) These and other anti-personnel weapons were being mass produced “to meet the needs of the anti-guerrilla campaign”. Since guerillas were hard to see, cluster munitions were developed so that they could be deployed from the sky, infiltrate the enemy area and cover a large area of land.\(^9\)

Between 1966-1971 the Department of Defense (DoD) ordered 423,778 CBU-24 series cluster bombs and 59,192 bomblet-filled units used in B-52 bombers, making a total of 285 million bomblets. That equates to 7 bomblets each to every man, women and child in Vietnam, Laos and Cambodia.\(^10\)

In addition, the DoD ordered 37 million BLU-3 or “pineapple” cluster bombs for production. These cluster bombs had six metal tail fins which were folded against the aluminum case. Inside there were 255 steel balls embedded in the case and would explode upon impact.\(^11\)

**1965**  
*Napalm and Cluster Munitions*

US military leaders argued strongly that napalm should be authorized for use in any combat situation, while State Department officials and civilians in the Department of Defense worried about “world opinion.” Finally in March of 1965, restrictions on the use of napalm were lifted. In the aftermath of the fight over napalm, U.S. military officers tried hard to avoid any political discussion about the use of cluster bombs, for fear their use might be restricted. Speaking to their subordinates all the way to the pilots on the line, the Directorate for Operations said, “As far as we know, that’s authorized to you, you’ve got ‘em, use ‘em when you want and keep your mouth shut, or somebody will tell you that you can’t.”\(^12\)

**August 13, 1966** Phu Xa, a suburb of Hanoi was bombed by cluster bombs. French correspondent Madeleine Riffaud reported immediately after the raid. She noticed the spherical bomblets and the dispenser in which these bomblets came from.\(^13\)

**November 1966** American pacifist, David Dellinger visited North Vietnam and gave an account of the damage he saw by cluster bombs.
“Fragmentation bombs are useless against bridges and building of any kind but are deadly against people…There are different types of fragmentation bombs, but they all start with a ‘mother’ bomb. The mother bomb explodes in the air over the target area, releasing 300 smaller bombs, typically the size of either a grapefruit or a pineapple. Each of the smaller bombs then ejects a spray of 150 tiny pellets of steel, which are so small that they bounce uselessly off concrete or steel, though they are very effectively when they hit a human eye or heart. Vietnamese doctors told me that they have difficulty operating on patients wounded by these bombs, because the steel is so small that it is hard to locate, except through X-rays.”

April-May 1967 Stockholm, Sweden was the location of the first session of the International War Crimes Tribunal. This session was set up to determine if the US was guilty of war crimes. The conference went almost unnoticed on the world stage.

Air campaign in Laos

Between the years 1964 and 1973 Laos endured one of the most intensive bombing campaigns in history, as the US attempted to destroy the social and economic infrastructure of the Pathet Lao communist forces. Part of the larger war in Indochina, the US bombing attempted to block the flow of supplies over the Ho Chi Minh trail which went through southern Laos. In addition, the US bombed northern Laos in support of Royal Lao Government military campaigns.

1971
Conference of Government Experts

This conference was organized by the International Committee on the Red Cross (ICRC) and convened in order to discuss developing the laws of war. The Swedes, who have a long tradition of disarmament, raised the issue of new weapons used in Vietnam.

1973
Swedish Report and “Working Group” of Official Experts

After the 1971 conference, the Swedes gathered military and medical experts “to study the effects of recently developed weapons from the point of view of international law”. The Swedish report “offered language for a series of possible antipersonnel weapons bans”. After this report, the ICRC convened a ‘working group’ of official experts to explore these possible Swedish recommendations.

1974
Conference of Governmental Experts on Weapons that May Cause Unnecessary Suffering or Have Indiscriminate Effects

The ICRC organized a working group of military and arms experts. The conference convened in Lucerne, Switzerland. There were 49 countries and six liberation movements present at this conference. Laos, Cambodia and the Provisional Revolutionary Government of South Vietnam
were not present due to US pressure. Discussion focused on five types of weapons that caused “excessive injury” or have “indiscriminate effects”: anti-personnel fragmentation weapons, flechettes, tumbling bullets, aircraft-delivered mines and incendiary weapons. When asked by a nongovernmental expert about cluster bombs, the US responded that these weapons just drive civilians into shelters.

At this meeting and the next meeting, experts had talked about outright banning these weapons. Thirteen countries proposed a ban on anti-personnel munitions which included landmines and cluster bombs, but the 1980 conference only addressed landmines. Other experts believed that restricting these weapons’ use would allow these meetings to progress further.

**1976**

*Conference of Governmental Experts on Weapons that May Cause Unnecessary Suffering or Have Indiscriminate Effects*

The second conference met in Lugano, Switzerland. More countries had come to side with the Swedes and make proposals about weapons bans. Other countries and their delegations came with more reports and information. By the end of the conference there were three proposals on the table. Mexico and Switzerland’s proposition wanted to “ban the use of weapons whose main effect was to injure by fragments undetectable by the usual medical methods like X-rays”. France, the Netherlands and the United Kingdom’s suggestion wanted to provide for the “recording of the location of minefields and imposing restriction on the use of scatterable mines”. The third proposal (which was eventually supported by the US) on incendiary weapons, was to prohibit incendiary attacks against civilian areas, and against military objectives within such areas unless suitable precautions were taken.

**1977**

*Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts*

This protocol is related to cluster munitions because the weapons’ use is indiscriminate, can cause superfluous injury to the victim and cannot be easily targeted at a military object.

This protocol lays out the guidelines on the protection of the civilian population. **Article 51** states that civilians:

- should not be the object of a military attack
- should not be part of indiscriminate attack in which the military objective does not distinguish between civilian and combatant
- should not be part of an attack that have “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”
- in movement should not be used to shield or immune military objects or military operations

**Article 52** and **Article 53** assert:
Buildings that are for civilian use are not to be targeted or used by military operations; nor are objects from places of worship, historical monuments or cultural and artistic pieces.

**Article 54** affirms that objects “indispensable to the survival of the civilian population such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works” targeted by the military is forbidden.

**Article 57** requires that military operations do everything they can to avoid civilian populations and their objects.\(^{24}\)

**1980**

*Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons That May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects*\(^{25}\)

Convention on Certain Conventional Weapons (CCW)

The CCW treaty agreed upon had a main body of text and three attached protocols with room to add more protocols as necessary. This convention and protocols were only applicable in times of armed conflict and to states who had signed the CCW.

**Protocol I** was on *Non-Detectable Fragments*.
This protocol stemmed off of the Mexican and Swiss recommendation in Lugano about the use of weapons which could not be detected by X-rays.

**Protocol II** was *Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices*.
Remotely delivered mines were prohibited unless they had the capability of self-destruction or self-neutralization. Anti-personnel mines were not allowed unless they were clearly marked in a fenced area and were supervised by military personnel. All mines were required to be recorded and picked up after the hostilities of a conflict ended.
This protocol was amended in 1996. NGOs had pressured the French government to call the UN General Assembly for a review conference in order to place further restriction on the use of these weapons.

**Protocol III** was on the *Prohibition or Restriction on the Use of Incendiary Weapons*.
This protocol defined incendiary weapons as ones that use fire and cause burn injuries. The protocol also addresses the protection of civilians against this class of weapons.

**1983**

*United Nations Environmental Programme Report*

This report recommended that states cooperate in the “collection, classification, dissemination of information on remnants of war, installing a database for this purpose and the promotion of technical assistance and co-operation in clearing”.\(^{26}\)

**1991**

*Operation Desert Storm*
Gulf War in Iraq

The Gulf War was the first time the public really heard about cluster bombs, thanks to the surge of mass media and the instantaneous reporting. NGOs also gathered civilian eyewitness reports and their stories about cluster munitions. When asked, the US military forces confirmed that they were using cluster munitions in and around Baghdad and on major evacuation routes.27

There have been estimates that coalition forces dropped about 61,000 cluster munitions, releasing 20 million submunitions.28 In addition cluster munitions were launched from the ground and from rockets. The total number of cluster munitions dispersed is estimated to be between 24-30 million.29

During the conflict 25 US military personnel were killed due to the mishandling and lack of proper training with submunitions;30 at least 80 US citizens were killed due to duds.31 Between 1991-1992, 1,400 Kuwaitis were killed;32 between 1993-2000, 1,600 people have been killed and 2,500 wounded due to cluster munitions dropped during the Gulf War.33

The movie “Three Kings” also references the use of cluster bombs in the Gulf War.

1997

Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction

Ottawa Treaty

The Ottawa Process was a ‘fast tracked’ diplomatic process which took just fourteen months from negotiations to treaty. The treaty to ban anti-personnel landmines was signed in Ottawa, Canada in December. There were 122 countries present at that conference. In 1998, Burkina Faso became the 40th country to ratify the treaty. The treaty entered into force in March 1999. As of April 2006, there are 151 countries that have ratified the Ottawa Treaty.34

1999

Operation Allied Force

Kosovo War

NATO forces confirmed that they used cluster munitions during the conflict.

During the campaign:

- 1,765 cluster bombs were air dropped containing 295,000 bomblets
- Nis, a town in Kosovo, was bombed with cluster munitions killing 14 and injuring twenty-eight 35
- 744 confirmed strikes occurred with cluster bombs but only 58 succeeded in hitting the target.
- UK and US cluster bomb failure rates were between 3%-26%, averaging 10%-15%.
- 230 cluster bombs were dropped in the Adriatic wounding three fishermen.36

By the first four weeks after the end of bombing 150 Kosovars were killed. By June 2000, 94 people had been killed and more than 400 injured due to UXO.37
Human Rights Watch produced a report on the Kosovo War, “Ticking Time Bombs: NATO’s use of Cluster Munitions in Yugoslavia” which called on NATO to stop the use of cluster bombs on civilians.\textsuperscript{38}

\textbf{2000}

\textit{Reports from various NGOs}

On the heels of the Kosovo War, a few reports were produced; “Clusters of Death” by Titus Peachey and Virgil Wiebe from the Mennonite Central Committee “Cluster Bombs: The military effectiveness and impact on civilians of cluster munitions” by Rae McGrath from Landmine Action and “Cluster Bombs and Landmines in Kosovo” from the ICRC.

\textit{United Nations General Assembly Resolution}

UN General Assembly Resolution 55/37 stated that a review conference needed to be held in order to discuss the future of the CCW.\textsuperscript{39}

\textit{First Preparatory Meeting for the CCW}

The ICRC recommended that a protocol be added to the CCW which included all explosive remnants (ERW) of war except anti-personnel mines. The ICRC recommended that:

- “the central principle that those who use munitions which remain after the end of active hostilities are responsible for clearing such weapons or providing the technical and material assistance needed to ensure their clearance;
- the principle that technical information to facilitate clearance should be provided to mine-clearance organizations immediately after the end of active hostilities in an affected area;
- the principle that those who use munitions likely to have long-term effects should provide warnings to civilian populations on the dangers of such weapons;
- for cluster-bomb and other submunitions only (whether delivered by air or ground-based systems), a prohibition of their use against military objects located in concentrations of civilians”\textsuperscript{40}

Many states bought into the idea of a protocol on the explosive remnants of war.

\textbf{2001}

\textit{Second and Third Preparatory Meetings}

Many more papers from both governments and NGOs were submitted to the next few meetings. There was a growing consensus that ERW needed to be addressed and the CCW was the right forum to do so.\textsuperscript{41}

\textit{Operation Enduring Freedom}

War in Afghanistan

During this war, 1,228 bombs carrying 248,056 submunitions were dropped on 232 targets.\textsuperscript{42} The US army also dropped MREs (ready made meals) to the Afghani people. Unfortunately,
these bright yellow packets were also the same color as cluster bombs. Many civilians could not distinguish the difference between the two until it was too late.
The first reported instance of civilian casualties from cluster munitions was in the town of Herat. A US weapon went astray and killed nine civilians, injured fourteen others and partially or completely destroyed 20 of the 45 houses in the village. Within the first year of the conflict, two deminers and 127 civilians were killed by cluster bomb duds.

Second Review Conference of the CCW

Three proposals were submitted to the conference:

- Switzerland proposed that “the adoption of a new protocol laying down technical specifications to prevent cluster bombs and other submunitions from becoming explosive remnants of war.” The proposal continued to state that all submunitions must have a 98% reliability rate by the fuse and must have a self-destruct function if they failed to explode.
- The US suggested a new protocol “to reduce the impact of anti-vehicle mines”. These mines would have to be detectable by readily available mine detectable devices and have a self-neutralization function if delivered remotely.
- The ICRC recommended ways “to reduce the human and social costs of explosive remnants of war”. The ICRC wanted to encompass all explosive remnants of war which threaten civilian populations after an armed conflict.

A Group of Governmental Experts was established to examine the “legal, technical, operational and humanitarian aspects of the proposals”. Specifically they were asked to examine:

- “the types of munitions that become explosive remnants of war
- features which could prevent munitions from becoming explosive remnants of war in the first place
- technical, legal and other measures which could facilitate their rapid and safe clearance and warnings to civilian populations where a threat exists
- the adequacy of existing international humanitarian law in minimizing the post-conflict risks of explosive remnants of war
- issues related to assistance and cooperation”

2003
Operation Iraqi Freedom
Iraq War

US and UK forces thus far have dropped between 1,300 and 1,500 cluster munitions from the air; surface delivered cluster munitions have totaled to 11,600. The first news story about civilian deaths was when a cluster munition hit al-Hilla in central Iraq killing 33 and injuring 109.

Cluster Munition Coalition Established
On November 13, Pax Christi Netherlands and with the financial assistance of the Dutch government organized the launch of the Cluster Munition Coalition (CMC) in order to coordinate efforts between NGOs. One hundred and four NGOs appeared on the initial list of the CMC.
The CMC calls for:

- “No use, production or trade of cluster munitions until their humanitarian problems have been resolved.
- Increased resources for assistance to communities and individuals affected by unexploded cluster munitions and all other explosive remnants of war.
- Users of cluster munitions and other munitions that become ERW to accept special responsibility for clearance, warnings, risk education, provision of information and victim assistance.”


After numerous meetings throughout 2002, the Group of Governmental Experts submitted a draft protocol for states to consider on the explosive remnants of war. It was the first treaty that dealt with UXO and the effects these weapons had to civilians after the end of an armed conflict. Article 3 asserts that after a conflict ceases each party to the conflict is required to:

- “survey and assess the threat posed by explosive remnants of war
- assess and prioritize needs and practicability in terms of marking and clearance, removal or destruction
- mark and clear, remove or destroy explosive remnants of war
- take steps to mobilizes resources to carry out these activities”

Article 4 states that countries part of the conflict must give up information and records as soon as possible in order for the demining process to occur.

Article 8 discusses steps that need to be taken in order to minimize civilian casualties and help restore economic and social well being to the mined area.

2006

Protocol V enters into force

Protocol V will enter into force November 12. Only states that have signed and ratified Protocol V will be bound by it. As of June 2006, there are 22 states.

2007

Norway initiates movement to ban cluster munitions

Forty-nine countries gathered in Oslo, Norway, February 22 and 23, 2007. At the end of the conference, forty-six countries signed a declaration agreeing to conclude a legally binding instrument by 2008 to:

“prohibit the use, production, transfer and stockpiling of cluster munitions that cause unacceptable harm to civilians.”
**Lima Conference on Cluster Munitions**

Sixty-seven countries met in Lima, Peru, May 23-25 to discuss the shape of a new treaty on cluster munitions.

**Vienna Conference on Cluster Munitions**

One hundred and thirty-eight countries met in Vienna, Austria, December 5-7, 2007 to outline the key components of a new treaty on cluster munitions.

**2008**

**Wellington Conference on Cluster Munitions**

One hundred and twenty-two countries gathered in Wellington, New Zealand, February 18-22 as a final preparatory meeting to formal negotiations of a new treaty on cluster munitions.

**Dublin Diplomatic Conference on Cluster Munitions**

One hundred and seven countries negotiated a new treaty on cluster munitions in May, 2008, in Dublin, Ireland. The treaty banned the production, transfer, stockpiling and use of cluster munitions.

**Convention on Cluster Munitions Signing Conference**

Ninety-four countries signed the Convention on Cluster Munitions at a signing ceremony in Oslo, Norway, December 2-4, 2008.

**2010**

**Convention on Cluster Munitions enters into force**

On August 1, 2010, the Convention on Cluster Munitions entered into force after receiving the required 30 ratifications.

**First Meeting of States Parties**

The 1st Meeting of States Parties to the Convention on Cluster Munitions was held in Vientiane, Laos, November 9-12, 2010.

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