Humanitarian Arms Control I – Anti-Personnel Mines and Cluster Munitions

Anti-personnel landmines and cluster munitions have been banned for their harmful effects on civilians. Treaties such as the Mine Ban Treaty (1997) and the Convention on Cluster Munitions (2008) focus on human security, requiring weapon clearance and victim assistance, and inspiring broader humanitarian disarmament efforts.

2 Introduction
7 Historical overview of international humanitarian law and weapons rules
10 Anti-personnel landmines
15 Cluster Munitions
20 Follow-up initiatives and challenges
24 Resources

Prof Margarita Petrova
INSTITUT BARCELONA D'ESTUDIS INTERNACIONALS (IBEI)

Cite as: Prof Margarita Petrova, "Humanitarian Arms Control I – Anti-Personnel Mines and Cluster Munitions" in EUNPDC eLearning, ed. Niklas Schoernig, Peace Research Institute Frankfurt. Available at https://eunpdc-elearning.netlify.app/lu-09/, last modified 22 May 2025

The EU Non-Proliferation and Disarmament eLearning Course aims to cover all aspects of the EU non-proliferation and disarmament agenda. It's produced by PRIF with financial assistance of the European Union. The contents of individual learning units are the sole responsibility of the respective authors and don't necessariy reflect the position of the European Union.

Funded by
the European Union

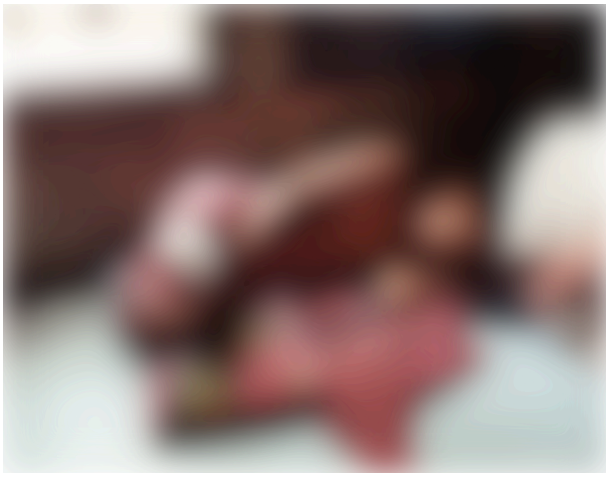
1. Introduction

What is 'humanitarian arms control'?

Anti-personnel landmines and cluster munitions have been banned because they take a heavy toll on civilian lives and impede post-conflict reconstruction and development. In the late 1980s and early 1990s, even as Cold War-era conflicts were coming to an end, thousands of civilians were still being killed and maimed by landmines.

Warning!

Trigger warning! The photo on the next tab shows the unpixelated image of a young landmine victim, Phnom Penh Hospital.



Young landmine victim, Phnom Penh Hospital.
Courtesy of ICBL-CMC/John Rodsted)

Picture

Young landmine victim, Phnom Penh Hospital.
Courtesy of ICBL-CMC/John Rodsted)

It was at this juncture that humanitarian arms control emerged. United Nations officials, NGOs and scholars moved away from an exclusive focus on state security to concentrate on the security of individuals, or 'human security', and from arms control focused on preventing great power war to humanitarian arms control aimed at prohibiting weapons that endangered men, women and children in their daily lives. Landmines were referred to as 'weapons of mass destruction in slow motion', killing a person every 20 minutes. This humanitarian crisis sparked a civil society campaign that led to the adoption of the Mine Ban Treaty in 1997.

Soon after this, the bombing campaign in Kosovo, the wars in Afghanistan and Iraq and the 2006 Israeli-Lebanon War led to another humanitarian crisis in the making caused by the use of cluster munitions. Cluster munitions contain numerous small submunitions that cover wide areas and often function as landmines due to their high failure rates, thus threatening civilian lives both during and after conflicts. Another NGO campaign helped bring about their prohibition in 2008 with the Convention on Cluster Munitions.

First Review Conference of the Convention on Cluster Munitions
Convention on Cluster Munition, CC BY-NC-ND 2.0

These treaties are hallmarks of humanitarian arms control and disarmament. They look at security and arms control through a humanitarian lens – focusing on the weapons' effects on human lives and livelihoods and addressing them holistically.

The paradigm shift from state-centred towards humanitarian security
Grübelfabrik, CC BY-NC-SA

They prohibit the weapons and require states to clear contaminated areas, provide victim assistance and educate people about the risks of these weapons. The treaties have also prompted efforts to protect civilians against the effects of small arms, nuclear weapons and other means of warfare – initiatives that have advanced

the field of humanitarian arms control in a changing international environment.

This unit will introduce you to the problems of anti-personnel landmines and cluster munitions and the legal frameworks that address them. It will help you understand the substance of humanitarian arms control, the dynamics that have led to its rise and its processes of implementation.

Humanitarian arms control or humanitarian disarmament[1] includes a number of international treaties that prohibit specific weapons because they are deemed to cause unacceptable civilian harm both during and after the end of armed conflicts. The 1997 Ottawa Convention that bans anti-personnel landmines and the 2008 Convention on Cluster Munitions are prime examples. One of their distinguishing features is that they are inspired by humanitarian principles and draw on International Humanitarian Law. The protection of innocent human beings takes centre stage rather than the state security interests that were underlying most arms control efforts during the Cold war. This shift towards 'human security' happened after the end of the Cold War when there was a hope of ending the arms race and gaining a peace dividend to be channelled into human development.

The shift towards human Security
Grübelfabrik, CC BY-NC-SA

In 1994, the UN Development Program (UNDP) was among the first actors to articulate this 'people-centred' human security agenda:

> The concept of security has for too long been interpreted narrowly: as security of territory from external aggression, or as protection of national interests in foreign policy [...] Forgotten were the legitimate concerns of ordinary people who sought security in their daily lives.
>
> So far, disarmament has focused more on high-technology weapons, when the real problems are small weapons [...] [including] one of the worst killers – landmines
>
> UNDP 1994: 22, 52

Chinese Type 72 landmine found by US Marines in Iraq.
Public domain, https://commons.wikimedia.org/wiki/File:Jason%27s_camera_127.JPG

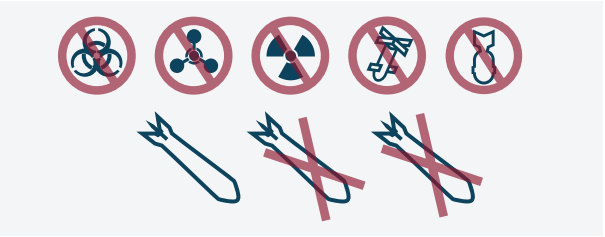
Although the International Campaign to Ban Landmines (ICBL) had started in 1992, before the UNDP brought human security into focus, it was motivated by the same ideas and showed how the human security agenda can be implemented in practice. The idea of 'disarmament as humanitarian action' was developed further at the UN Institute for Disarmament Research[2] and has influenced a number of initiatives for weapons prohibitions, including those on cluster munitions, nuclear weapons, explosive weapons in populated areas and lethal autonomous weapons, as well as efforts to curb the arms trade, including trade in small arms and light weapons.

More broadly, we can think of humanitarian arms control as a type of arms control that incorporates humanitarian concerns – avoiding the infliction of unnecessary suffering on combatants and indiscriminate harm on civilians. Such instruments fall within the ambit of international humanitarian law, which regulates the conduct of military operations, and were adopted both before and during the Cold War. Their emphasis on humanitarian values (albeit to differing degrees) distinguishes them from the typical arms control initiatives of the Cold War, which aimed at stabilising relations between the two superpowers by limiting the numbers and types of certain weapons. Thus humanitarian arms control is guided by humanitarian values and focuses on alleviating the suffering of individuals. In contrast, arms control during the Cold War was driven by the strategic and security interests of states, primarily the US and the Soviet Union, and aimed at avoiding a 'hot' war between them, or at least at lowering the destructiveness of such a conflict.

Next, I will offer some brief definitions of arms control, elaborate on the main principles of IHL and how it relates to weapons, and highlight the distinctive aspects of humanitarian arms control after the Cold War, the period we usually associate with the beginning of this approach.

What is arms control?

Arms control can be defined in different ways, some broader, others narrower (see also LU01, LU20). Here, I will adopt a narrow perspective and focus on the measures that prohibit certain weapons, their size, development, production, transfer, stockpiling or use, as well as those that manage, cap or lower weapons numbers.[3]



Forms of arms control
Grübelfabrik, CC BY-NC-SA

These measures can serve different purposes, foremost maintaining state security at a minimal cost, as well as establishing stability in interstate relations, allaying suspicions of aggressive intentions, diminishing the risk of war, or limiting a war's destructiveness and its harmful effects on people and the environment.

Disarmament is a type of arms control that aims to eliminate certain (or all) weapons or reduce their numbers. While arms control and disarmament are sometimes used together or interchangeably, historically, disarmament was closely aligned with attempts to abolish war itself. Thus disarmament can be seen as antithetical to defence measures, which, from an arms control perspective, are essential for stable interstate relations.

During the Cold War, the two superpowers were the main players in the field of arms control. Arms control was primarily about containing the arms race and achieving stable mutual deterrence.[4] In the prevailing climate of mutual suspicion, verification measures were important in order to increase the probability of states complying with their treaty obligations and to detect early any cheating.

President Nixon (USA) and General Secretary Brezhnev (USSR) signing the SALT 1 Treaty, the ABM Treaty, and the Interim Agreement on strategic offensive arms in Moscow, May 26, 1972
Richard Nixon Presidential Library

A strategic balance between the superpowers was established. However, it came at a high cost and with high levels of nuclear armaments, which at their peak in the mid-1980s reached some 70,000 nuclear warheads,[5] more than half of which were acquired after the start of arms control efforts in the early 1960s. Hence, critics perceived arms control largely as a failure – it maintained the status quo and contributed to militarisation and ever higher defence expenditures. In sum, during the Cold War, arms control revolved around weapons of mass destruction (WMD), centred on the interests of great powers and was primarily a means to stabilise their relations.

What is international humanitarian law?

Humanitarian arms control is guided by humanitarian norms and values. These include basic human rights norms that protect the life and dignity of every human being, and importantly, humanitarian principles that apply during armed conflict. These principles are codified in international humanitarian law, and their breach is illegal (see also LU17) `[/lu-17/]`. In such cases, there are legal grounds to argue that the use of certain weapons should be prohibited. This has helped NGOs strengthen their arguments by connecting the problems of landmines and cluster munitions with existing legal norms.

So, what is international humanitarian law (also referred to as the law of armed conflict, law of war, or IHL)? This set of rules regulates the conduct of military operations. It tries to balance military requirements with humanitarian values and prohibits violence that has no military purpose – causing unnecessary suffering to soldiers, harming civilians (who do not participate in hostilities), wounded and sick soldiers, and prisoners of war (who no longer fight). Given that IHL imposes certain limitations on the use of arms, these rules are sometimes considered a subset of arms control.[6] There are both general and specific rules on weapons.

General IHL principles, in particular, Article 51 of the 1977 Additional Protocol I to the Geneva Conventions (AP-I), apply to the use of all weapons. Article 51 prohibits indiscriminate attacks, which

> are not directed at a specific military objective;[…] which employ a method or means of combat which cannot be directed at a specific military objective; or […] are of a nature to strike military objectives and civilians or civilian objects without distinction
>
> Article 51 of the 1977 Additional Protocol I to the Geneva Conventions (AP-I)

It also defines as indiscriminate and prohibits

> 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

> Article 51 of the 1977 Additional Protocol I to the Geneva Conventions (AP-I)

Articles 35 specifically prohibits the use of weapons

> of a nature to cause superfluous injury or unnecessary suffering
>
> Article 35 of the 1977 Additional Protocol I to the Geneva Conventions (AP-I)

According to the International Committee of the Red Cross, the above principles reflect customary international law and are thus binding on all states irrespective of whether they have ratified the AP-I.[7] Article 36 of API requires states parties that develop or acquire a new weapon to determine whether its use would be prohibited by the AP-I or other IHL rules. In other words, states need to act before developing weapons to ensure that all new weapons comply with IHL. While general IHL principles apply to all weapons, they do not directly ban specific weapons. Whether the use of a weapon is prohibited is assessed on a case-by-case basis and interpretation of the principles often differ, especially regarding what constitutes unnecessary suffering, superfluous injury, or disproportionate harm to civilians. Weapons prohibitions can be considered a way of giving meaning to the principles in practice and of reflecting a convergence of state opinion (but no unanimity) on whether weapons in their normal use would have indiscriminate effects or cause unnecessary suffering. Specific treaty provisions (e.g. banning the use of, stockpiling or transferring a weapon) remain legally binding only on those states that have ratified the respective treaty. Thus treaties prohibiting or restricting weapons both draw on and, over time, can clarify and develop IHL. This dynamic is at play in several treaties instituting weapons restrictions in the late 19th and early 20th centuries (summarised in Chapter 2). However, the use of the principles banning indiscriminate and disproportionate attacks on civilians in order to prohibit specific weapons became particularly prominent following the end of the Cold War.

Humanitarian arms control vs traditional arms control

Rather than focus on the security interests of states, humanitarian arms control restricts the use of or totally bans weapons because of their effects on **civilians and their communities**.

The balance between the humanitarian harm and military use of landmines
Grübelfabrik, CC BY-NC-SA

Thus, anti-personnel landmines were prohibited in 1997 because in the aftermath of conflicts, they were taking a heavy toll on civilians in many places, including Cambodia, Afghanistan, Colombia, Mozambique and Angola.

They killed and maimed innocent people and prevented socio-economic reconstruction. Whatever their military utility during conflict, civilians paid for it with their limbs and lives after the end of fighting.

Map showing Cambodia, Afghanistan, Colombia and Mozambique
Data: Natual Earth. Graphic: PRIF
Licensed under CC BY 4.0.

Cluster munitions had a similar post-conflict humanitarian impact, as they comprise small bomblets many of which do not explode as intended and thus function as de facto landmines. In addition, because they cover a large territory when fired by artillery or dropped by airplanes anywhere near populated areas, they often indiscriminately affect civilians at the time of their use.

US cluster bomb CBU-58A/B in the Cottbus Airfield Museum
https://commons.wikimedia.org/wiki/File:Cluster_bomb_CBU-58.jpg

The campaigns for the prohibition of landmines and cluster munitions were led by non-governmental

organisations (NGOs) in partnership with small and medium-sized states. They mobilised the states from the Global South that had predominantly borne the burden of these weapons, while the major military powers, the US, Russia and China, opposed the treaties. The treaties included total prohibitions of the production, stockpiling, transfer and use of the weapons as defined. They also included provisions that aimed to commit states to clear landmines and unexploded cluster munitions and provide victim assistance. In so doing, they comprehensively addressed the problems of these weapons. The treaties do not include verification measures (apart from annual state reports on treaty implementation). Instead, NGOs have taken on a monitoring role and issue annual reports on state policies and practices. Thus, state compliance depends to a large extent on the ability of NGOs to publicly name and shame transgressors. Last, but certainly not least, the treaties set new norms and stigmatise the weapons with the ultimate objective of exerting normative pressure on states that have not signed them.

Landmine warning sign in Israel
https://commons.wikimedia.org/wiki/File:Landmine_warning_signs_in_Israel.jpg, CC Attribution-Share Alike 4.0 International

The main differences between humanitarian arms control and traditional arms control regarding WMD during the Cold War can be expressed as follows:

Characteristics	Humanitarian arms control	Cold War arms control
Focus	Human security Civilian protection	State security Stability of strategic balance
Main actors	NGOs Small and middle powers	States Superpowers
Decision-making	Possibility for majority voting	Consensus
Comprehensive weapons prohibition	Yes	No (nuclear weapons) Yes (chemical and biological weapons)
Compliance mechanism	NGO monitoring (MBT, CCM, TPNW) Verification (TPNW)	Verification (nuclear and chemical weapons)
Victim assistance	Yes	No
Remedial measures	Yes	No

Grübelfabrik, CC BY-NC-SA

To sum up using the words of the *Armed Conflict and Civilian Protection Initiative at Harvard Law School*:

> Humanitarian disarmament seeks to prevent and remediate arms-inflicted human suffering and environmental harm through the establishment and implementation of norms. This approach to disarmament is people-centred in substance and process
>
> Armed Conflict and Civilian Protection Initiative at Harvard Law School

1. Here I use humanitarian arms control and humanitarian disarmament interchangeably
2. Borrie and Randin 2005, 2006.
3. Here, even establishing rates of armament growth for states parties can be included when it contributes to the stability of their relations.
4. Bull 1987.
5. Kristensen, Korda and Reynolds 2024.
6. E.g. Viotti 2012; Morgan 2012, 20; Vagts 2000, 31.
7. [https://ihl-databases.icrc.org/en/customary-ihl/v1/rule11]; [https://ihl-databases.icrc.org/en/customary-ihl/v1/rule12]; [https://ihl-databases.icrc.org/en/customary-ihl/v1/rule70]; [https://ihl-databases.icrc.org/en/customary-ihl/v1/rule71].

2. Historical overview of international humanitarian law and weapons rules

The launch of the International Campaign to Ban Landmines in 1992 is usually seen as the beginning of humanitarian disarmament. However, **the 1868 St. Petersburg Declaration banning explosive projectiles** already shared some of the same humanitarian spirit, although it sought specifically to prevent the suffering of soldiers. The Declaration banned projectiles under 400 grams containing explosive or inflammable substances, recognising that such weapons would needlessly aggravate soldiers' injuries or cause inevitable death.

The **1899 Hague Convention** further codified the humanity principle by prohibiting the use of poisonous weapons and any weapons 'of a nature to cause superfluous injury'[1]. Two additional Hague Declarations prohibited 'the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases'[2] and of 'bullets which expand or flatten easily in the human body', the so-called 'dumdum bullets'[3].

AI-generated artistic depiction by ChatGPT of the 1899 Hague Convention negotiations
AI-generated with DALL·E via ChatGPT, free to use, subject to OpenAI's terms of use

The **1907 Hague Conventions** reiterated the above prohibitions. At that time civilians were usually far from the battlefield and rarely exposed to the effects of weapons, hence humanitarian concerns primarily addressed the excessively injurious effects of weapons on soldiers. The 1907 Hague Convention VIII also banned unanchored automatic contact mines, unless they deactivated within an hour, to protect merchant ships and fishermen. This logic of limiting the indiscriminate effects of weapons later contributed to the ban on anti-personnel landmines.[4]

After the extensive use of chemical gases during World War I and the development of aircraft, there was widespread public outcry and fears about the potential use of aero-chemical warfare in the future, particularly against civilians living in cities. This, together with the precedent of banning asphyxiating gases in the 1899 Hague Declaration, led to the adoption of the **1925 Geneva Protocol banning the use of asphyxiating and poisonous gases and bacteriological methods of warfare (see LU02)** `[/lu-02/]`. This prohibition on use was meant to protect both combatants and civilians against the pernicious effects of chemical weapons.[5]

During this period, IHL treaty-making was predominantly based on majority decisions. Although some great powers failed to ratify some of the treaties, [6] this did not prevent them from becoming binding law among the rest of the states parties and over time their provisions have become norms of customary international law, binding even for states that have remained outside of the treaties.

After World War II, disarmament initially focused on WMD, starting with atomic weapons and later including biological and chemical ones. Although there were humanitarian concerns about the indiscriminate nature of WMD, security and strategic interests drove these discussions, resulting in the Biological Weapons Convention (BWC, 1971, see LU03) and the Chemical Weapons Convention (CWC, 1992, (see LU02) `[/lu-02/]`), with verification mechanisms included only in the latter.

Timeline of weapons-related IHL treaties

1868 · St. Petersburg Declaration
St. Petersburg Declaration banned explosive projectiles

1899 · Hague Convention
Hague Convention prohibited:
- the use of poisonous weapons
- the use of weapons 'of a nature to cause superfluous injury'
- 'the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases'
- the use of 'bullets which expand or flatten easily in the human body'
- the launching of projectiles and explosives from balloons for a period of five years

1907 · Hague Conventions
- Hague Conventions reaffirmed the bans of the use of weapons adopted in the 1899 Hague Convention
- Hague Convention VIII prohibited the laying of unanchored automatic contact mines (unless they deactivate within one hour) and anchored mines that did not become harmless upon detaching from their moorings

1925 · Geneva Protocol
Geneva Protocol banning the use of asphyxiating and poisonous gases and bacteriological methods of warfare

1971 · Biological Weapons Convention
Biological Weapons Convention, 1980

1980 · Convention on Conventional Weapons
Convention on Conventional Weapons
- Protocol I on weapons, the primary effect of which is to injure by fragments that cannot be detected by X-ray
- Protocol II on mines
- Protocol III on incendiary weapons

1992 · Chemical Weapons Convention
Chemical Weapons Convention

1995 · Convention on Conventional Weapons
Convention on Conventional Weapons
- Protocol IV on blinding lasers

During this period, disarmament negotiations often hinged on great power agreement, which critics saw as a 'game' that was 'institutionalizing the arms race'.[7] In 1960, a special forum, the Ten-Nation Committee on Disarmament, a predecessor of the current Conference on Disarmament (CD), was set up to work on WMD and other weapons issues. Historically, a limited number of states have participated in this forum (from 10 in 1960 to 65 states of 'key military significance' today).[8] The BWC, the 1968 Nuclear Nonproliferation Treaty (NPT, see LU05), the CWC and the 1996 Comprehensive Test Ban Treaty (CTBT) are among the treaties adopted by the Conference on Disarmament. Despite these achievements, the CD has remained dominated by the great powers and since the mid-1990s, its work has stagnated due to divergent state interests and consensus decision-making.

In the late 1960s and 1970s, conventional weapons and the need to develop IHL gained prominence on the international agenda, influenced by the Vietnam War and decolonisation. This led to the 1977 Additional Protocols (AP). As noted earlier, AP-I codified for the first time the principles of civilian protection that prohibited indiscriminate attacks.[9] Several neutral and non-aligned states, led by Sweden, called for specific prohibitions on a range of conventional weapons to be included in the protocols. However, the major powers blocked conventional weapons bans within the protocols, leading to separate negotiations that produced the 1980 Convention on Certain Conventional Weapons (CCW). The CCW reconnected IHL with arms control during renewed Cold War tensions and became a precursor to later disarmament initiatives. The CCW includes an umbrella, framework convention and three weapons-specific protocols. Protocol I banned the use of any weapon whose primary effect is to injure by fragments which cannot be detected in X-rays. Protocol II restricted the use of remotely delivered mines whose location could not be recorded or those that did not have a self-neutralisation mechanism to render them harmless when no longer serving a military purpose. Protocol III prohibited the use of air-dropped incendiary weapons in populated areas, but allowed the use of ground-launched incendiaries if precautions to minimise civilian harm were taken. Without going into details, from an arms control perspective, the CCW became an uneasy compromise, combining IHL substantive rules and arms control decision-making procedures.

The CCW also included a clause that allowed future conferences to be convened to adopt amendments or new protocols. Fifteen years later, this clause was used to open new negotiations. These led to the 1995 Protocol IV prohibiting the use of laser weapons specifically designed to cause permanent blindness, and in 1996, to an amendment of Protocol II, which introduced additional safety and recording requirements for mines. However, the consensus decision-making inherited from the Cold War prevented agreement on the comprehensive prohibition of anti-personnel landmines that NGOs were seeking. This prompted Canada to launch a stand-alone negotiation process that resulted in the 1997 Mine Ban Treaty.

The CCW continues to serve as a forum for raising awareness of new weapons problems with input from NGOs. Thus, it can function as an indirect catalyst for action on new initiatives, but, given its consensus-

based decision-making, can rarely adopt strict weapons prohibitions.

1. [https://ihl-databases.icrc.org/assets/treaties/150-IHL-10-EN.pdf].
2. [https://ihl-databases.icrc.org/assets/treaties/165-IHL-13-EN.pdf].
3. [https://ihl-databases.icrc.org/assets/treaties/170-IHL-14-EN.pdf].
4. [https://ihl-databases.icrc.org/en/ihl-treaties/hague-conv-viii-1907?activeTab=default]; Vagts 2000, 36.
5. See, for example, Price 1997.
6. For example, the US never signed the 1899 Hague Declarations banning asphyxiating gases and expanding bullets.
7. Myrdal 1978, 169.
8. [https://disarmament.unoda.org/conference-on-disarmament].
9. See Alexander 2016; Mantilla 2020, 2023; Petrova forthcoming, chapters 3–6.

3. Anti-personnel landmines

Definition and humanitarian problems

Anti-personnel landmines, which include some of the simplest and most common weapons, are banned by a treaty adopted in 1997 and ratified by 164 states (as of September 2024). What are anti-personnel landmines and why were they banned?

There is a common understanding that a mine is a concealed explosive that detonates when someone unwittingly steps on it. It is a hidden and explosive danger, waiting to strike unexpectedly.

A more technical description is that anti-personnel landmines (APL) are explosive devices, designed to detonate when disturbed by the presence, proximity or contact of a person, who is then injured or killed. Most surviving victims have to undergo amputations. Once placed under or on the ground, APLs can stay active for decades.[1] The large majority are victim-activated – detonated by pressure or trip-wire when a person walks on or near them. In contrast, anti-vehicle mines are designed to explode with the much heavier weight of a vehicle. Some mines are command-detonated, for example by radio signal, and require a human decision to explode.

Mines are used for several main purposes – to prevent the deactivation of anti-tank mines, to create defensive barriers around military positions, to deny territory to, slow down, or channel enemy forces to specific areas where they will then be fired upon.

Anti-personnel landmines are typically small, usually about 7–16 cm in diameter and 5–10 cm in height.[2] The simplest models can cost as little as three US dollars.[3] With the invention of remotely delivered types, air-dropped or ground-launched mines could be dispersed in great numbers over large territories. Given their simple design and low cost, APLs have been widely used by non-state armed groups. Thus, a combination of new delivery methods, low cost and use by non-state actors led to rampant landmine contamination in the 1980s. Demining, in contrast, is costly and slow. Although self-destructing or self-deactivating mines were developed during the Cold War, they had reliability issues and posed similar challenges for demining to older models.

In the 1990s, during a time of relative peace when the Cold War had come to an end and proxy civil wars were receding, it was estimated that around 26,000 people fell victim to landmines each year. Ordinary people, about half of them children, were being maimed and killed. Agricultural land, mostly in countries in the Global South, on which people depended to make a living was contaminated in 'epidemic proportion', in the words of Jody Williams who in 1992, became the coordinator of an NGO network, the International Campaign to Ban Landmines (ICBL) to address the problem. Five years later, a treaty comprehensively banning anti-personnel landmines (APL) was adopted.

So why were landmines singled out for prohibition? To quote Williams again:

> Landmines distinguish themselves because once they have been sown, once the soldier walks away from the weapon, the landmine cannot tell the difference between a soldier or a civilian – a woman, a child, a grandmother going out to collect firewood to make the family meal. The crux of the problem is that while the use of the weapon might be militarily justifiable during the day of the battle […] once peace is declared the landmine does not recognize that peace. The landmine is eternally prepared to take victims
>
> Source: Jody Williams 1997

Or as expressed by the International Committee of the Red Cross (ICRC):

> The limited military utility of AP mines is far outweighed by the appalling humanitarian consequences of their use in actual conflicts
>
> Source: ICRC 1996, 73

Thus, from a legal and a humanitarian perspective, anti-personnel landmines were indiscriminate weapons whose humanitarian impact exceeded whatever military value they may have had.

Another aspect of the problem, the gruesome and graphic injuries they inflicted on innocent civilians, especially children, made a particularly strong and emotional impact on public opinion.

Context mattered, too. At the end of the Cold War, immediate security threats in the West and the East had subsided, allowing other issues, such as human rights and development, to move up the international agenda. At the same time, smaller states could forge a more independent path without being bound to the great powers' wishes.

Non-governmental organisations working on human rights, development and humanitarian issues were able to gather first-hand information about mine contamination and casualties. They became the experts providing information on the issue and framing it to resonate with existing legal frameworks and public opinion. These organisations were the active force behind the ban. The next section will outline some of the main aspects of their campaign.

The NGO campaign

In the late 1980s and early 1990s, as proxy civil wars came to an end, an increasing number of NGOs moved in to assist with post-conflict reconstruction – and found themselves confronted with the landmine problem. The scale of the human, social and economic toll of landmine contamination in Cambodia, Angola, Colombia, Mozambique, or Afghanistan was staggering. Humanitarian, medical and human rights organisations had to deal with the consequences and before long started compiling information about the issue and reflecting on ways to address it. In addition to providing assistance to victims and clearing mines, in 1992, several organisations launched the International Campaign to Ban Landmines (ICBL). These organisations saw a ban as the only way of tackling the root cause of the problem. Given that landmines were small, cheap and available in great numbers, while mine clearance was difficult, time consuming and costly, clearance alone was not enough to put an end to the landmine threat. Supply also needed to be stopped and a stigma around mines created so that even when they were easily-available, combatants would be reluctant to use them.

In 1994, having witnessed the horrendous effects of landmines through the work of its surgeons and fieldworkers, the ICRC also decided to call for a ban and launched an extensive public campaign on the issue.[4] The NGO strategy centred on gathering and publicising information about the scale of mine contamination, the long-term human suffering faced by victims and the obstacles to socio-economic development. They reframed the debate in humanitarian terms. They argued that the humanitarian costs of these weapons far outweighed their military utility and shifted the burden of proof – now those insisting on retaining landmines had to defend their positions and show that APLs did not in fact cause serious humanitarian harm and were not simply useful to the military, but indispensable weapons.[5]

The CCW was the logical forum to address the landmine problem and NGOs convinced France to call for a review conference and place the ban on the CCW agenda. The CCW adopted Amended Protocol II, which strengthened provisions regarding the inclusion of self-neutralisation mechanisms in landmines, recording and marking of minefields and mine clearance on territory controlled by states parties. It also banned non-detectable mines. However, this was not a comprehensive ban and fell short of expectations. Nevertheless, the CCW talks provided an opportunity for NGOs to advocate for a ban, lobby delegates and importantly, foster relationships with government officials. As government policies gradually shifted from export bans, to moratoria on use, to domestic bans on APLs, Canada decided to organise a separate conference to capitalise on the momentum created for a ban. At this conference, held in October 1996, Canada announced its initiative to work for total prohibition of APL and called for governments to support it.

The Ottawa Process to ban anti-personnel landmines

The historical development

What followed became known as the Ottawa Process, a fast-track, ad hoc negotiation process led by a few likeminded small and medium-sized states,[6] but opposed by the main military powers. It involved close cooperation with the ICRC and ICBL and emphasised the human dimension of the problem. Landmine survivors were active players and placed the process on a human plane, making it different from traditional diplomacy and arms control. In procedural terms, the Ottawa Process comprised a number of regional conferences to rally support for the ban, especially among mine-affected countries in the Global South, and negotiation conferences to flesh out the treaty provisions. After a whirlwind campaign, the treaty banning anti-personnel landmines was adopted in September 1997 and signed by 122 states in December.

Timeline of the Ottawa Process leading to the MBT

Oct. 1992 · ICBL created by the Vietnam Veterans of America Foundation (US), Medico International (Germany), Human Rights Watch (US), Handicap International (now Humanity and Inclusion) (France), Physicians for Human Rights (US) and the Mines Advisory Group (UK). US moratorium on the export of APLs

Apr. 1993 · ICRC organises 'Symposium on Anti-Personnel Mines'

May 1993 · First International NGO Conference on Landmines, London

Sept. 1993 · UNICEF gives priority attention to the issue of landmines and provides support to the ICBL

Feb. 1994 · ICRC President Cornelius Sommaruga declares that a 'worldwide ban on anti-personnel mines is the only truly effective solution'

May 1994 · Second International NGO Conference on Landmines, Geneva

Sept. 1994 · UN Secretary-General's first report on mine clearance notes that the 'best and most effective way' to solve the global landmine problem is a complete ban of all landmines. US President Clinton calls for the 'eventual elimination' of landmines

Mar. 1995 · Belgium becomes the first country to pass domestic laws banning the use, production, procurement, sale and transfer of APLs

Jun. 1995 · The Norwegian parliament adopts a binding resolution calling upon its government to work towards a complete ban on APLs. The Cambodia Campaign to Ban Landmines and the NGO Forum on Cambodia organise an international conference on APLs in Phnom Penh

Oct. 1995 · CCW Review Conference

Nov. 1995 · Switzerland and Canada announce that they favour a complete and immediate international ban on APLs

Jan. 1996 · The CCW Review Conference reconvenes in Vienna to discuss 'technical issues' related to controlling landmine use. Canadian moratorium on the use, production, trade and export of APLs

Apr. 1996 · Canada announces decision to organise a strategy meeting on ways to address the APL problem beyond the CCW

May 1996 · CCW adopts Amended Protocol II on mines, featuring provisions on mine reliability, recording and clearance

Jun. 1996 · The Organization of American States adopts a resolution providing for the establishment of a hemisphere-wide landmine-free zone

Oct. 1996 · Ottawa Conference on APLs launches the mine ban process

Feb. 1997 · Austria hosts the first Ottawa Process preparatory conference to discuss provisions for inclusion in the Mine Ban Treaty. ICBL organises an International NGO Conference on Landmines in Maputo, Mozambique

Mar. 1997 · Tokyo Conference on Anti-Personnel Landmines, organised by the Association for Aid and Relief

Apr. 1997 · A technical meeting on verification and compliance measures to include in the MBT organised by Germany. A regional seminar on landmines for States of the Southern Africa Development Community in Harare, organised by the ICRC, together with the OAU and Zimbabwe

May 1997 · Seminar on Anti-Personnel Mines and Strategy Workshop for countries of the Baltic and Eastern European Region in Stockholm. 25 African governments commit to signing the MBT at the OAU meeting in Johannesburg, South Africa

Jun. 1997 · Belgium organises the second Ottawa Process preparatory conference. Central Asia Regional Conference organised by ICBL and the ICRC and the governments of Turkmenistan and Canada in Ashgabat

Sept. 1997 · Norway hosts the negotiation conference of the MBT

Oct. 1997 · ICBL and its coordinator Jody Williams are awarded the Nobel Peace Prize

Dec. 1997 · Ottawa Conference for the signing of the MBT

This process, characterised by the partnership between NGOs and state norm entrepreneurs, has been dubbed 'new diplomacy'[7] and a 'new kind of "superpower"'[8] for the development of humanitarian norms. It also became a model (with some variations) for a number of processes, including the Rome Statute of the International Criminal Court in 1998, the 2008 Convention on Cluster Munitions, and the 2017 Treaty on the Prohibition of Nuclear Weapons. The Mine Ban Treaty remains the archetypal example of humanitarian arms control. In recognition of their role in it, the ICBL and its coordinator, Jody Williams, received the 1997 Nobel Peace Prize.

Provisions of the Mine Ban Treaty

The Mine Ban Treaty, adopted in September 1997, prohibited countries that ratified the Treaty from using, developing, producing, acquiring, stockpiling, retaining or transferring to anyone, directly or indirectly, anti-personnel mines, as well as assisting, encouraging or inducing, in any way, anyone to engage in any activity prohibited to a state party. It also required state parties to destroy stockpiles within four years of the Convention's entry into force and to clear mine fields within ten years (with the possibility to request an extension for another ten years, which can also be renewed).

Anti-personnel mines are defined as 'mines designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons'. The definition also covers victim-activated improvised explosive devices (IEDs).

Command-detonated mines are not banned. The definition excludes anti-vehicle mines, including those equipped with anti-handling devices.[9] This can be seen as the one concession made to military requirements for anti-tank and anti-vehicle mines.

PROM-1 bounding landmine
https://commons.wikimedia.org/wiki/File:PROM-1_bounding_landmine.jpg

Importantly, the Convention included provisions on international cooperation and assistance that required states parties 'in a position to do so [to] provide assistance for the care and rehabilitation, and social and economic reintegration, of mine victims and for mine awareness programs' as well as for mine clearance and stockpile destruction.

Mines warning sign
https://commons.wikimedia.org/wiki/File:Mines_warning_sign.jpg#file

While the treaty included transparency provisions, such as state reporting to the UN Secretary General on stockpiles and clearance, ultimately NGOs assumed the monitoring role – investigating use, gathering information and requesting additional data and explanations from states. In this role, NGOs relied on the normative power of the treaty and public opinion. The Landmine Monitor was launched in 1999 as the flagship publication providing information to NGOs, diplomats and researchers on states' mine policies, stockpiles, mine clearance and use.[10]

The Convention also provided for annual meetings of states parties, intersessional meet¬ings between the annual meetings and a review conference every five years. These meetings have been important for the institutionalisation and universalisation of the treaty and provided NGOs with opportunities to network with government officials, disseminate information and ensure that the implementation of the treaty remains on the international agenda.

Finally, the Geneva Call was established in 2000 with the purpose of promoting the norm to non-state armed groups (NSAGs). Humanitarian principles of civilian protection apply both in international and non-international armed conflict. However, since NSAGs have not participated in treaty-making and do not usually receive training in IHL, the Geneva Call's mission is to foster engagement with NSAGs, spread awareness of humanitarian principles and encourage groups to minimise the impact of conflict on civilians. In 2000, it launched a Deed of Commitment for Adherence to a Total Ban on Anti-Personnel Mines and for Cooperation in Mine Action, which, as of September 2024, a total of 54 groups had signed.[11]

Status of the Mine Ban Treaty

Currently, the Convention is ratified by 164 states. This includes many of the countries who had been the biggest landmine producers in the past, such as Belgium, Bosnia, Bulgaria, Czech Republic, France, Hungary, Italy and the United Kingdom, as well as states with largescale APL contamination, such as Afghanistan, Angola, Bosnia and Herzegovina, Cambodia, Colombia, Croatia and Mozambique. All 27 EU member states and all but one (the US) NATO member states are states parties.

Despite this widespread support for the Convention, major military powers, including China, India, Pakistan, Russia and the US, remain outside of it. There is evidence that stigmatisation has had an effect on US policies – since the adoption of the MBT, the US has been in de facto compliance with the ban on use, export and transfer (except for a single mine used in Afghanistan), and in 2022, the Biden administration declared the country's commitment to eventually rejoining the treaty.[12] Unfortunately, this de facto support for the MBT's core provisions was broken in November 2024 when the US decided to transfer APLs to Ukraine.[13]

Since the adoption of the MBT, more than 55 million anti-personnel landmines have been destroyed and since the mid-1990s, there has been a de facto

global ban on APL transfer[14] until the US decision to provide Ukraine with APLs.

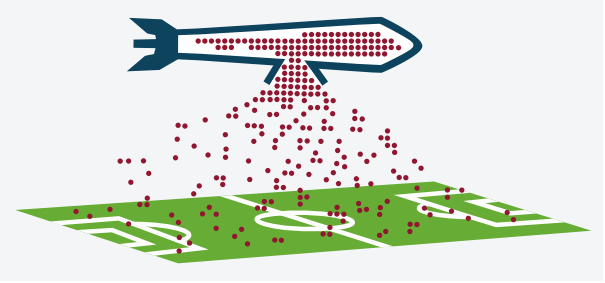
Many states no longer produce APLs – of the over 50 past producers, 12 remained in 2023, only five (India, Iran, Myanmar, Pakistan and Russia) of which are believed to be actively producing mines.[15]

1. Some mines are fitted with self-destruct or self-deactivation mechanisms that have to render them harmless after a certain period of time.
2. UN Mine Action Service 2015, 13.
3. U.S. Department of State 1994.
4. Maslen 2004.
5. Price 1998; Petrova 2018.
6. These included Austria, Belgium, Canada, Norway, Mexico, South Africa and Sweden; Cameron 2002.
7. McRae and Hubert 2001; Cooper et al. 2002.
8. Williams 1997.
9. A device intended to protect a mine and which is part of, linked to, attached to or placed under the mine and which activates when an attempt is made to tamper with or otherwise intentionally disturb the mine.
10. Wareham 2008.
11. [https://www.genevacall.org/deed-of-commitments/]
12. This has been an official objective since 1997, although the Trump administration dropped it in 2020.
13. 'Biden approves antipersonnel mines for Ukraine, undoing his own policy', Washington Post, 19 November 2024, [https://www.washingtonpost.com/national-security/2024/11/19/biden-landmines-ukraine-russia/].
14. Landmine Monitor 2022, 24.
15. Landmine Monitor 2023, 23.

4. Cluster Munitions

Definition and humanitarian problems

Cluster munitions (CMs) are ground-launched or air-dropped rockets/dispensers that 'scatter widely smaller submunitions, which usually number in the dozens or hundreds'.[1] The submunitions from a single CM can cover an area the size of a football field.



Cluster bomb dispersing submunitions
Grübelfabrik, CC BY-NC-SA

Cluster munitions are designed for use against tank formations, moving or concealed vehicles and troops, or wide-area targets, such as airfields. Most CMs combine anti-personnel and anti-materiel effects. Their casing breaks into fragments that maim or kill people, while their armour-penetrating and blast effects damage vehicles and materiel. Since the end of World War II, a total of 23 governments have used CMs in 39 countries and five other areas.[2] Notwithstanding these military uses, CMs pose significant dangers to civilians and these have driven a process leading to their prohibition in 2008.

Cluster bomblets ShOAB-0,5 in Sumy Oblast
National Police of Ukraine, CC BY 4.0

Due to their inaccuracy, large numbers and wide dispersal, cluster submunitions often end up falling in areas where civilians are present, killing and injuring them. In addition, a significant percentage (between 5 percent and 40 percent) of submunitions fail to detonate upon impact, leaving numerous duds functioning as de facto landmines and thus posing a long-term threat to civilians and socio-economic development.[3] For example, CMs used during the Vietnam War still take a heavy toll on civilian lives to this day.[4] In addition, because of their high explosive charge, large lethal range and volatility, submunitions are particularly deadly and difficult to clear.[5] Globally, over 24,000 casualties of CMs have been recorded, while estimates reach at least 56,800, with the overwhelming majority of recorded casualties being civilians.[6]

The humanitarian problems of CMs already attracted attention during the Vietnam War. However, at the time, the multiple wounds they caused were discussed in light of the principle of unnecessary suffering and superfluous injury, while claims about their indiscriminate wide-area effects were contested by US and British government experts and ultimately CMs fell off the CCW agenda in the 1970s.[7] Likewise, although CMs were discussed in the context of APLs in the early 1990s, NGOs chose to concentrate only on the latter.

Cluster munitions became the focus of attention after their use in Kosovo in 1999, Afghanistan, Iraq and finally, Lebanon in 2006 revealed the serious humanitarian problems they caused. In the wake of the Kosovo bombing, several NGOs, including Human Rights Watch (HRW), the ICRC and Landmine Action (UK), issued reports about the CM problem. Once again, the CCW became the forum where the issue was raised. Following a couple of years of talks there, in 2003, states agreed on CCW Protocol V on Explosive Remnants of War, which focused on the post-conflict problems of unexploded ordnance, but did not cover CM use – one of its main causes. It was then that a number of NGOs[8] launched the Cluster Munition Coalition (CMC) to advocate for more restrictions. The CCW continued discussing CMs, but even after their extensive use in Lebanon in 2006 became a salient problem, states could not agree to start negotiations. At this point, Norway initiated fast-track negotiations on CMs outside of the CCW – the so-called Oslo Process – with the support of a small number of pro-ban states.[9]

The Oslo Process to ban cluster munitions

The Oslo Process followed the model of the Ottawa Process. Several regional and negotiation conferences were organised in close partnership between the lead states, the ICRC and the CMC. Likewise, NGOs and leading states emphasised the humanitarian framing of the issue and the 'unacceptable harm' caused by CMs. Thus, the legal norm of disproportionate harm informed the political meaning of 'unacceptability', even if it could be argued that in certain circumstances CMs could be used in a legal manner. Starting with a broad humanitarian frame that CMs cause

unacceptable harm, the burden of proof shifted to states opposing a comprehensive prohibition to show that some CMs did not in fact present humanitarian dangers.

Although the emerging norm was grafted on the previous landmine prohibition, especially through arguments that CMs functioned as de facto landmines, more emphasis was placed on their indiscriminate effects during conflicts to counter proposals based on technical fixes of the unexploded rate. An important document in this respect was a 2007 report about the unexploded rates and humanitarian costs of relatively modern submunitions, claimed to have a dud rate of just 1–2 percent, which Israel had used in Lebanon.[10] It showed that the failure rate was close to 10 percent, thus laying to rest arguments about finding a technological solution and exempting CMs with self-destruct mechanisms from the ban.

The Oslo Process was successful despite some differences with the landmine campaign. Compared to anti-personnel landmines, the perceived military utility of CMs was higher and their humanitarian problem smaller. Importantly, the core states leading the process were fewer in number and the opposition they faced included some erstwhile strong supporters of the landmine ban. For example, Australia, France, the Netherlands and the UK participated in the process, but opposed a comprehensive ban until the very end, preferring a prohibition of old, CMs with high dud rates only. Nevertheless, once they had committed to a humanitarian approach to the issue, they found themselves rhetorically entrapped in the process and ultimately ratified the resulting Convention on Cluster Munitions, even if it banned all the CMs they possessed, including recently acquired ones.[11]

Timeline of the Oslo Process leading to the adoption of the CCM

Mar.–Jun. 1999 · The US, the UK and the Netherlands use cluster munitions during NATO's Kosovo intervention

1999–2000 · Calls for a moratorium on cluster munition use by HRW, the Mennonite Central Committee, UK Working Group on Landmines and the ICRC

2001 · CCW mandate to discuss ways to address the issue of explosive remnants of war

2001–2002 · US use of CMs in Afghanistan

Mar.–May 2003 · US and UK use of CMs in Iraq

Nov. 2003 · CCW Protocol V on Explosive Remnants of War adopted. Cluster Munition Coalition launched

2003–2006 · CCW discussions on CM compliance with IHL

Feb. 2005 · Handicap International calls for a global CM ban

May 2006 · Belgian national ban on CMs. Norwegian moratorium on the use of CM until further testing takes place

July–Aug. 2006 · Israel heavy use and Hezbollah use of CMs in South Lebanon war

Oct. 2006 · Norway pledges to lead work on an international ban on CMs. 30 states submit proposal for CCW mandate to negotiate a cluster munition protocol

Nov. 2006 · CCW fails to adopt a mandate to negotiate a legally binding instrument on CMs. Norway announces its initiative to 'start a process towards an international ban on cluster munitions that have unacceptable humanitarian consequences'

Feb. 2007 · Oslo Conference on the Convention on Cluster Munitions, first meeting of the Oslo Process

Mar. 2007 · Southeast Asia Regional Conference on Cluster Munitions in Phnom Penh

May 2007 · Lima Conference on the Conference on Cluster Munitions

Sept. 2007 · San Jose Regional Conference on Cluster Munitions

Oct. 2007 · Conference of States Affected by Cluster Munitions, Belgrade. European regional conference and victim assistance and stockpile destruction, Brussels

Dec. 2007 · Vienna Conference on the Convention on Cluster Munitions

Jan. 2008 · Austrian national ban on CMs

Feb. 2008 · Wellington Conference on the Convention on Cluster Munitions

Apr. 2008 · African Regional Conference, Livingstone, Zambia. Regional Conference for Latin America and the Caribbean, Mexico City. ICRC Southeast Asia Regional Meeting on Cluster Munitions, Bangkok

May 2008 · Dublin final negotiation conference

Sept. 2008 · Sofia Regional Conference on the Convention on Cluster Munitions. Kampala Regional Conference on the Convention on Cluster Munitions

Oct. 2008 · Southeast Asia Regional Conference on the Convention on Cluster Munitions, Xiengkhouang, Laos

Nov. 2008 · Quito Regional Conference on the Convention on Cluster Munitions. Beirut Regional Conference on Cluster Munitions

Dec. 2008 · Convention on Cluster Munitions Signing Conference, Oslo

Provisions of the Convention on Cluster Munitions

The CCM institutes a comprehensive prohibition on CMs as defined by it (including the use, production, stockpiling and transfer of CMs, and assisting states not party to the treaty with prohibited activities).[12]

According to its definition:

> Cluster munition' means a conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions. It does not mean the following:
> - A munition or submunition designed to dispense flares, smoke, pyrotechnics or chaff; or a munition designed exclusively for an air defence role;
> - A munition or submunition designed to produce electrical or electronic effects;
> - A munition that, in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions, has all of the following characteristics:
>   1. Each munition contains fewer than ten explosive submunitions;
>   2. Each explosive submunition weighs more than four kilograms;
>   3. Each explosive submunition is designed to detect and engage a single target object;
>   4. Each explosive submunition is equipped with an electronic self-destruction mechanism;
>   5. Each explosive submunition is equipped with an electronic self-deactivating feature[13]
>
> Convention on Cluster Munitions, Article 2

The definition aimed to capture all CMs posing a humanitarian problem, while excluding sensor-fused munitions that had only a small number of submunitions, higher reliability and infrared sensors for targeting vehicles. Since all the requirements (i-v) have to be cumulatively met, certain types of sensor-fused weapons (such as the American CBU-97) were also banned. Moreover, the definition explicitly prohibits the indiscriminate area effects of CMs – a ban campaigners see as potentially applicable to other weapon types.

The treaty sets a deadline for stockpile destruction – eight years from its entry into force for a state party with the possibility of extending this by four years on request. Cluster munition remnants should be cleared within ten years (with a possibility of a five-year extension).

Past users that have created contamination in the territory of another state party are also 'strongly encouraged to provide, inter alia, technical, financial, material or human resources assistance to the latter State Party'[14] – a path-breaking provision that creates retroactive responsibility for clearance of past contamination, even if expressed only as strong encouragement.

The CCM provides a broad definition of CM victims both regarding the impacts of CMs and the range of persons affected. It covers 'all persons who have been killed or suffered physical or psychological injury, economic loss, social marginalisation or substantial impairment of the realisation of their rights caused by the use of cluster munitions', including the victims' families and communities.[15] The CCM obliges states to 'adequately provide age- and gender-sensitive assistance', as well as social and economic inclusion.[16] Importantly, the preamble commits states to guarantee the human rights of all persons with disabilities, without discrimination, including among victims injured by different weapons. Lastly, it adds a requirement that states report on fulfilling their victim assistance obligations. These provisions are an advancement over the MBT that only required states to provide victim assistance if they were 'in a position to do so'.[17]

As in the MBT, state reporting is complemented by de facto civil society monitoring. Since 2010, the Cluster Munition Monitor has been providing vital information about the evolution of state practices and treaty compliance.

Status of the CCM

As of September 2024, a total of 112 states have ratified the CCM and another 12 have signed but not ratified it. States parties include past producers (Belgium, Germany, France, Italy, the UK, the Netherlands, Spain, Sweden and South Africa) and users (France, the UK and the Netherlands). States contaminated with unexploded CMs, such as Afghanistan, Iraq, Lao PDR and Lebanon, have also ratified the CCM.

Regional body	Support (%)	Support (number of member states)	Non-signatories to the convention
African Union (AU)	81	44 of 54	Algeria, Egypt, Equatorial Guinea, Algeria, Egypt
Association of Southeast Asian Nations (ASEAN)	30	3 of 10	Brunei Darussalam, Cambodia, Malaysia, Myanmar, Singapore, Thailand, Vietnam
European Union (EU)	78	21 of 27	Estonia, Finland, Greece, Latvia, Poland, Romania

(NATO)	75	24 of 32	Estonia, Finland, Greece, Latvia, Poland, Romania, Türkiye, US
Organization of American States (OAS)	77	27 of 35	Argentina, Bahamas, Barbados, Brazil, Dominica, Suriname, US, Venezuela
Pacific Island Forum	56	10 of 18	Kiribati, Marshall Islands Micronesia, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu

Convention on Cluster Munitions membership by regional or security body

Source: Cluster Munitions Monitor 2024, p. 7

Eighteen states have stopped production of CMs (all of them states parties except Argentina), while 16 continue production (none of them has joined the CCM).[18]

Since the Convention's adoption, states parties have destroyed 99 percent of their declared CM stocks, eliminating 1.48 million CMs and 178.5 million submunitions.

Major military powers, including China, India, Pakistan, Russia and the US, remain outside the treaty. Nevertheless, there are signs that the ban has had stigmatising effects. Several states not party to the treaty – Estonia, Finland, Poland and Romania – have committed not to use CMs outside their own territories. The US has not used CMs since 2003 (except for a single, unacknowledged attack in Yemen in 2009), while Israel last used CMs in 2006, despite the conduct of military operations by both.

Non-governmental organisations have promoted an interpretation that the ban on assisting and encouraging prohibited activities includes investment in CM production. They have focused, in particular, on stigmatising CMs beyond states by advocating that financial institutions, such as banks and pension funds, divest from CM manufacturers.[19] In 2018, a total of 48 financial institutions had clear and comprehensive policies prohibiting investment in CM manufacturing,[20] while several producers had ceased CM production due to its increased political and economic costs.[21]

Compared to the ICBL, the NGO campaign on cluster munitions has extended the range of activities targeting non-state actors – from NSAGs (which for the most part have not used CMs) to the business and financial sector.

TREATY

Convention on Cluster Munitions (CCM)

Effective 01 August 2010 Legally binding 0 Member States

The Convention on Cluster Munitions (CCM) is a legally binding international treaty that prohibits the use, production, stockpiling, and transfer of cluster bombs due to their indiscriminate effects and long-lasting danger to civilians. It mandates clearance of contaminated areas, destruction of stockpiles, and assistance to victims. Adopted in 2008, it entered into force on August 1, 2010. Over 120 countries have signed, though major military powers such as the U.S., Russia, and China remain non-signatories. The treaty strengthens international humanitarian law by aiming to reduce the human cost of war and prevent future harm from unexploded submunitions.

Current Adoption

AFG	ALB	AND	ATG	AUS	AUT	BEL	BLZ	BEN	BOL	BIH	BWA
BGR	BFA	BDI	CPV	CMR	CAN	TCD	CHL	COL	COM	COG	COK
CRI	CIV	HRV	CUB	CZE	DNK	DOM	ECU	SLV	SWZ	FJI	FRA
GMB	DEU	GHA	GRD	GTM	GIN	GNB	GUY	VAT	HND	HUN	ISL
IRQ	IRL	ITA	JPN	LAO	LBN	LSO	LIE	LTU	LUX	MDG	MWI
MDV	MLI	MLT	MRT	MUS	MEX	MCO	MNE	MOZ	NAM	NRU	NLD
NZL	NIC	NER	NGA	NIU	MKD	NOR	PLW	PAN	PRY	PER	PHL
PRT	MDA	RWA	KNA	LCA	VCT	WSM	SMR	STP	SEN	SYC	SLE
SVK	SVN	SOM	ZAF	SSD	ESP	LKA	PSE	SWE	CHE	TGO	TTO
TUN	GBR	URY	ZMB	AGO	ARE	ARG	ARM	AZE	BGD	BHR	BHS
BLR	BRA	BRB	BRN	BTN	CAF	CHN	COD	CYP	DJI	DMA	DZA
EGY	ERI	EST	ETH	FIN	FSM	GAB	GEO	GNQ	GRC	HTI	IDN
IND	IRN	ISR	JAM	JOR	KAZ	KEN	KGZ	KHM	KIR	KOR	KWT
LBR	LBY	LVA	MAR	MHL	MMR	MNG	MYS	NPL	OMN	PAK	PNG
POL	PRK	QAT	ROU	RUS	SAU	SDN	SGP	SLB	SRB	SUR	SYR
THA	TJK	TKM	TLS	TON	TUR	TUV	TZA	UGA	UKR	USA	UZB
VEN	VNM	VUT	YEM	ZWE							

Signed but not adopted
Not adopted

Data: United Nations Treaty Collection

1. Goose 2004, 247.
2. CM Monitor 2024, 10.
3. Failure rates vary widely depending on the types of submunitions, delivery method and conditions under which they are used. According to HRW, 5 percent is a conservative estimate for the CMs used by the US in Afghanistan, while the ICRC estimates that in general 10 to 40 percent fail in practice; HRW 2010; ICRC 2010.
4. In 2021–2023, in Laos, 47 people were killed or injured by Vietnam-era CMs; CM Monitor 2024, 51.
5. Many submunitions are dual purpose with anti-vehicle and anti-personnel effects. They are designed to penetrate armour and send fragments that can kill a person within 10–20 metres, depending on the type. For example, one of the most widely used CMs, CBU-87, has a lethal range of at least 20 metres; Geneva International Centre for Humanitarian Demining 2016, 36. Moreover, their sensitive fuses make unexploded submunitions hazardous to clear; ICRC 2000, 14.
6. This is partly due to the lack of information on military casualties. However, even when information does exist, as it does on CM use in Ukraine, civilians still make up 93 percent of recorded casualties; HRW 2010; CM Monitor 2024, 51.
7. Prokosch 1995.
8. HRW, Handicap International, Landmine Action, Mines Action Canada and Pax Christi, among others.
9. Austria, New Zealand, Mexico, Ireland and initially Peru.
10. King, Dullum, and Østern 2007.
11. Petrova 2016.
12. A controversial caveat, criticised by NGOs, was included at the end of the treaty text in article 21. It sought to protect states parties against liability for joint military operations with states not party to the CCM

by explicitly providing that 'States Parties, their military personnel or nationals, may engage in military cooperation and operations with States not party to this Convention that might engage in activities prohibited to a State Party.'
13. CCM, Article 2(2), [https://www.clusterconvention.org/convention-text/].
14. Article 4(4)(a).
15. Article 2(1).
16. Article 5(1).
17. Docherty 2009.
18. Brazil, China, Egypt, Greece, India, Iran, Israel, North Korea, South Korea, Pakistan, Poland, Romania, Russia, Singapore, Türkiye and the US. Although known production of CMs, including the CBU-97 sensor-fused weapons, has stopped in the US, it is listed as a producer because of the development of replacement munitions that might fall under the CCM definition of CMs.
19. See, Stop Explosive Investments Campaign, [https://stopexplosiveinvestments.org/]
20. Another 62 institutions have policies on cluster munitions, but with several loopholes; PAX 2018.
21. CM Monitor 2023, 19, 35.

5. Follow-up initiatives and challenges

The Treaty on the Prohibition of Nuclear Weapons

The humanitarian initiative on nuclear weapons, which led to the adoption of the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) built on the experience of the Oslo Process and some of the partnerships established between CM campaigners and government officials. It focused on the catastrophic health and environmental effects of a nuclear explosion (either incidental or intentional) and sought to reframe the debate in humanitarian terms. As in previous cases, the goal was to establish a social and legal norm accepted by the majority of states – norm-building by the 'force of numbers'[1] that would then stigmatise the weapons and influence states not party to the treaty.

The first steps to change the debate came in 2010, when the ICRC issued a call to the Geneva diplomatic corps to 'bring the era of nuclear weapons to an end' and Switzerland and Norway included in the Final Document of the NPT Review Conference a paragraph expressing 'deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons, and reaffirm[ing] the need for all States to comply with international humanitarian law at all times'. In 2013–2014, NGOs and governments focused on the humanitarian consequences of nuclear weapons at meetings organised by Norway, Mexico and Austria. In December 2014, the Austrian government called upon states to 'fill the legal gap for the prohibition and elimination of nuclear weapons'.[2] In 2016, a UN General Assembly resolution recommended negotiations for a nuclear ban treaty, which was eventually adopted in July 2017 with the votes of 122 states.

Ambassador Thani Thongphakdi of Thailand, the chair of a UN working group on nuclear disarmament, accepts a global parliamentary appeal from Beatrice Fihn, executive director of the International Campaign to Abolish Nuclear Weapons, in Geneva on May 3, 2016.
ICAN, CC BY 2.0

The International Campaign to Abolish Nuclear Weapons (ICAN) served as the NGO partner pushing the issue forward, bringing in testimonies by survivors of Hiroshima and Nagasaki and nuclear testing. In recognition of its efforts, it received the 2017 Nobel Peace Prize.

As of September 2024, a total of 70 states have ratified the TPNW and another 26 have signed it. The treaty commits states not to "[d]evelop, test, produce, manufacture, otherwise acquire, possess or stockpile nuclear weapons [...] transfer, receive the transfer of or control over nuclear weapons, [...] use or threaten to use nuclear weapons, [...] assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Treaty' (Art. 1). It also requires states to maintain their safeguards obligations with the International Atomic Energy Agency in force at the time of the treaty's entry into force, or if they do not already have one, to conclude a comprehensive safeguards agreement (Art. 3). This verification mechanism is complemented by the civil society Nuclear Weapons Ban Monitor.

Explosive weapons in populated areas

Every year, tens of thousands of civilians are killed or injured by explosive weapons, over 90 percent of them in populated areas.[3] This veritable carnage has led NGOs, the UN Secretary-General and the ICRC to raise concerns about the need to minimise civilian suffering caused by explosive weapons, especially those with wide-area effects.[4] In 2011, NGOs working on the issue formed the International Network on Explosive Weapons (INEW). After a series of expert meetings (2013–2015) and state consultations, organised by Ireland (2019–2022), a Political Declaration on Strengthening the Protection of Civilians from the Humanitarian Consequences Arising from the Use of Explosive Weapons in Populated Areas was adopted in 2022. It commits states to establish national policies and practices restricting the use of explosive weapons in areas where civilians would be impacted. The aim is to ensure that both direct and indirect effects on civilians and civilian objects (e.g. long-term effects resulting from the destruction of hospitals, power plants and sanitation systems) are taken into account in planning military operations, to record relevant data on civilian harm and provide humanitarian access and assistance to victims. Currently endorsed by 87 states,[5] the Declaration is a step toward building awareness and fostering efforts to reduce civilian harm, with follow-up conferences planned in 2024 in Norway and 2025 in Costa Rica. In 2022, INEW launched the Explosive Weapons Monitor, a monthly bulletin that gathers data on the use of

explosive weapons and tracks the Declaration's implementation.[6]

Lethal autonomous weapons

Since 2012, an NGO coalition, "Stop Killer Robots", has been advocating for a ban on lethal autonomous weapons that would make life and death decisions without meaningful human control. It managed to place the issue on the CCW agenda in 2014 and since 2017, a CCW Group of Governmental Experts has been discussing the problem, albeit without having reached an agreement on a negotiation mandate.

Informal expert meeting on LAWS at the CCW 2016.
Frank Sauer

In October 2023, the UN Secretary-General and the ICRC President issued a joint call to states to conclude, by 2026, negotiations on a legally binding instrument setting out 'clear prohibitions and restrictions on autonomous weapon systems'.[7] In December 2023, the UN General Assembly adopted resolution 78/241 that 'stressed the urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems' and requested the UN Secretary-General to consult with states and NGOs and publish a report on their views. The rapidly accelerating use of weapons with various degrees of autonomy and the widespread support for the UN resolution[7] make this a critical moment when political will for negotiations on autonomous weapons is needed.

Incendiary weapons

Since 2009, Human Rights Watch has advocated strengthening CCW Protocol III on incendiary weapons to ensure better civilian protection. Although a complete ban on incendiary weapons 'would have the greatest humanitarian benefits' and stigmatise the weapons, at a minimum, HRW has been calling for two loopholes to be closed. First, the Protocol's definition only covers weapons 'primarily designed to set fire to objects or to cause burn injury to persons', and thus excludes white phosphorus munitions which are designed primarily for smoke screening or marking and tracing, but also cause severe burn injuries. A broader definition should cover multi-purpose munitions with incendiary effects. Second, the Protocol only bans use of air-delivered incendiary weapons in civilian areas. According to HRW, the same use of ground-launched incendiary weapons should be banned. Although concerns about use of incendiary weapons in civilian areas have been repeatedly expressed at the CCW, so far no steps have been taken to revise Protocol III and a widely supported proposal for informal consultations on its status was blocked by Cuba and Russia in 2021, 2022 and 2023. It remains to be seen whether the issue will ultimately be addressed at the CCW or elsewhere.

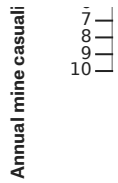
Challenges

Humanitarian disarmament and norm-making without the great powers emerged after the Cold War at a time of relative security and US unipolarity. Stigmatising landmines and cluster munitions had important restraining effects on the US given its power preponderance and military operations, although other military powers have not been affected to the same extent. As the international environment has become more hostile, humanitarian arms control has faced a number of challenges – lack of universal norm acceptance, limited NGO reach and influence in non-democratic states, increasing use of improvised mines by non-state armed groups, and new use of mines and cluster munitions by states.

Civilians continue to bear the burden of landmine use – in 2022, a total of 85 percent of all casualties, whose status was known, were civilians – almost half of them children.[8] After a steady decline, since 2015, the number of recorded casualties from landmines and explosive remnants of war (ERW) has risen again as a result of conflicts in Syria, Yemen and Ukraine. The widespread use of mines by Russia (not a state party to the treaty) in Ukraine (a state party) has caused huge contamination. Documented use by the Ukrainian forces around the city of Izium in 2022 also poses challenges to treaty compliance.[9]

**Number of mine/ERW casualties per year, 2001-2022 **

Annual mine casualities 2001-2022 (in thousands)



Annual mine casualities between 2001-2022
Data: Landmine Monitor 2022, Graphic: PRIF

The situation in Ukraine is particularly problematic as it involves a state party to the MBT being a victim of aggression and largescale landmine use by Russia. Moreover, Russian minefields have become an obstacle for Ukrainian military operations and have been portrayed in some media and military analysis as particularly effective. In November 2024, the difficult military situation prompted the US to transfer to Ukraine antipersonnel landmines in a breach of US policy existing at the time. The US justified the decision by the need of Ukrainian forces to counter dismounted Russian attacks and the fact that the transferred APLs had self-destruct and self-neutralisation mechanisms that would limit their impact on civilians after the conflict.[10] Campaigners have characterised the transfer and Ukraine's violation of its treaty obligations as a 'crisis'[11] that poses serious challenges to the mine ban and humanitarian arms control as a whole.

Non-state armed groups (NSAGs) are continuing to use APLs in Colombia, India, Myanmar, Thailand and Tunisia, as well as in the Sahel region. Increased use of improvised mines (primarily by NSAGs) has been a worrying trend since 2015,[12] and caused the largest number of casualties in 2022.[13] Although around 70 NSAGs have committed not to use APLs, either through the Geneva Call's Deed of Commitment or through other means,[14] more needs to be done to spread the norm among NSAGs.

Recently, CM use has also risen. A total of 1,172 new cluster munition casualties were recorded across eight countries in 2022, the highest number since 2010. Of those, 987 were caused by CM attacks, with most (890) in Ukraine. In contrast, in 2021, there were no new casualties from CM attacks, just from the remnants of CMs.[15]

In another challenge to the CCM, in July 2024, Lithuania withdrew from the treaty due to security concerns following Russia's invasion of Ukraine. The US decision to transfer CMs to Ukraine in 2023 could also be seen as undermining the stigmatisation on the weapon. However, the US took more than a year to approve the transfer, in a situation that the administration argued was exceptional (both Ukraine and the US facing a shortage of other, unitary munitions). Thus, the fact that the transfer was publicly discussed and required explicit justification of an exceptional practice can also be seen as an indication of the persistent normative power of the CM ban even though neither the US nor Ukraine are legally bound to it.

Non-governmental organisations that have recently become more focused on providing expert contributions and facilitating international level negotiations would have to realign some of their strategies in order to shore up and universalise the norms that have been adopted. They have to return the focus of the debate on the humanitarian consequences of the weapons, contest military arguments and distinguish victim-activated anti-personnel mines from remote-controlled APLs and anti-vehicle mines, which remain legal (even if with humanitarian problems of their own). NGOs would also need to find more domestic partners in non-democratic states, redouble their efforts to promote the norms among military officials and NSAGs, and renew their work with states from the Global South, which have been among the strongest supporters of humanitarian arms control, in order to put normative pressure on the states that have remained largely impervious to Western state and NGO 'naming and shaming'.

Conclusion

To recap, humanitarian arms control is guided by the **goal of minimising the humanitarian harm** of weapons and draws on the **international humanitarian law principles** of civilian immunity (distinction), proportionality and avoiding unnecessary suffering to develop **comprehensive solutions**. The Mine Ban Treaty (MBT) and the Convention on Cluster Munitions (CCM) seek to fulfil these goals by prohibiting the production, stockpiling and use of anti-personnel landmines and cluster munitions and instituting measures for victim assistance and post-conflict clearance. These treaties were negotiated in **fast-track, stand-alone processes**, led by small and medium-sized states in partnership with NGOs, the ICRC and UN agencies. Lastly, negotiations were based on majority voting, rather than consensus, in order to ensure that the norms that were adopted were not weakened by a small number of opposing states. Although the major military powers, such as China, Russia and the US, have not joined the treaties, the

latter have been able to stigmatise the weapons and make their use by any actor politically costly. Their success has inspired a number of humanitarian initiatives, such as the Treaty on the Prohibition of Nuclear Weapons (TPNW), the Political Declaration on Explosive Weapons in Populated Areas and current efforts to regulate autonomous weapons systems.

At this very moment, as it faces unprecedented challenges, humanitarian arms control is needed more than ever.

1. Minor 2015, 723.
2. "Pledge presented at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons", [https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/HINW14/HINW14_Austrian_Pledge.pdf]
3. In 2013–2023, there were an estimated 280,632 civilian casualties. In 2023, for example, 96 percent of all civilian casualties were in populated areas; Action On Armed Violence 2023, 2024.
4. The wide-area effects can result from inaccuracy of delivery, large blast and fragmentation radius and/or use of multiple munitions.
5. [https://ewipa.org/endorsement].
6. [https://explosiveweaponsmonitor.org/]. The Explosive Weapons Monitor compiles data on casualties, based on information from Action on Armed Violence (AOAV), and on the impacts of explosive weapons on aid access, health and education, based on research by Insecurity Insight. Action on Armed Violence has been publishing a separate, Explosive Violence Monitor since 2010, [https://aoav.org.uk/explosiveviolence/].
7. [https://www.icrc.org/en/document/joint-call-un-and-icrc-establish-prohibitions-and-restrictions-autonomous-weapons-systems].
8. Landmine Monitor 2023, 55.
9. Myanmar is the only other state (not party to the treaty) that used mines in 2022 (and has continuously been using APL for over 20 years).
10. Washington Post, 19 November 2024.
11. 'US landmine offer to Ukraine throws treaty into 'crisis': campaign group', 29 November 2024, [https://www.france24.com/en/live-news/20241129-us-landmine-offer-to-ukraine-throws-global-treaty-into-crisis-campaign-group].
12. Landmine Monitor 2022, 1.
13. Landmine Monitor 2023, 56.
14. Landmine Monitor 2023, p. 70, fn 60.
15. Cluster Munitions Monitor 2023, 1.

6. Resources

Cited works

- Geneva International Centre for Humanitarian Demining. 2016. *A Guide to Cluster Munitions*, available at: [https://www.clusterconvention.org/files/publications/A-Guide-to-Cluster-Munitions.pdf]
- Action On Armed Violence. 2023. *"Decade overview: Explosive violence hotspots"*, 1 January, available at: [https://aoav.org.uk/2023/decade-overview/]
- Action On Armed Violence. 2024. *Explosive Violence Monitor 2023*, available at: [https://aoav.org.uk/wp-content/uploads/2024/04/Explosive-Violence-Monitor-2023.pdf]
- Alexander, Amanda. 2016. *"International humanitarian law, postcolonialism and the 1977 Geneva Protocol I"*, in: *Melbourne Journal of International Law* 17 (1): 15–50.
- Borrie, John. 2009. *Unacceptable Harm: A History of How the Treaty to Ban Cluster Munitions Was Won*. UN Institute for Disarmament Research.
- Borrie, John. 2014. *"Humanitarian reframing of nuclear weapons and the logic of a ban"*, in: *International Affairs* 90 (3): 625–46.
- Borrie, John/Martin Randin, Vanessa (eds). 2005. *Alternative Approaches in Multilateral Decision Making: Disarmament as Humanitarian Action*. UNIDIR/2005/11.
- Borrie, John/Martin Randin, Vanessa (eds). 2006. *Disarmament as Humanitarian Action: From Perspective to Practice*. UNIDIR/2006/8.
- Brem, Stefan/Stiles, Kendall (eds). 2009. *Cooperating without America*. Routledge.
- Bull, Hedley. 1987. *"Arms Control: A Stocktaking and Prospectus"*, in: *Hedley Bull on Arms Control*, selected and introduced by O'Neill, Robert/Schwartz, David N. Palgrave Macmillan, 100–18.
- Cameron, Maxell. 2002. *"Global civil society and the Ottawa process: Lessons from the movement to ban anti-personnel mines"*, in: Cooper, Andrew F./English, John/Thakur, Ramesh (eds) *Enhancing Global Governance: Towards A New Diplomacy?* United Nations University Press.
- Cluster Munition Monitor. 2024. *Cluster Munition Monitor 2024*, available at: [https://backend.icblcmc.org/assets/reports/Cluster-Munition-Monitors/CMM2024/Downloads/Cluster-Munition-Monitor-2024-Web.pdf]
- Cooper, Andrew F./English, John/Thakur, Ramesh (eds). 2002. *Enhancing Global Governance: Towards A New Diplomacy?* United Nations University Press.
- Docherty, Bonnie. 2009. *"Breaking New Ground: The Convention on Cluster Munitions and the Evolution of International Humanitarian Law"*, in: *Human Rights Quarterly* 31 (4): 934–63.
- Goose, Steven. 2004. *"Cluster Munitions: Toward a Global Solution"*, in: *HRW World Report*, January.
- Human Rights Watch. 2010. *Meeting the Challenge: Protecting Civilians through the Convention on Cluster Munitions*. Report.
- International Committee of the Red Cross. 1996. *Anti-personnel Landmines - Friend or Foe?: A Study of the Military Use and Effectiveness of Anti-Personnel Mines*, March, available at: [http://www.icrc.org/Web/Eng/siteeng0.nsf/iwpList74/C2951729922B4364C1256B6600599BF2]
- International Committee of the Red Cross. 2000. *Cluster Bombs and Landmines in Kosovo*, report, revised June 2001, available at: [https://www.icrc.org/en/doc/assets/files/other/icrc_002_0780.pdf]
- International Committee of the Red Cross. 2010. *"Cluster Munitions: What are they and what is the problem?"*, factsheet, available at: [https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/cluster-munitions-factsheet-2010.pdf]
- King, Colin/Dullum, Ove/Østern, Grethe. 2007. *M85: An Analysis of Reliability*, report, December, available at: [http://www.npaid.org/content/download/1142/10896/file/m85.pdf]
- Kristensen, Hans et al. 2024. *"Status of World Nuclear Forces"*, 29 March 2024, available at: [https://fas.org/initiative/status-world-nuclear-forces/]
- Mantilla, Giovanni. 2020. *"Social pressure and the making of wartime civilian protection rules"*, in: *European Journal of International Relations* 26 (2): 443–68.
- Mantilla, Giovanni. 2023. *"Deflective Cooperation: Social Pressure and Forum Management in Cold War Conventional Arms Control"*, in: *International Organization* 77: 564–98.
- Maslen, Stuart. 2004. *Commentaries on Arms Control Treaties: the Convention on the prohibition of the use, stockpiling, production, and transfer of anti-personnel mines and on their destruction; Oxford commentaries on international law*, Vol. I. Oxford University Press.
- McRae, Rob/Hubert, Don (eds). 2001. *Human Security and the New Diplomacy. Protecting People, Promoting Peace*. McGill-Queen's University Press.
- Minor, Elizabeth. 2015. *"Changing the discourse on nuclear weapons: The humanitarian initiative"*, in: *International Review of the Red Cross* 97 (899): 711–30.

- Morgan, Patrick. 2012. *"Elements of a General Theory of Arms Control"*, in: Williams Jr., Robert E./Viotti, Paul R. (eds), *Arms Control: History, Theory, and Policy*. Praeger, 15–40.
- Myrdal, Alva. 1978. *"The Superpowers' Joint Responsibility for the Arms Race"*, in: *International Security* 2 (3): 168–71.
- PAX. 2018. *Worldwide Investments in Cluster Munitions: A Shared Responsibility*, report, December, available at: [https://paxforpeace.nl/wp-content/uploads/sites/2/import/import/pax-worldwide-investment-in-cluster-munitions-2018pdf.pdf]
- Petrova, Margarita H. 2016. *"Rhetorical Entrapment and Normative Enticement: How the United Kingdom Turned From Spoiler into Champion of the Cluster Munition Ban"*, in: *International Studies Quarterly* 60 (3): 387–99.
- Petrova, Margarita H. 2018. *"Weapons Prohibitions through Immanent Critique: NGOs as Emancipatory and (De)securitising Actors in Security Governance"*, in: *Review of International Studies* 44 (4): 619–53.
- Petrova, Margarita H. forthcoming. *The Politics of Norm Creation: State Leadership and NGO Partnerships in Curbing Violence in War*. Oxford University Press.
- Price, Richard. 1997. *The Chemical Weapons Taboo*. Cornell University Press.
- Price, Richard. 1998. *"Reversing the Gun Sights: Transnational Civil Society Targets Landmines"*, in: *International Organization* 52 (3): 613–44.
- Rutherford, Kenneth R. 2000. *"The Evolving Arms Control Agenda: Implications of the Role of NGOs in Banning Antipersonnel Landmines"*, in: *World Politics* 53: 74–114.
- UN Development Program. 1994. *Human Development Report*, available at: [http://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf]
- UN Mine Action Service. 2015. *Landmines, Explosive Remnants of War, and IED Safety Handbook*, available at: [https://unmas.org/sites/default/files/handbook_english.pdf]
- U.S. Department of State. 1994. *"Hidden Killers: The Global Landmine Crisis"*, available at: [https://1997-2001.state.gov/global/arms/rpt_9401_demine_ch1.html]
- Vagts, Detlev F. 2000. *"The Hague Conventions and Arms Control"*, in: *American Journal of International Law* 94: 31–41.
- Viotti, Paul R. 2012. *"A Template for Understanding Arms Control"*, in: Williams Jr., Robert E./Viotti, Paul R. (eds), *Arms Control: History, Theory, and Policy*. Praeger, 7–14.
- Wareham, Mary. 2008. *"Evidence-Based Advocacy: Civil Society Monitoring of the Mine Ban Treaty"*, in: Williams, Jody et al. (eds) *Banning Landmines: Disarmament, Citizen Diplomacy, and Human Security*. Rowman & Littlefield Publishers, 49–67.
- Williams, Jody. 1997. *"Nobel Lecture"*, available at: [https://www.nobelprize.org/prizes/peace/1997/williams/lecture/]

Websites

- Action on Armed Violence, Explosive Violence Monitor, [https://aoav.org.uk/explosiveviolence/]
- Article 36, [https://www.article36.org]
- Convention on Certain Conventional Weapons, [https://disarmament.unoda.org/the-convention-on-certain-conventional-weapons/]
- Don't Bank on the Bomb, [https://www.dontbankonthebomb.com/]
- The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (also known as the Ottawa Convention or Mine Ban Treaty), [https://www.apminebanconvention.org/]
- Convention on Cluster Munitions, [https://www.clusterconvention.org/]
- Explosive Weapons Monitor, [https://explosiveweaponsmonitor.org/]
- Humanitarian Disarmament (Armed Conflict and Civilian Protection Initiative, Harvard Law School), [https://humanitariandisarmament.org/]
- Human Rights Watch, [https://www.hrw.org/topic/arms]
- Geneva Call, [https://www.genevacall.org/deed-of-commitments/]
- Insecurity Insight, [https://insecurityinsight.org/]
- Landmine and Cluster Munition Monitor, [https://www.the-monitor.org/]
- International Campaign to Ban Landmines-Cluster Munition Coalition (ICBL-CMC), [https://www.icblcmc.org/]
- International Campaign to Abolish Nuclear Weapons (ICAN), [https://icanw.org/]
- International Network on Explosive Weapons (INEW), [https://www.inew.org/]
- Stop Killer Robots, [https://www.stopkillerrobots.org/]
- Nuclear Weapons Ban Monitor, [https://banmonitor.org/]
- Reaching Critical Will (the disarmament programme of the Women's International League for Peace and Freedom), [https://www.reachingcriticalwill.org/]
- Stop Explosive Investments Campaign, [https://stopexplosiveinvestments.org/]
- Treaty on the Prohibition of Nuclear Weapons (TPNW), [https://disarmament.unoda.org/wmd/nuclear/tpnw/]