# Cluster Munitions for Ukraine: a Case Study in the Ethics of Military Technology

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**Abstract:** Critics of the Ukrainian use of cluster munitions (CMs) fail to acknowledge several key details of the case: Ukraine's lack of alternatives, use in own, already heavily mined territory, the existential threat the country is facing or the fact the less harmful class of CMs is being used in finite and pre-determined amounts as a stop-gap measure. Given these circumstances, standard arguments against CM use fail to convince. The case of Ukraine's CM use also showcases several weaknesses of the contemporary prohibition-focused approach to weapons law, such as a failure to deliver alternatives, to acknowledge outlier cases and to be more aware of organizational biases that may affect NGOs and IGOs advocating for new bans and restrictions.

**Keywords:** cluster munitions, War in Ukraine, ethics of military technology, arms control, weapons law

In July 2023, after long deliberations, the US decided to transfer substantial amounts of DPICM cluster munitions to Ukraine in order to aid the latter in its defense against the ongoing Russian invasion<sup>1</sup>. This decision has been subject to morally-grounded criticism from both prominent human rights

<sup>1</sup>Ward, Alexander; Seligman, Lara; Gould, Jay & McLeary, Paul. "U.S. to include controversial cluster munitions in new Ukraine weapons package." *Politico*, July 7<sup>th</sup>, 2023, www.politico.com/news/2023/07/06/decision-to-send-cluster-munitions-to-ukraine-onbidens-desk-00104903 NGOs, such as Amnesty International<sup>2</sup> and Human Rights Watch<sup>3</sup>, and from the coalition of state-parties to the Convention on Cluster Munitions (CCM)<sup>4</sup>. My goal in this article is to display why in that particular case these critiques are ultimately unsound and misguided. I also want to show how their failure demonstrates the perils of trying to limit the destructiveness of war by prohibiting successive weapon classes, instead of focusing on regulating weapon use. While the former approach may be well suited to certain cases, such as that of biological weapons or chemical weapons, the latter, being more ethically subtle and flexible, should be preferred in most cases and remain a default.

I begin by briefly describing what cluster munitions (CMs) are and the undeniable negative consequences of their use; I also specify the circumstances and the ends of the Ukrainian decision to ask for their delivery and use them. This establishes the values and goals to be weighed against each other within this dilemma. I follow by analyzing possible arguments against CMs being delivered to or used by Ukraine, and showing that despite some initial plausibility they fail upon closer examination. I conclude by trying to draw some lessons from this case study.

Before I start, one general caveat is in order – even though I will sometimes adopt the language of the International Humanitarian Law (IHL) or talk about the need to shape or approach it in a certain way, this is an article about ethics, not about the law as it exists today. So far as I speak about IHL principles, I treat them as moral ones; as so far as I postulate them, I do so for ethical reasons and out of a desire for the legal order to reflect the ethical

<sup>&</sup>lt;sup>2</sup> Amnesty International "Ukraine: US transfer of cluster munitions to Ukraine undermines international efforts to safeguard civilians from indiscriminate weapons." July 7<sup>th</sup>, 2023, www.amnesty.org/en/latest/news/2023/07/ukraine-us-plan-to-transfer-cluster-munitions-to-ukraine-undermines-international-efforts-to-safeguard-civilians-from-indiscriminate-weapons/

<sup>&</sup>lt;sup>3</sup>Docherty, Bonnie. "US Cluster Munition Transfer to Ukraine Ignores History of Civilian Harm." July 14<sup>th</sup>, 2023,

www.hrw.org/news/2023/07/14/us-cluster-munition-transfer-ukraine-ignores-history-civilian-harm

<sup>&</sup>lt;sup>4</sup>Hernandez, Gabriela I. R. "States Condemn All Cluster Munitions Use." October 2023, www.armscontrol.org/act/2023-10/news/states-condemn-cluster-munitions-use

one. Keeping the discussion on the moral plain is made easier by the fact that none of the countries involved – neither Ukraine, Russia, or the US – are parties to the Convention on Cluster Munitions<sup>5</sup>, as acknowledged by aforementioned critics<sup>6</sup>. Consequently, only the more general and universal principles of IHL apply, and these are closely aligned with relevant ethical principles.

#### **Cluster Munitions – Definition & Flaws**

"Cluster munitions can, in general terms, be defined as 'weapons that open in mid-air and disperse smaller sub-munitions—anything from a few dozen to hundreds—into an area. They can be delivered by aircraft or from ground systems, such as artillery, rockets and missiles'."<sup>7</sup> The ethical problems are caused by the fact that the submunitions being released, sometimes in scores or hundreds, do not always explode on impact as intended by the weapon's user. The unexploded submunitions then pollute the place where they were released, lingering for years or decades unless removed by a painstaking, expensive and time-consuming clearance operations<sup>8</sup>. For these reasons cluster munitions are highly analogous to anti-personnel landmines, and can be considered a weapon that is indiscriminate not in space but in time, failing to stop causing damage once the battle, or even the war, is over.

Not all cluster munitions are, of course, identical, and therefore they are not all equally harmful. The key difference, ethically, is made by their respective dud rates, or by the percentage of submunitions that fail to explode. The dud rates of legacy Soviet cluster munitions can be as bad as 40%, while the DPICM (Dual Purpose Improved Conventional Munitions) variants being shipped to Ukraine are claimed by American officials to have a dud rate of

<sup>&</sup>lt;sup>5</sup> Boothby, William H. "Cluster Munitions and the Ukraine War." *Articles of War*, February 28<sup>th</sup>, 2022,

<sup>&</sup>lt;sup>6</sup> Amnesty International, op. cit.

<sup>&</sup>lt;sup>7</sup> Boothby, op.cit.

<sup>&</sup>lt;sup>8</sup> Docherty, op. cit.

2,35%<sup>9</sup>. Even if practically achievable and invariant across different types of terrain or circumstances of combat<sup>10</sup>, this rate would be in excess of the 1% dud rate sought by 2008 US cluster munitions policy because of the aforementioned humanitarian concerns<sup>11</sup>.

There is, consequently, an undeniable price to be paid for any CM use. The areas where they were used, if they are clearly delineated (and this can be either subject to negligence or physical impossibility, for example when water flow moves submunitions from place to place), need to remain closed to civilians until they are thoroughly cleared. Absent this, death and injury will inevitably follow. While the harms caused by cluster munitions used may be somewhat mitigated by the circumstances obtaining right now on the front, there is no magic way of making them disappear. Cluster munitions do cause real, substantial harm, and in the presence of feasible alternatives, they should never be used. However, as I will now demonstrate, Ukraine has had no such alternatives.

### Key Context

To ask whether Ukraine should use cluster munitions is to ask too general a question. After all, Ukraine is not trying to increase its stockpile of CMs for some unspecified purpose, to be used in a vague future contingency. The question should instead be: "should Ukraine use already produced cluster munitions slated for destruction in its own territory in order to address a debilitating ammunition shortage during an existential war against genocidal

<sup>&</sup>lt;sup>9</sup> Transcript of a Press briefing given by the US Undersecretary of Defense for Policy Colin Kahl on July 7<sup>th</sup>, 2023, www.defense.gov/News/Transcripts/Transcript/Article/3452000/under-secretary-of-defense-for-policy-dr-colin-kahl-holds-press-briefing/ <sup>10</sup> Human Rights Watch, "Off Target The Conduct of the War and Civilian Casualties in Iraq", 2003, pp. 104-10. https://www.hrw.org/reports/2003/usa1203/usa1203.pdf <sup>11</sup> Cancian, Mark F. "Cluster Munitions: What Are They, and Why Is the United States Sending Them to Ukraine?", July 10<sup>th</sup>, 2023, www.csis.org/analysis/cluster-munitionswhat-are-they-and-why-united-states-sending-them-ukraine; Congressional research Service, "Cluster Munitions: Background and Issues for Congress", updated September 6<sup>th</sup>, 2023, pp. 5-6, https://sgp.fas.org/crs/weapons/RS22907.pdf

threat?". Only by asking this specific question can we address key facts that need to be acknowledged in any fair and thorough study of the case.

Already produced cluster munitions, slated for destruction. The DCIPM munitions being delivered to Ukraine are not, unlike most other weapons provided by Ukraine's allies, items in current production that have been specifically produced for Ukraine's use or that were drawn down from other nation's stockpiles only to be replaced later by newly produced batches. These are instead munitions slated for destruction as soon as they can be replaced by unitary munitions or cluster munitions with dud-rates below  $1\%^{12}$ . The same is true for another, much rarer kind of CMs – older, M39 Block I version of ATACMS missile that have been first used in combat by Ukraine in October 2023<sup>13</sup>. These weapons being delivered to Ukraine cannot cause any new CMs to be produced or designed, nor any production of CMs to be started or re-started. Consequently, it can hardly engender a global resurgence in CM use. If anything, transfers to Ukraine will force a military superpower, the US, to cease relying on them as a deep strategic reserve<sup>14</sup> and to accelerate transition towards unitary munitions and/or less harmful, below-1%-dud-rate cluster munitions.

**Used within Ukraine's own territory.** The overwhelming majority of fighting in the Russo-Ukrainian war took place on the territory of Ukraine<sup>15</sup>, and absent a total (and unlikely) collapse of the Russian military it is bound to remain so. Ukrainian officials have explicitly stated that CMs will be used

<sup>&</sup>lt;sup>12</sup> Congressional Research Service, op. Cit., pp. 5-6.

<sup>&</sup>lt;sup>13</sup> Reuters, "US-supplied ATACMS enter the Ukraine war", October 19th\, 2023,

www.reuters.com/world/atacms-us-may-send-ukraine-their-cluster-bomb-payloads-2023-10-19/.

<sup>&</sup>lt;sup>14</sup> Zeigler, Sean M. "Why Biden Was Justified to Send Cluster Munitions to Ukraine.", August 14<sup>th</sup>, 2023,

www.rand.org/blog/2023/08/why-biden-was-justified-to-send-cluster-munitions-to.html <sup>15</sup>Territorial extent of fighting and control has been meticulously documented by many open intelligence researchers, for example at https://www.warmapper.org/interactive-map

only on their own sovereign territory<sup>16</sup>, and have provided the US government with written assurances to that effect<sup>17</sup>. For both military and foreign policy reasons Ukraine is highly unlikely to violate this promise. It also has a perfect record of keeping such promises to their allies since the beginning of the war.

This matters for ethical analysis for two reasons. First, the very people who have to bear the harms of Ukraine's CMs use – Ukrainians living in territories occupied by Russia – are simultaneously the people who stand to benefit from the Ukrainian military being empowered to use such weapons. This simplifies the ethical calculus, since we are not talking about burdening one group of people with certain harms in order to spare another group, but only about which harms potentially affecting the same group would be worse. Secondly, military commanders failing to value the lives of enemy nation civilians equally to the lives of their countrymen is a perennial problem in war. Ukrainian commanders using CMs are aware they pollute their own land and cause (potential) harm to their own countrymen. Consequently, moral callousness and cavalierly use of such weapons are likely to be present to a lesser degree than they would be in a war thought on foreign territory.

**Debilitating Ammunition Shortage.** The bulk of US deliveries of CMs to Ukraine, the DCIPM munitions, have not been delivered because their military utility exceeds that of unitary munitions, although against some types of targets it does<sup>18</sup>, but chiefly to plug a steadily widening ammunition gap between Ukraine and Russia until the West will be able to ramp up unitary munition production<sup>19</sup>. Given that both sides of the war rely very heavily on

<sup>&</sup>lt;sup>16</sup> See for example the July 7<sup>th</sup>, 2023 statement by the then-minister of defense Oleksiy Reznikov, https://twitter.com/oleksiireznikov/status/1677410470108471298

<sup>&</sup>lt;sup>17</sup> Congressional Research Service, op. cit., p. 10.

<sup>&</sup>lt;sup>18</sup> Cancian, op. cit., discusses CMs several times greater utility against exposed infantry and soft-skinned vehicles.

<sup>&</sup>lt;sup>19</sup>Kahl Transcript, op. cit.; Cancian, op. cit.; Bertrand, Natasha et al. "US and NATO grapple with critical ammo shortage for Ukraine." July 18<sup>th</sup>, 2023, edi-

tion.cnn.com/2023/07/18/politics/ukraine-critical-ammo-shortage-us-nato-grapple/index.html

artillery<sup>20</sup>, and that an attritional approach of this sort "plays to Ukraine's strengths"<sup>21</sup> and allows to compensate for the almost complete lack of air support, shortages in manpower and specialized breaching equipment, and deficiencies in combined arms capabilities, artillery munitions supply is absolutely critical issue in the war<sup>22</sup>, perhaps the most critical single factor. The bottom line is that these weapons are not being used wantonly, but as a virtual necessity and as a last resort after all other sources of conventional ammunition have become nearly exhausted. Nor is their use supposed to become a new norm; given both the fact that the supply of DCIPMs is final, and that the production of conventional artillery ammunition is being ramped up all over the West<sup>23</sup>, the period of CM use in Ukraine is bound to be finite, albeit probably much longer than one would wish.

**Existential War.** The overwhelming wrongness of Russian aggression against Ukraine is hard to express succinctly. Yet its purpose is also freely admitted, unconcealed and obvious, so that there is no need to document it at length. Russia has openly stated that it's war goal was the destruction of

<sup>22</sup>Waling, Jack and Bronk, Justin. "Giving Ukraine Cluster Munitions is Necessary, Legal and Morally Justified." July 10<sup>th</sup>, 2023, www.rusi.org/explore-our-research/publica-

<sup>&</sup>lt;sup>20</sup>Crammy-Evans, Sam. "Russia's Artillery War in Ukraine: Challenges and Innovations." August 9th, 2023, rusi.org/explore-our-research/publications/commentary/russias-artillery-war-ukraine-challenges-and-innovations

<sup>&</sup>lt;sup>21</sup>Kofman, Michael and Lee, Rob. "Perseverance and Adaptation: Ukraine's Offensive at Three Months", September 23<sup>rd</sup>, 2023, warontherocks.com/2023/09/perseverance-and-adaptation-ukraines-counteroffensive-at-three-months/

tions/commentary/giving-ukraine-cluster-munitions-necessary-legal-and-morally-justified <sup>23</sup>Jakes, Lara. "Europe Made a Bold Pledge of Ammunition for Ukraine. Now Comes the Hard Part." *New York Times*, September 23<sup>rd</sup>, 2023, www.ny-

times.com/2023/09/23/world/europe/eu-ukraine-war-ammunition.html; Tucker, Patrick. "Army aims to make 1 million artillery shells a year, starting in fiscal 2025." August 7<sup>th</sup>, 2023,

www.defenseone.com/technology/2023/08/army-aims-make-1-million-artillery-shells-year-starting-fiscal-2025/389202/

the Ukrainian state and of the Ukrainian nation, denying that is has ever existed in the first place<sup>24</sup>; it formally annexed occupied Ukrainian lands, forcing their inhabitants on a massive scale to accept Russian passports<sup>25</sup>; conscripting them to fight for Russia and/or to work for the Russian war effort<sup>26</sup>; and separating thousands of children from their parents and transferring them into Russia with the purpose of indoctrination or forced adoption by Russian families<sup>27</sup>. Any Ukrainians that resisted and the representatives of local elites were subject to extrajudicial executions, torture and arbitrary imprisonment on a widespread and massive scale<sup>28</sup>. In short, Russia can be credibly accused of committing genocide against the Ukrainians it conquered<sup>29</sup>, and it has sought to conquer all or most of them, with the end goal of forcing them to live as Russians under its own semi-totalitarian regime,

<sup>&</sup>lt;sup>24</sup> Andrejsons, Kristaps. "Putin's Speech Laid Out a Dark Vision of Russian History." February 22<sup>nd</sup>, 2022, foreignpolicy.com/2022/02/22/putin-speech-ukraine-war-historyrussia/

<sup>&</sup>lt;sup>25</sup> Yale School of Public Health Humanitarian Research Lab, "Forced Passportization in Russia-Occupied Areas of Ukraine", August 2<sup>nd</sup>, 2023, hub.conflictobservatory.org/portal/apps/sites/#/home/pages/passport-1

<sup>&</sup>lt;sup>26</sup> Arhirova, Hanna et al. "Thousands of Ukraine civilians are being held in Russian prisons. Russia plans to build many more." July 13<sup>th</sup>, 2023, apnews.com/article/ukraine-russia-prisons-civilians-torture-detainees-88b4abf2efbf383272eed9378be13c72

<sup>&</sup>lt;sup>27</sup> Bilkova, Veronika et al. "REPORT ON VIOLATIONS AND ABUSES OF INTER-NATIONAL HUMANITARIAN AND HUMAN RIGHTS LAW, WAR CRIMES AND CRIMES AGAINST HUMANITY, RELATED TO THE FORCIBLE TRANSFER AND/OR DEPORTATION OF UKRAINIAN CHILDREN TO THE RUSSIAN FEDERATION", May 4<sup>th</sup>, 2023, www.osce.org/files/f/documents/7/7/542751.pdf. See also the official statement by the International Criminal Court's Pre-Trial Chamber II, March 17<sup>th</sup> 2023, icc-cpi.int/news/situation-ukraine-icc-judges-issue-arrest-warrantsagainst-vladimir-vladimirovich-putin-and

<sup>&</sup>lt;sup>28</sup> Hinnant, Lori et al. "10 torture sites in 1 town: Russia sowed pain, fear in Izium." October 2<sup>nd</sup>, 2022,

apnews.com/article/russia-ukraine-business-treatment-of-prisoners-government-and-politics-aec9afe8d6631795ae9f9478a4ede4cc; Office of the High Commissioner For Human Rights, "UN report details summary executions of civilians by Russian troops in northern Ukraine." December 7<sup>th</sup>, 2022, ohchr.org/en/press-releases/2022/12/un-report-detailssummary-executions-civilians-russian-troops-northern;

<sup>&</sup>lt;sup>29</sup> Finkel, Eugene. "What's Happening in Ukraine Is Genocide. Period." *Washington Post*, April 5<sup>th</sup>, 2022, washingtonpost.com/opinions/2022/04/05/russia-is-committing-genocide-in-ukraine; Snyder, Timothy. "The War in Ukraine and the Question of Genocide." Lecture given at Boston University, October 28<sup>th</sup>, 2022, audio recording available at snyder.substack.com/p/the-war-in-ukraine-and-the-question#details

subject to severe and regular violations of human rights even in the absence of any resistance.

This situation creates a supreme emergency – a state of existential threat to their very existence as a community and as individuals. Some of the most prominent ethicists of war believe that in such circumstances the normal ethical rules of conduct in war can be relaxed or even wholly suspended<sup>30</sup>. While the extent to which this could be justified in Ukraine is worth contemplating, one needs not evoke supreme emergency to point out that the unequivocal status of this war matters. It is enough to say that Ukraine's war is as just as they come, and indeed as just as a war can theoretically be; that the stakes for the victims of war are enormous, indeed, that almost everything is at stake for them; and that it is these stakes that need to be weighed against the inevitable harms that come with the use of cluster munitions. Given that both groups of harms threaten the same group of people, as already established, this is indeed a matter of simply comparing these harms, multiplied by the respective probabilities of them occurring. I proceed to do just that.

# Possible Arguments Against CM Use by Ukraine

Discussing various possible objections to the CM use by Ukraine, I will refer to the idealized versions of these arguments. Some of these are only being implied by the explicit statements of critics; others may not have been formulated publicly, yet should be addressed for the sake of completeness. Consequently I will not attribute the criticized arguments to any particular authors, but simply refute them, starting with the weakest ones and ending with those that can be seriously considered by reasonable thinkers but nonetheless ultimately fail to convince.

**Absolutist Argument.** "Any use of cluster munitions is intrinsically wrong and no possible good can outweigh it". This extremely strong statement is both far-fetched and quite common, and thus worth addressing. It seems to

<sup>&</sup>lt;sup>30</sup> Walzer, Michael. "Just and Unjust Wars", Basic Books 1992, Second Edition, Chapter XVI; Orend, Brian. "Morality of War", Broadview Press 2013, Second Edition, Chapter 5. See also Smilansky, Saul. "Terrorism, justification, and illusion." *Ethics* 114.4 (2004): 790-805.

suggest that the harm caused by any instance of CM use is simply incomparable; it should never be effected, period, because of how wrong it is by itself. Ethics of war does indeed know such instances - intentional murder of innocents, sexual violence and, according to many, torture constitute deeds of this kind. But the collateral damage that follows, or is likely to follow the use of CMs is nothing of the sort. First, it does not occur necessarily; if the polluted land is cleared quickly, or if it is effectively closed to civilians, no bodily harm needs to occur whatsoever. An area being closed to humans for decades may be and usually is a great loss, although this depends on what it is exactly. Not being able to step into the village when why has lived half one's life is to be wronged indeed; but not being able to hike in a certain forest is less harmful. Secondly, even if casualties do indeed occur, the harms are analogous to those caused by other kinds of weapons; they are lamentable and very serious, but subject to the principles of distinction, precautions and proportionality, such harms are an inevitable and accepted part of war. If it was not so, war, and consequently effective defense of basic human rights against agents unresponsive to moral reasons, would have to be made illegal<sup>31</sup>. CMs are not harmful in a way that is different to other weapons; they are merely more harmful and harmful in a less predictable and quantifiable way. Additionally, they are not the only weapons polluting the battlefield with unexploded ordnance; almost all munitions do, it is just that the dud-rates of most CMs are worse, and the duds less easily detectable, than those of unitary munitions. All these are differences of degree, not differences of kind; but the absolutist argument relies on arguing that the difference is in the kind, not in the quantity or likelihood of harm.

**The Stochastic Argument.** The anti-CM stance can take a more plausible, stochastic form. It is not that every single instance of CM use will render more harm than good for the Ukrainian inhabitants of the areas where they are used; it is that it will be more harmful in aggregate. Some instances of clearly non-harmful use are possible (a recent ATACMS strike on Russian military airfields where civilians have no business being present is probably

<sup>&</sup>lt;sup>31</sup> Orend, op. cit., Chapter 9.

a good real-life example<sup>32</sup>). However, on average, civilians will be harmed more than they will gain from being protected by their CM-wielding military. This is, indeed, the logic behind both the CM and anti-personnel landmine bans. It is not that these weapons cannot ever be used discriminately; it is that their discriminate use is, on the long run, (far) less likely than indiscriminate one.

This argument has substantial plausibility, especially over long time scales and across multiple conflicts. Replacing CMs with other, less harmful types of munitions is by all means a worthy goal in general. The plausibility of the argument is, however, lowered in the specific case of Ukraine. The fact that Ukraine will use CMs on their own territory; that they will use them in already heavily mined and UXO-polluted areas that will have to be closed to civilians and demined anyway; the fact that the Ukrainian war goals are uncharacteristically and unequivocally just; and the fact that there is currently no alternative to CM use all diminish the plausibility of the stochastic argument. At the very least, the stakes involved incline one not to rely on a general rule that may render faulty judgments in particular instances, but instead to judge every instance of potential use on its own, that is, proceed as one does with most other weapons. With the stakes so high the Ukrainians need to get things right every time, not only most of the time; and it makes sense to trust Ukrainian officials and military officers with these case-by-case judgments, since they represent the very people who are going to be affected both by the use and the non-use of CMs.

Let us stress how highly untypical this combination of: CMs large availability, unavailability of unitary munitions, and the stakes involved is. In its absence reasonable people could disagree about the virtues of the stochastic argument, of trusting military organizations to complete complex procedures and conduct sophisticated moral reasoning versus tying their hands prior to fighting in order to avoid certain outcomes at the expense of certain oppor-

 $<sup>^{32}</sup>$  For the description of the strike and its effects, see twitter.com/Tatarigami\_UA/status/1714797845457350817

tunities. Yet these circumstances do hold. A thought experiment may illustrate this point more clearly: we all know asbestos is a harmful material, and there are no asbestos advocates. However, if a parent caught in a blizzard has to choose between sheltering themselves and their family in an old house containing asbestos for a couple of days, or exposing them to the elements, then the general case against letting one's children stay in asbestos-laced houses is not really applicable to the situation at hand.

A critic may reply that claiming emergency circumstances obtain is hardly a rare move; all conflicts are emergencies from the perspectives of their participants. Most if not all belligerents believe, or plausibly pretend to believe, that their circumstances are unique and that their cause is (exceptionally) just. Surely this cannot be accepted at face value every time. I agree; this, however, does not mean that we cannot know a genuine exception when we see one. Insisting that a general rule be followed all the time because genuine exceptions are rare is not very sophisticated ethical thinking; indeed, genuinely sophisticated moral reasoning must be flexible enough to recognize and allow rare exceptions when they are valid, and so needs not to tie itself to simplistic if useful rules of thumb, but rather proceed on a deeper understanding of values and moral goals underlying these rules. The general IHL framework of selecting weapons most fitting the circumstances of an individual attack in accordance with the principles of distinction, precautions and proportionality does allow such flexibility rooted in moral values; it should and must govern CM use in those rare cases when CM use in just cause is judged to be truly inevitable.

**Argument From The Value of Precedent.** This argument focuses on the consequences beyond the Russo-Ukrainian conflict. It can be argued that any use or transfer of CMs shatters the nascent international norm and increases the probability of CM use in conflicts yet to come. When harms to the victims of these conflicts are considered, the moral balance changes.

Considerations of space prevent me from engaging fully with this argument and its assumptions; I will just make three brief points. Firstly, no truly global norm exists yet. While 112 countries are parties to the Cluster Munition Convention<sup>33</sup>, the list does not include 7 out of 9 nuclear powers, many other military powers and/or countries located in conflict-prone regions such as the Middle East-North Africa, South Asia and Eastern Europe. Since most actual practitioners reserve their right to use CMs in at least some circumstances, existence of a firm norm cannot be alleged. This is in contrast with, for example, Biological Weapons Convention that really does establish a firm norm that has not been violated by a state actor for decades, and therefore an actual precedent of substantial value.

Given this fundamental fact, the argument from the value of precedent loses much of its strength; but what strength is left is additionally sapped by two other points. The very existence of a precedent does not guarantee that it will not be broken, and hence its own value; the degree to which the existence of a precedent reinforces itself may be different (and speculative), but it is surely possible for a norm to fall into obsolescence. Even if Ukraine declined to use CMs, the norm could be shattered in the very next conflict.

This leads to another observation – either the norm is brittle, that is, a violation by one country leads to a cascade of violations by other countries, or it is not, perhaps because the benefits of following the norm are independent of other countries' compliance. If the CM taboo is brittle, than the supposed precedent is too. But if the norm is not brittle, than Ukraine's refusal to honor it in this particular conflict will do little damage in the long run. No parties to the CCM have withdrawn since July, and it is hard to see why they would do so – the reasons that propelled their accession have little to do with unanimity or general compliance. Ukraine claiming an exception does not threaten any of the CCM parties, prove CM use to be morally unproblematic nor infuse the global weapons market with new CMs. It is a last resort action that others will be prudent to avoid having to take in the future. A family sheltering in a house laced with asbestos for a night will not bring building with asbestos back into vogue.

<sup>33</sup> clusterconvention.org/states-parties/

## Lessons to be Learned

In this brief last section I want to sketch some general takeaways from this case study for the ethics of military technology.

**Create and distribute alternatives to ethically problematic weapons.** In order to effectively ban a weapon, one has to encourage the development and/or and proliferation of an ethically superior and militarily viable alternative. No matter how horrific, weapons will be used until an alternative becomes available – and countries will revert to using them when the supply of this alternative weapon is exhausted. Promoting cleaner weapons and effective and ways of using them, making military organizations invested in these systems and habituated to their use, creating sufficient stockpiles – all this is necessary to make the transition permanent and irreversible.

Needless to say, this approach is incompatible with general hostility to armaments industry, weapon acquisitions and military-technological endeavors in general. Prohibitory efforts that are aimed not at a weapon system but at a military capability as such are bound to fail. If they are aimed at the armed forces of a legitimate state exercising its duty of providing security for its citizens, this is indeed a welcome result. It is imperative to communicate and prove that weapon restrictions, as well as other ethical restrictions, do not have to sap military power, but can indeed engender military excellence, as in the case of precision-guided munitions.

Focusing on weapon bans, rather than use restrictions, can produce crude judgments and fallible rules. With some exceptions weapons that have been banned by (some) countries or targeted for such bans are ethically suspect because they cause problems in many or most cases, not in all cases of their use. A general ban is always bound to bar use in instances when such use could be legitimate, that is, when it could spare lives or protect rights worth protecting. Making weapon or even weapon class bans a go-to method for humanizing war is therefore a questionable idea. Bans are a tool with its own limitations, even in cases where a weapon really does have inherent flaws, and one does well to remember that there are alternatives.

Account for organizational biases in humanitarian advocacy. 'Organizational biases' are not ones originating in ill will or specific prejudice; rather they are ones an organization acquires just in virtue of being an organization. Military organizations have them, and NGOs and IGOs have them as well it would indeed be astonishing if they have not had these. A bias towards quantifiability and verifiability of results will exist in any organization interested in measuring its impact. And it just so happens that compliance with unequivocal weapon bans is easier to measure and verify than compliance with restrictions on their use. As a matter for further research, it is indeed worth investigating the extent to which the clarity and susceptibility to bureaucratic quantification may be driving the preference for outright bans over more nuanced and context-sensitive approaches, observable among contemporary humanitarian NGOs. That does not mean that one should favor policies whose success is unverifiable, or undervalue efforts to measure and document compliance. Still, the ethics and laws of war should generally evolve towards greater sensitivity to morally relevant facts, and when they stop doing that, an attempt at diagnosis is in order. Acknowledging organizational biases towards solutions that are simpler to market, introduce, monitor and quantify, but not necessarily morally superior, and acting on this awareness may be a step worth exploring.