

Guidance Required for Protections of Cyber Participation in Hostilities Under International Humanitarian Law

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Abstract: Since the Second World War, the Geneva Conventions of 1949 and its Additional Protocols were developed to protect civilians from the consequences of armed conflicts by distinguishing them from combatants. With the advent of non-State armed groups and foreign participation in non-international conflicts, this distinction required clarification of the rules pertaining to the protection of civilians participating in armed conflicts. In 2009, the International Committee of the Red Cross (ICRC) released the *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*, providing recommendations for such situations. However, the emergence of cyber warfare now requires that this guidance be further expanded. The abuses resulting from the United States' War on Terror illustrate the consequences of vague consensus on terrorism and gaps in international law. Independent interpretations, such as the *Tallinn Manual on the International Law Applicable to Cyber Warfare* (2013) and *Tallinn Manual 2.0* (2017), provide the groundwork for the ICRC, but the continued existence of numerous interpretations surrounding cyber operations allow for the undermining of civilian protections. Thus, it is necessary for the ICRC to establish official protections of civilians for cyber participation in hostilities.

Keywords: International Committee of the Red Cross, International humanitarian law, IHL, Armed conflict, Direct participation in hostilities, Targeting civilians, Cyber operations.

Introduction

The Second World War proved that there needed to be laws applicable to all nations to protect civilians during times of war. The International Committee of the Red Cross' (ICRC) Geneva Conventions of 1949, which will be discussed further in this paper, provided such protection and further extended them to the international and non-international conflicts of the Cold War era through amendments. Since then, civilians have become more involved as private entities in close proximity with armed conflicts. Without a recognized definition of "direct participation in hostilities," the concept can be manipulated to undermine civilian protections. In 2009, the ICRC provided guidance that declares the situations to which international humanitarian laws apply for civilian involvement during armed conflicts. However, the criteria and interpretations provided do not apply to the cyber dimension of warfare. Situations of cyber operations being met with lethal force in 2015 and 2019 have introduced a new dilemma regarding civilian participation and the limits of protection concerning the distinction between cyber participation in hostilities as opposed to cyber-crime and terrorism.

Targeting Civilians in Warfare

Initial humanitarian laws in the 19th century focused on protecting combatants, as they were suffering from widespread injury and sickness without means of medical help on the battlefield. During the peak of conventional warfare in the Second World War, both the Allies and Axis powers employed various methods of violence against each other, including the use of bombing campaigns. The German Luftwaffe's raids over Warsaw and the Blitz of London indiscriminately bombed both military and civilian targets, killing thousands. Britain's Royal Air Force (RAF), in conjunction with the United States Army Air Force (USAAF), retaliated by area bombing the German cities of Hamburg and Dresden. Alongside the difficulties of using precision bombing at the time, Britain opted for area bombing as a means to break the morale of the enemy's population in hopes they

would pressure their governments to surrender⁴⁵³. The justification for the indiscriminate targeting of civilians surrounded the role of factory workers who were constructing arms and ammunition for the military⁴⁵⁴. The logic for such was that if factories could be legitimate targets, so should the people operating within them. This came to be a negligible goal, as it ultimately served to strengthen their morale instead⁴⁵⁵. German citizens remained efficient in rebuilding damaged infrastructure for the majority of the war, and the Nazi Party used the bombings as propaganda against the Allies. It was not until the USAAF were able to accurately target resource supply lines that a greater impact on Germany's fighting capabilities was achieved⁴⁵⁶. On the Pacific Front, USAAF employed a similar strategy to the RAF through the firebombing of Tokyo and the atomic bombing of Hiroshima and Nagasaki. Existing international humanitarian laws prohibited the bombardment of undefended structures and required that "all necessary steps" be taken to avoid attacking buildings of art, charity, religion, science, historic monuments, and hospitals⁴⁵⁷. However, such laws had to be reemphasized and reevaluated concerning the more complex role of civilians in armed conflicts.

Protection of Civilians

International Humanitarian Law (IHL) is a set of rules created by the International Committee of the Red Cross (ICRC) that intends to "limit the effects of armed conflict" through the protection of those who are not, or are no longer, participating in hostilities⁴⁵⁸. It is primarily composed of the four Geneva Conventions of 1949 and its amendments. The first and second conventions protect wounded and sick soldiers as well as religious

⁴⁵³ Arthur T. Harris and Sebastian Cox, *Despatch on War Operations: 23rd February, 1942, to 8th May, 1945* (Cass, 1995).

⁴⁵⁴ A. C. Grayling, *Among the Dead Cities: Is the Targeting of Civilians in War Ever Justified?* (Bloomsbury, 2007).

⁴⁵⁵ *Ibid.*, 251.

⁴⁵⁶ *Ibid.*, 251–252.

⁴⁵⁷ *Ibid.*, 195.

⁴⁵⁸ *What Is International Humanitarian Law?* (International Committee of the Red Cross, 2002), 1.

and medical units during warfare on land and sea. The third protects prisoners of war, while the fourth protects civilians from the consequences of war⁴⁵⁹. Two amendments to the conventions were created in 1977, known as Additional Protocols, to address issues that arose during the conflicts of the Cold War era. Protocol I strengthens the protection of victims of international armed conflicts, where two States are involved⁴⁶⁰. Protocol II further protects victims of non-international conflicts, which are restricted to the territory of a single State, and was the first international treaty to be directed at such conflicts explicitly⁴⁶¹. Article 3, common to all four conventions, applies to non-international conflicts through implementation of key concepts such as: humane, unbiased treatment for those within custody of opposing forces; prohibiting murder, mutilation, torture, cruel and humiliating treatment, hostage taking, and unfair trial; requires that the wounded, sick, and shipwrecked be collected and cared for; and grants the ICRC the right to offer its services to the parties involved in the conflict⁴⁶². This is an important clause, as most conflicts today are non-international⁴⁶³. It is vital that these protections be applied correctly and clearly to the appropriate populations. To guarantee that IHL encompassed all situations, the ICRC established customary rules that apply globally. The first six rules clarify the distinction between civilians and combatants:

- (1) The parties to the conflict must at all times distinguish between civilians and combatants. Attacks may only be directed against combatants. Attacks must not be directed against civilians⁴⁶⁴.

⁴⁵⁹ "The Geneva Conventions of 1949 and Their Additional Protocols," War & Law, ICRC, January 1, 2014, <https://www.icrc.org/en/document/geneva-conventions-1949-additional-protocols>.

⁴⁶⁰ "Protection of Victims of International Armed Conflicts (Protocol I)," Treaties, States Parties and Commentaries, ICRC, June 8, 1977, <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/470?OpenDocument>.

⁴⁶¹ "Protection of Victims of Non-International Armed Conflicts (Protocol II)," Treaties, States Parties and Commentaries, ICRC, June 8, 1977, <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/475?OpenDocument>.

⁴⁶² ICRC, "The Geneva Conventions of 1949 and Their Additional Protocols".

⁴⁶³ Arnaud Blin, "Armed Groups and Intra-state Conflicts: The Dawn of a New Era?" *International Review of the Red Cross* 93, no. 882 (06 2011): 293. doi: 10.1017/s1816383112000045.

⁴⁶⁴ "Rule 1. The Principle of Distinction between Civilians and Combatants," Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule1.

- (2) Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited⁴⁶⁵.
- (3) All members of the armed forces of a party to the conflict are combatants, except medical and religious personnel⁴⁶⁶.
- (4) The armed forces of a party to the conflict consist of all organized armed forces, groups and units which are under a command responsible to that party for the conduct of its subordinates⁴⁶⁷.
- (5) Civilians are persons who are not members of the armed forces. The civilian population comprises all persons who are civilians⁴⁶⁸.
- (6) Civilians are protected against attack, unless and for such time as they take a direct part in hostilities⁴⁶⁹.

Direct Participation in Hostilities

The concept of “direct participation in hostilities” in rule 6 was vague and required clarification. In 2009, the ICRC released the *Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law*. Within the *Interpretive Guidance*, “hostilities” is the collective employment of methods used to injure an enemy by the parties of a conflict, and “participation” is the involvement of individuals in such hostilities. Thus, “direct participation in hostilities” is considered “specific acts carried out by individuals as part of the conduct of hostilities between parties to an armed conflict”⁴⁷⁰. The *Interpretive Guidance* lays out clear criteria that must be met for a civilian action to be considered direct participation in hostilities:

⁴⁶⁵ “Rule 2. Violence Aimed at Spreading Terror among the Civilian Population,” Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule2.

⁴⁶⁶ “Rule 3. Definition of Combatants,” Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule3.

⁴⁶⁷ “Rule 4. Definition of Armed Forces,” Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule4.

⁴⁶⁸ “Rule 5. Definition of Civilians,” Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule5.

⁴⁶⁹ “Rule 6. Civilians’ Loss of Protection from Attack,” Customary IHL, ICRC, https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule6.

⁴⁷⁰ Nils Melzer, *Interpretive Guidance on the Notion of Direct Participation in Hostilities Under International Humanitarian Law* (International Committee of the Red Cross, 2009), 43.

- (1) Threshold of harm: The act must be likely to adversely affect the military operations or military capacity of a party to an armed conflict or, alternatively, to inflict death, injury, or destruction on persons or objects protected against direct attack⁴⁷¹.
- (2) Direct causation: There must be a direct causal link between the act and the harm likely to result either from that act, or from a coordinated military operation of which that act constitutes an integral part⁴⁷².
- (3) Belligerent nexus: The act must be specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another⁴⁷³.

Having met the above criteria, the next concern is the beginning and end of the perpetrator's loss of protection. It would be difficult to determine whether a civilian has previously participated in a conflict or plans to in the future, so the loss of protection is restricted to the specific acts committed, as to prevent unjust targeting⁴⁷⁴. The *Interpretive Guidance* considers the act of direct participation to include any preparations made beforehand for the purpose of the act, and their deployment to and from the act's location⁴⁷⁵. While civilians lose protection during the duration of these acts, so do members of non-State organized armed groups that participate in an armed conflict, for as long as they assume a combat function⁴⁷⁶. Before engaging in hostilities, there must be undoubted determination of whether a person is a civilian, and, if so, whether they are directly participating in hostilities⁴⁷⁷. This is a difficult, but necessary proposition; for example, if a non-state organized armed group were employed as protection of a party's armed forces during a time of armed conflict, their status depends on who they protect against:

⁴⁷¹ Ibid., 47.

⁴⁷² Ibid., 51.

⁴⁷³ Ibid., 58.

⁴⁷⁴ Ibid., 45.

⁴⁷⁵ Ibid., 65.

⁴⁷⁶ Ibid., 70.

⁴⁷⁷ Ibid., 74.

The line between the defense of military personnel and other military objectives against enemy attacks (direct participation in hostilities) and the protection of those same persons and objects against crime or violence unrelated to the hostilities (law enforcement/defense of self or others) may be thin⁴⁷⁸.

Thus, engaging with hostile combatants or criminals can determine the legal standing of participating civilians. Even so, the *Interpretive Guidance* urges that the force used against those unprotected from direct attack be kept to the temporary minimum of what is necessary for a strategic goal⁴⁷⁹. When the civilians or members of non-state organized armed groups cease participation in a combat function, they regain protection from direct attack. However, this does not protect them from prosecution for violations of domestic or international law committed during their participation⁴⁸⁰.

Implications

The *Interpretive Guidance* provided by the ICRC is critical to preventing the exploitation of civilian protections by parties to an armed conflict. Without such, what is considered “direct participation in hostilities” can be determined independently, with some opting for strict criteria while others may choose a looser interpretation. The consequences could potentially allow for a government persecution of its people to appear legal under IHL, claiming that the victims were involved in armed conflict and that it was legitimate warfare. This hypothetical can be compared with other subjects, such as the situation regarding terrorism. In response to the attacks on September 11, 2001, the United States declared a “War on Terror” through a Joint Resolution of Public Law 107–40, authorizing the use of military force:

The President is authorized to use all necessary and appropriate force against those nations, organizations, or persons he determines planned, authorized, committed, or aided the terrorist attacks that occurred on

⁴⁷⁸ Ibid., 38.

⁴⁷⁹ Ibid., 77.

⁴⁸⁰ Ibid., 83.

September 11, 2001, or harbored such organizations or persons, in order to prevent any future acts of international terrorism against the United States by such nations, organizations or persons⁴⁸¹.

This exploits the lack of internationally agreed upon definitions for terrorism, allowing for the ongoing interventions in Yemen, Afghanistan, Iraq, Pakistan, and Syria. The authorization was also used to justify the targeting of U.S. citizens operating within terrorist cells. In 2011, 16-year-old Abdulrahman Al-Aulaqi was killed with six others by a U.S. drone strike in Yemen, without an accusation of any crime⁴⁸². The act quickly met a backlash in U.S. court, with accusations toward the Central Intelligence Agency for killing Al-Aulaqi without due process and not as a last resort, claiming he was not an imminent threat; however, the case was dismissed⁴⁸³. This is just one of many examples within the War on Terror that exploits vulnerabilities in international policy that can be used to undermine civilian protections. The next era of disputed hostilities is occurring in the realm of cyber warfare.

In 2009, private contractors and civilian employees in proximity to armed conflicts were primary concerns for the *Interpretive Guidance*, in terms of the legality of targeting such participants and protections allotted to them. Ten years later, armed conflicts have become evermore complex in the cyber realm. The definition of cyber participation in hostilities is now obscure enough to require official interpretation. A landmark case occurred in May of 2019, when Israel countered a cyber operation with lethal force. Israeli Defense Forces (IDF) successfully intercepted a cyber-attack perpetrated by Hamas, and retaliated with an air strike on the suspected headquarters of the perpetrators in Gaza⁴⁸⁴. The justification for striking the building was that Hamas “attempted to establish offensive cyber capabilities within the

⁴⁸¹ United States of America, 107th Congress (September 18, 2001), *Public Law 107–40* (Vol. 147 ed.), Congressional Record.

⁴⁸² “Is It Legal for the U.S. to Kill a 16-year-old U.S. Citizen with a Drone?” Amnesty International USA, July 20, 2012, <https://www.amnestyusa.org/is-it-legal-for-the-u-s-to-kill-a-16-year-old-u-s-citizen-with-a-drone/>.

⁴⁸³ “Al-Aulaqi v. Panetta,” Center for Constitutional Rights, <https://ccrjustice.org/home/what-we-do/our-cases/al-aulaqi-v-panetta>.

⁴⁸⁴ Elias Groll, “The Future Is Here, and It Features Hackers Getting Bombed,” *Foreign Policy*, May 6, 2019, <https://foreignpolicy.com/2019/05/06/the-future-is-here-and-it-features-hackers-getting-bombed/>.

Gaza Strip and to try and harm the Israeli cyber realm”⁴⁸⁵. Many militaries consider the cyber dimension as a “domain of military operations,” though the scope of this domain is contested⁴⁸⁶. Regardless, if the perpetrators were undoubtedly members or under command of Hamas, the airstrike was legal for IHL, as per customary rules 3 and 4⁴⁸⁷. A precursor to this situation occurred in 2015, when the U.S. targeted Junaid Hussain⁴⁸⁸. Hussain was a recruiter for the Islamic State and responsible for two attacks committed by his recruits as well as the hack of the accounts for many U.S. personnel in 2015⁴⁸⁹. According to former FBI Chief of Staff, John P. Carlin, Hussain was an “imminent threat to the American homeland, and since we couldn’t reach him with handcuffs, he was a top priority for the military”⁴⁹⁰. Thus it prompted the drone strike killing of Hussain in Syria later that same year. It is not disputed that these two instances were legal under IHL, but the hypothetical implications surrounding them pose ethical dilemmas. If instead, Hussain had been acting alone to hack U.S. personnel data, would he still lose protections from direct attack? How does IHL apply to cyberattacks committed in times of no armed conflict with the perpetrator? What constitutes lethal retaliation? These questions will eventually require an answer by an international authority.

Some have already recognized these issues of civilian protection in the cyber realm. Published in 2017 by international experts participating in the NATO Cooperative Cyber Defense Centre of Excellence, the *Tallin Manual and Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* recommends how IHL be applied to cyber warfare. However, it does not apply as IHL, because it is only an independent interpretation and so

⁴⁸⁵ Israel Defense Forces, “Thwarted Hamas Cyber Activity,” Press Release, <https://app.activetrail.com/S/eiwixdxwxd.htm>.

⁴⁸⁶ Groll, “The Future Is Here, and It Features Hackers Getting Bombed.”

⁴⁸⁷ Ibid.

⁴⁸⁸ Ibid.

⁴⁸⁹ John P. Carlin, Eugene Rumer, and Jeff Greenfield, “Inside the Hunt for the World’s Most Dangerous Terrorist,” Politico Magazine, November 21, 2018, <https://www.politico.com/magazine/story/2018/11/21/junaid-hussain-most-dangerous-terrorist-cyber-hacking-222643>.

⁴⁹⁰ Ibid.

necessitates a higher officiality to gain compliance. Thus, if a comprehensive guidance were to be created, it would need to be set forth by the ICRC.

Conclusion

The strategic bombings in Poland, Britain, Germany, and Japan during the Second World War necessitated protections for civilians from direct attacks during armed conflicts. The ICRC succeeded in prohibiting such actions by distinguishing civilians from combatants and declaring that civilian participation does not permit the targeting of them. However, as the civilian's role in armed conflicts became evermore intertwined with the combatants', a further distinction was required for what would be considered "direct participation in hostilities." The *Interpretive Guidance on the Notion of Direct Participation in Hostilities Under International Humanitarian Law* succeeded in determining such for private contractors and civilians employed in armed conflicts but failed to resolve the issue of participation through cyber means.

U.S. and Israeli airstrikes, in retaliation for cyber-attacks, now necessitate clarification of such participation and the limits of protection. As shown in the U.S. War on Terror, non-consensus for terrorism allows for manipulations to the jurisdiction of countering it, such as circumventing due process for U.S. citizens by means of drone strikes. Thus, I think it is of critical importance that ICRC expand their *Interpretive Guidance* to clarify protections of civilian participation in the cyber dimension of modern conflicts. This should be done in consideration of the recommendations made by the *Tallin Manual and Tallinn Manual 2.0* and other independent studies that carefully interpret the customary rules of IHL and its application for cyber operations. These studies on their own are only legal frameworks for those in agreement with it, so official guidance should be provided by the ICRC to clarify and distinguish cyber participation in hostilities globally.

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