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## “Point and Shoot”: How Technology Blurs the Lines Between Civilians and Combatants

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# “POINT AND SHOOT”: HOW TECHNOLOGY BLURS THE LINES BETWEEN CIVILIANS AND COMBATANTS

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## ABSTRACT

*New forms of technology continue to transform the nature of warfare, offering more opportunities for civilians to directly participate in hostilities. For example, in the ongoing conflict between Ukraine and Russia, Ukrainian civilians have been using the Diia and ePPO apps to report Russian military activity to Ukraine’s armed forces. By acting as spotters, civilians’ use of the Diia and ePPO apps likely constitutes direct participation in hostilities under both the ICRC’s Interpretive Guidance and the U.S. Department of Defense Law of War Manual. By blurring the line between civilians and combatants, use of these apps may expose millions of civilians to lawful targeting in war. To protect civilians, the law must be updated to reflect the technological realities of modern-day warfare. As a starting point, both the attacking and defending parties to a conflict should have an affirmative duty to warn civilians of the potential consequences of their direct participation in hostilities. While developing a new legal standard, the international legal community must remain cognizant of establishing new precedents that address technology’s role in warfare appropriately.*

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## INTRODUCTION

For at least the last decade, social media and new forms of technology have revolutionized civilians' capacity and frequency of directly participating in hostilities.<sup>1</sup> As initially observed in the Arab Spring,<sup>2</sup> the proliferation of cell phones and social media has “endow[ed] ordinary individuals, frequently noncombatants, with the power to change the course of both the physical battlefield and the discourse around it.”<sup>3</sup> Such new forms of technology can be used in a variety of ways, each of which involve civilians in an armed conflict such that “[e]veryone, it seem[s], [can] now be an actor in war.”<sup>4</sup>

First, new technologies amplify messages, which can be used to garner international support for a party to an armed conflict.<sup>5</sup> For example, TikTok has been instrumental in garnering Western support for Ukraine's fight against the Russian invasion.<sup>6</sup> Similarly, amplifying messages can impact an armed conflict by recruiting fighters, whether by encouraging military defections or otherwise.<sup>7</sup> Second, technology has empowered civilians to “circumvent the lumbering government bureaucracy, create networks to raise money, and mobilize and inform the populace,” thereby facilitating crucial organization and mobilization efforts.<sup>8</sup> Third, and most critically, documentation of armed conflicts via smartphones collects information that can impact military operations and bolster subsequent prosecutions for war crimes.<sup>9</sup> Overall, technology “has irretrievably changed the way that wars are fought, reported on, and consumed.”<sup>10</sup>

Ukrainian civilians' use of the Diia and ePPO apps in the ongoing conflict between Ukraine and Russia epitomizes the latest iteration of this phenomenon.<sup>11</sup>

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<sup>1</sup> See generally DAVID PATRIKARAKOS, *WAR IN 140 CHARACTERS: HOW SOCIAL MEDIA IS RESHAPING CONFLICT IN THE TWENTY-FIRST CENTURY* (1st ed. 2017) (examining how the rise of social media and digital warfare has brought civilians more directly into warfare).

<sup>2</sup> See David Heitner, Note, *Civilian Social Media Activists in the Arab Spring and Beyond: Can They Ever Lose Their Civilian Protections?*, 39 BROOKLYN J. INT'L L. 1207, 1207–08 (2014).

<sup>3</sup> PATRIKARAKOS, *supra* note 1, at 4.

<sup>4</sup> *Id.*

<sup>5</sup> See Heitner, *supra* note 2, at 1208 (explaining how “a dissident's use of social media presents great potential to alter the military balance of an engagement, as it can be used to . . . garner sympathy and material support from the international community . . .”).

<sup>6</sup> Tess Lowery, *WarTok: How Ukraine is Using TikTok to Fight Putin's Invasion*, GLOB. CITIZEN (Mar. 11, 2022), <https://www.globalcitizen.org/en/content/wartok-how-ukraine-using-tiktok-putin-invasion/>.

<sup>7</sup> See Heitner, *supra* note 2, at 1208.

<sup>8</sup> See PATRIKARAKOS, *supra* note 1, at 99.

<sup>9</sup> See Steven Feldstein, *Disentangling the Digital Battlefield: How the Internet Has Changed War*, WAR ON THE ROCKS (Dec. 7, 2022), <https://warontherocks.com/2022/12/disentangling-the-digital-battlefield-how-the-internet-has-changed-war/> (describing how Russia's invasion of Ukraine “has generated a trove of digital data that could be used for potentially prosecuting war crimes”). See also Stephen Fidler & Thomas Grove, *Smartphones Are Changing the War in Ukraine*, WALL ST. J. (Feb. 16, 2023, 5:30 AM), <https://www.wsj.com/articles/smartphones-are-changing-the-war-in-ukraine-adb37ba1> (comparing the 2.8 million digital records that have been collected in less than a year of the Russian invasion of Ukraine with only five million digital records collected after eleven years of war in Syria).

<sup>10</sup> PATRIKARAKOS, *supra* note 1, at 9.

<sup>11</sup> Feldstein, *supra* note 9.

In early 2020, Ukraine created the Diia app to facilitate mundane government tasks like renewing licensing permits, paying for parking tickets, and reporting potholes.<sup>12</sup> However, prompted by the Russian invasion on February 24, 2022,<sup>13</sup> Ukraine “repurposed the app to serve as frontline eyes and ears for the Ukrainian army.”<sup>14</sup> The Diia app enables Ukrainians to submit geolocated photos and videos of Russian military forces, including tanks, troops, and military assets.<sup>15</sup> Notably, the app’s only purpose is to “identify, track, and transmit data in real time.”<sup>16</sup> After aggregating the data on a map, intelligence officials use the findings to inform defense and counterstrike efforts.<sup>17</sup>

Thus far, Ukraine’s government has encouraged civilians to use the Diia app.<sup>18</sup> For example, Gulsana Mamedieva, an official in Ukraine’s Ministry of Digital Transformation explained how “[w]e really urge citizens to [use the Diia app].”<sup>19</sup> Similarly, the Ministry of Digital Transformation has pushed for widespread civilian usage, stating that “[a]nyone can help our army locate Russian troops . . . [by] [u]s[ing] our chat bot to inform the Armed Forces.”<sup>20</sup> Moreover, on April 5, 2023, the Defence Intelligence of Ukraine posted on its website to thank Crimean residents for their “high-quality cooperation” and “ask to give information about location of the occupation forces and weapons” and other Russian military operations.<sup>21</sup> The post ended with a call to action: “Together [we] kick occupiers out of our native land!”<sup>22</sup>

Seeking to supplement the government-created Diia app, Ukrainian volunteers developed a similar app, ePPO, which facilitates civilian reports of

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<sup>12</sup> *Id.*

<sup>13</sup> Associated Press, *1 Year After the Invasion Began, A Timeline of Russia’s War in Ukraine*, PBS NEWS HOUR (Feb. 19, 2023, 10:25 AM), <https://www.pbs.org/newshour/world/1-year-after-the-invasion-began-a-timeline-of-russias-war-in-ukraine>.

<sup>14</sup> *Id.* See also Lukasz Olejnik, *Smartphones Blur the Line Between Civilian and Combatant*, WIRED (June 6, 2022, 9:00 AM), <https://www.wired.com/story/smartphones-ukraine-civilian-combatant/> (explaining how the Ukrainian government’s Diia app “was once used by more than 18 million Ukrainians for things like digital IDS, but now it allows users to report the movements of invading soldiers through the ‘e-Enemy’ feature”).

<sup>15</sup> Feldstein, *supra* note 9.

<sup>16</sup> Dan Maurer, *A State’s Legal Duty to Warn Its Own Civilians on Consequences of Direct Participation in Hostilities*, LIEBER INST: W. POINT (Feb. 21, 2023), <https://lieber.westpoint.edu/states-legal-duty-warn-civilians-consequences-direct-participation-hostilities/>.

<sup>17</sup> Feldstein, *supra* note 9.

<sup>18</sup> See Luke James, *Military Information Sharing by Ukrainian Citizens in the Digital Environment: DPH? – Blurring of Lines Between Civilian and Military Actors in Ukraine*, OPINIO JURIS (Dec. 9, 2022), <http://opiniojuris.org/2022/09/12/military-information-sharing-by-ukrainian-citizens-in-the-digital-environment-dph-blurring-of-lines-between-civilian-and-military-actors-in-ukraine/> (“Sharing of Russian positions is overtly encouraged by Ukraine’s Ministry of Digital Development in the Diya mobile app.”).

<sup>19</sup> Feldstein, *supra* note 9.

<sup>20</sup> Olejnik, *supra* note 14.

<sup>21</sup> *Defence Intelligence of Ukraine Addresses to Residents of Temporarily Occupied Crimea Regarding Cooperation with Ukraine’s Defence Forces* (Apr. 5, 2023), <https://gur.gov.ua/en/content/hur-mo-ukrainy-zvertaietsia-do-meshkantsiv-tymchasovo-okupovanoho-krymu-shchodo-spivpratsi-z-sylamy-oborony-ukrainy.html>.

<sup>22</sup> *Id.*

Russian drones, missiles, and other air threats.<sup>23</sup> Using a cell phone's GPS and compass, the ePPO app allows users to "point their device[s] in the direction of an incoming object and press a single button for it to send a location report to the country's military."<sup>24</sup> According to the Office of the Commander-in-Chief of the Armed Forces of Ukraine, the ePPO app's functionality means that "every citizen of Ukraine can join the anti-missile and anti-aircraft defense of our skies."<sup>25</sup>

Civilians' use of new forms of technology, including the Diia and ePPO apps, has empowered Ukraine to counterbalance Russia's conventional military strength.<sup>26</sup> For example, in March 2022, Ukraine and Russia battled for Voznesensk, a town of about 35,000 people.<sup>27</sup> Ukrainian civilians sent coordinates of Russian tanks and direct artillery fire to the Ukrainian army via the Viber social messaging app.<sup>28</sup> Armed with this information, Ukrainian forces expelled the Russian army, forcing Russian soldiers to abandon nearly thirty vehicles, including tanks, armored personnel carriers, rocket launchers, trucks, and a wrecked Mi-24 helicopter gunship.<sup>29</sup> The ePPO app has been particularly effective against Russia's use of Shahed-136 drones, which, due to their relatively slow cruising speed and distinctive sound, are quite easy to detect from the ground.<sup>30</sup> For example, on October 22, 2022, data from the ePPO app provided Ukrainian forces with the information necessary to shoot down a Kalibr cruise missile.<sup>31</sup> Therefore, digital technology, largely involving smartphones, have enabled civilians to "assist in the war effort," which has been "critical to Ukraine's success in the early stages of the war."<sup>32</sup>

Given its impact on the conflict between Russia and Ukraine, new technology complicates the application of international legal principles, namely, direct participation in hostilities. Part I introduces the concepts of distinction and direct participation in hostilities. Part II examines how new forms of technology, including the Diia and ePPO apps, complicate the direct participation in hostilities

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<sup>23</sup> Dan Sabbagh, *Ukrainians Use Phone App to Spot Deadly Russian Drone Attacks*, THE GUARDIAN (Oct. 29, 2022, 8:39 AM), <https://www.theguardian.com/world/2022/oct/29/ukraine-phone-app-russia-drone-attacks-epo>.

<sup>24</sup> *Id.* See also Michael N. Schmitt & William Casey Biggerstaff, *Ukraine Symposium – Are Civilians Reporting with Cell Phones Directly Participating in Hostilities?*, LIEBER INST.: W. POINT (Nov. 2, 2022), <https://lieber.westpoint.edu/civilians-reporting-cell-phones-direct-participation-hostilities/> (explaining how an ePPO user "toggles the applicable category from a menu of options: airplane, helicopter, drone, rocket, or explosion," "points the phone in the direction of the incoming object and presses a single button," wherein "[u]sing its internal GPS and compass, the phone reports location and trajectory data to nearby air defense units, which use the information to supplement their targeting radars").

<sup>25</sup> Schmitt & Biggerstaff, *supra* note 24.

<sup>26</sup> Feldstein, *supra* note 9.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> See Sabbagh, *supra* note 23; Schmitt & Biggerstaff, *supra* note 24.

<sup>31</sup> Schmitt & Biggerstaff, *supra* note 24.

<sup>32</sup> Eric Stutchbury & Claudette Werden, *Mobile Phones Have Changed the Rules of War. Ukrainians Are Using That to Their Advantage*, ABC NEWS AUSTL. (June 8, 2022, 10:30 PM), <https://www.abc.net.au/news/2022-06-09/mobile-phones-are-changing-the-way-war-is-fought-in-ukraine/101085610> (quoting John Arquilla, Emeritus Professor of US Naval Postgraduate School).

analysis by blurring the lines between civilians and combatants. Part III recommends potential legal and policy solutions, which are designed to start a discussion about what precedents the international legal community would like to establish regarding civilians' direct participation in hostilities via technology.

## I. LEGAL LANDSCAPE

Designed for use by civilians, the Diia and ePPO apps raise two key issues of international humanitarian law, each of which implicate civilian protection in war—distinction and direct participation in hostilities.<sup>33</sup>

### A. *Distinction*

Often referred to as “the combatant’s most significant battlefield principle,”<sup>34</sup> distinction requires parties to a conflict to not only distinguish between civilians and combatants but also to target combatants only.<sup>35</sup> Although protecting civilians is a key component of international law of armed conflict,<sup>36</sup> international law does not clearly define who constitutes a civilian. For example, the Geneva Conventions of 1949 do not define “civilian.”<sup>37</sup> Instead, the Geneva Conventions refer to individuals that are entitled to the Conventions’ safeguards as “protected persons.”<sup>38</sup> Article 50(1) of Additional Protocol I defines a civilian as “any person who does not belong to one of the categories of persons referred to in Article 4(A)(1), (2), (3) and (6) of the Third Geneva Convention and in Article 43 of Additional Protocol I.”<sup>39</sup> Each of the provisions mentioned in Article 50(1) of

<sup>33</sup> See Olejnik, *supra* note 14.

<sup>34</sup> GARY D. SOLIS, *THE LAW OF ARMED CONFLICT: INTERNATIONAL HUMANITARIAN LAW IN WAR* 210 (3d ed. 2022).

<sup>35</sup> See INTERNATIONAL COMMITTEE OF THE RED CROSS, *RULE 1: THE PRINCIPLE OF DISTINCTION BETWEEN CIVILIANS AND COMBATANTS*, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule1> (“Rule 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 civilians.”).

<sup>36</sup> See COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, ¶ 598 (Yves Sandoz, Christophe Swinarski & Bruno Zimmermann eds., 1987) [hereinafter 1987 Commentary on Additional Protocol I] (explaining how “the civilian population and civilian objects must be respected and protected in armed conflict”).

<sup>37</sup> See, e.g., Convention (IV) Relative to the Protection of Civilian Persons in Time of War, art. 10, Aug. 12, 1949 [hereinafter Geneva Convention IV] (“The provisions of the present Convention constitute no obstacle to the humanitarian activities which the International Committee of the Red Cross or any other impartial humanitarian organization may, subject to the consent of the Parties to the conflict concerned, undertake for the protection of civilian persons and for their relief.”) (emphasis added).

<sup>38</sup> See *id.* art. 4 (defining protected persons as “those who at a given moment and in any manner whatsoever, find themselves, in case of a conflict or occupation, in the hands of a Party to the conflict of Occupying Power of which they are not nationals”); *id.* art. 27 (describing the treatment to which “[p]rotected persons” are entitled).

<sup>39</sup> Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 50(1), June 8, 1977, 1125 U.N.T.S. 3 [hereinafter Additional Protocol I].

Additional Protocol I refers to members of the armed forces of a party to the conflict or members of other militias.<sup>40</sup> Thus, a “civilian” may be defined as the converse of a combatant—a noncombatant.<sup>41</sup> Moreover, Additional Protocol II refers to civilians without defining the term.<sup>42</sup> Responding to the lack of definition in Additional Protocols I and II, the U.S. Department of Defense Law of War Manual defines a civilian as “a person who is neither part of nor associated with an armed force or group, nor otherwise engaging in hostilities.”<sup>43</sup>

Distinction forms the bedrock of international humanitarian law (“IHL”). As stated in the St. Petersburg Declaration of 1868, the “only legitimate object” for states during an armed conflict is “to weaken the military forces of the enemy.”<sup>44</sup> Distinction therefore seeks to “ensure respect for and protection of the civilian population and civilian objects.”<sup>45</sup> Thus, civilians are entitled to protection “against dangers arising from military operations.”<sup>46</sup> To accomplish this objective, distinction, as articulated under customary IHL, imposes two interrelated obligations on parties to an armed conflict.

First, a party must differentiate between civilians and combatants.<sup>47</sup> For example, Article 48 of Additional Protocol I states that “the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives.”<sup>48</sup> The United States Department of Defense Law of War Manual (“DoD Law of War Manual”) echoes this sentiment by noting that “distinction seeks to separate the armed forces and the civilian population.”<sup>49</sup> This obligation to distinguish between civilians and combatants

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<sup>40</sup> See *id.* art. 4(A)(1) (referring to “[m]embers of the armed forces of a Party to the conflict as well as members of militias or volunteer corps forming part of such armed forces”); *id.* 4(A)(2) (describing “[m]embers of other militias and members of other volunteer corps”); *id.* 4(A)(3) (classifying “[m]embers of regular armed forces who profess allegiance to a government or an authority not recognized by the Detaining Power” as prisoners of war); *id.* 4(A)(6) (referring to *levee en masse*). See also Additional Protocol I, *supra* note 39, art. 43 (describing armed forces of a party to a conflict).

<sup>41</sup> Prosecutor v. Galić, Case No. IT-98-29-T, Judgment, ¶ 47 (Int’l Crim. Trib. for the former Yugoslavia Dec. 5, 2003) (describing how, under Additional Protocol I, a civilian is “defined negatively as anyone who is not a member of the armed forces or of an organized military group belonging to a party to the conflict”).

<sup>42</sup> See, e.g., Protocol Additional to the Geneva Conventions of August 12, 1949, and Relating to the Protection of Victims of Non-international Armed Conflicts art. 13, June 8, 1977, 1125 U.N.T.S. 609 [hereinafter Additional Protocol II] (“1. The civilian population and individual civilians shall enjoy general protection against the dangers arising from military operations.”).

<sup>43</sup> OFFICE OF THE GENERAL COUNSEL, U.S. DEPARTMENT OF DEFENSE, LAW OF WAR MANUAL § 4.8.1.5 (rev. ed., Dec. 2016) [hereinafter DOD LAW OF WAR MANUAL].

<sup>44</sup> 1868 St. Petersburg Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight, Dec. 11, 1868, *reprinted in* 1 American Journal of International Law § 83 (1907).

<sup>45</sup> Additional Protocol I, *supra* note 39, art. 48.

<sup>46</sup> *Id.* art. 51(1).

<sup>47</sup> See *supra* note 35 (“The parties to the conflict must at all times distinguish between civilians and combatants.”).

<sup>48</sup> Additional Protocol I, *supra* note 39, art. 48.

<sup>49</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 2.5.1, at 62.

applies to both the attacking and defending parties in an armed conflict.<sup>50</sup> That is, in addition to discriminating in attacks against the enemy,<sup>51</sup> the DoD Law of War Manual requires a party to distinguish among its *own* persons and objects by “us[ing] its best efforts to distinguish or separate its military forces and war-making activities from members of the civilian population to the maximum extent feasible.”<sup>52</sup> To fulfill this duty, parties to a conflict must adopt measures to visually distinguish military forces from civilians,<sup>53</sup> physically separate military objectives from the civilian population to the extent possible,<sup>54</sup> and avoid using protected persons to insulate military objectives from attack.<sup>55</sup>

Second, absent direct participation in hostilities,<sup>56</sup> a party may not lawfully target civilians or civilian objects.<sup>57</sup> Article 48 of Additional Protocol I states that parties to a conflict “shall direct their operations only against military objectives.”<sup>58</sup> Moreover, Article 51(2) of Additional Protocol I extends protection from targeting to the civilian population as a whole by noting that the “civilian population as such, as well as individual civilians, shall not be the object of attack.”<sup>59</sup> Similarly, the United Kingdom Joint Service Manual of the Law of Armed Conflict states that “the civilian population and individual civilians shall not be the object of attack.”<sup>60</sup>

The Rome Statute, which established the International Criminal Court, also reflects this principle by finding that “intentionally directing attacks against the civilian population as such or against individual civilians not taking direct part in hostilities” constitutes a war crime in international armed conflicts.<sup>61</sup> Furthermore, in the *Blaškić* Judgment of 2000, the Trial Chamber of the International Criminal Tribunal for the Former Yugoslavia (ICTY) noted that “[t]argeting civilians or civilian property is an offence when not justified by military necessity.”<sup>62</sup> The DoD Law of War Manual reiterates the need to refrain from targeting civilians and other

<sup>50</sup> *Id.* § 2.5, at 62 (“Parties to a conflict must apply a framework of legal classes for persons and objects by: (1) discriminating in conducting attacks against the enemy; and (2) distinguishing a party’s own persons and objects.”).

<sup>51</sup> *Id.* § 2.5.2.

<sup>52</sup> *Id.* § 2.5.3, at 63.

<sup>53</sup> *See id.*; *see also id.* § 2.5.3.1 (describing guidelines for how to visually distinguish civilians from military forces).

<sup>54</sup> *See id.* § 2.5.3; *id.* § 2.5.3.2 (listing “feasible measures” for physically separating a party’s military forces and objectives from the civilian population and other protected persons).

<sup>55</sup> *See* DoD LAW OF WAR MANUAL, *supra* note 43, § 2.5.3, at 63; *id.* § 2.5.3.3, at 63 (explaining the need to “refrain from the misuse of civilians and other protected persons and objects to shield their own military objectives”).

<sup>56</sup> *See infra* Part I.B for further discussion of direct participation in hostilities.

<sup>57</sup> *See, e.g.,* Yoram Dinstein, *Protection from Attack of Civilians and Civilian Objects*, in THE CONDUCT OF HOSTILITIES UNDER THE LAW OF INTERNATIONAL ARMED CONFLICT 165 (4th ed. 2022) (“The first and foremost inference from the principle of distinction is that direct attacks against either civilians or civilian objects are forbidden.”).

<sup>58</sup> Additional Protocol I, *supra* note 39, art. 48.

<sup>59</sup> *Id.* art. 51(2).

<sup>60</sup> UNITED KINGDOM MINISTRY OF DEFENCE, THE MANUAL OF THE LAW OF ARMED CONFLICT ¶ 5.3 (2004) [hereinafter UK MANUAL].

<sup>61</sup> Rome Statute of the International Criminal Court art. 8(2)(b)(i), July 17, 1998, 2187 U.N.T.S. 90 [hereinafter Rome Statute]. *See* Yoram Dinstein, *supra* note 57, at 167.

<sup>62</sup> Prosecutor v. Blaškić, Case No. IT-95-T, Judgment, ¶ 180 (Int’l Crim. Trib. for the former Yugoslavia Mar. 3, 2000).



protected persons or objects.<sup>63</sup> Notably, this duty persists even if an adversary fails to distinguish its military objectives from civilians.<sup>64</sup> When discriminating between civilian and military objectives in targeting decisions, parties must rely on the information available at the time.<sup>65</sup>

However, despite the protections mentioned above, the principle of distinction does not insulate civilians absolutely from being targeted in war. Rather, civilians may be targeted lawfully “for such time as they take a direct part in hostilities.”<sup>66</sup>

### *B. Direct Participation in Hostilities*

Stemming from a desire to balance military necessity and humanitarian concerns,<sup>67</sup> Article 51(3) of Additional Protocol I states that civilians remain protected from attack in an armed conflict “unless and for such time as they take a direct part in hostilities.”<sup>68</sup> That is, when a civilian directly participates in hostilities, she loses her immunity from attack.<sup>69</sup> Although some countries, like the United States, hold that Article 51(3) of AP I does not reflect customary international law,<sup>70</sup> the principle underlying direct participation in hostilities has been widely accepted.<sup>71</sup> For example, Common Article 3 of the 1949 Geneva Conventions establishes humane treatment for those “taking no active part in hostilities.”<sup>72</sup> Like discussed above,<sup>73</sup> the Rome Statute makes it a war crime to attack civilians “not taking direct part in hostilities.”<sup>74</sup> Military manuals, including

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<sup>63</sup> See DoD LAW OF WAR MANUAL, *supra* note 43, § 2.5.2 (explaining how “consistent with humanity, parties may not make the civilian population and other protected persons and objects the object of attack”) (emphasis in original)).

<sup>64</sup> *Id.* § 2.5.5.

<sup>65</sup> See *id.*

<sup>66</sup> Additional Protocol I, *supra* note 39, art. 51.3.

<sup>67</sup> Michael N. Schmitt, *The Interpretive Guidance on the Notion of Direct Participation in Hostilities: A Critical Analysis*, 1 HARV. NAT’L SEC. J. 5, 11 (2010).

<sup>68</sup> *Id.*

<sup>69</sup> See Dinstein, *supra* note 57, at 200 (describing how civilians’ direct participation in hostilities is not a war crime or forbidden by international law of armed conflict but rather a loss of protection from attack).

<sup>70</sup> DoD LAW OF WAR MANUAL, *supra* note 43, § 5.8.1.2 (explaining how the United States does not view Article 51(3) of AP I, as drafted, to reflect customary international law).

<sup>71</sup> See Michael N. Schmitt, *Deconstructing Direct Participation in Hostilities: The Constitutive Elements*, 42 INT’L L. & POL. 697, 702 (2010) (listing the sources that have adopted the notion of direct participation in hostilities).

<sup>72</sup> Convention (I) for the Amelioration of the Condition of the Wounded and Sick in the Armed Forces in the Field art. 3(1), Aug. 12, 1949, 6 U.S.T. 3114, 75 U.N.T.S. 31 [hereinafter Geneva Convention I]; Convention (II) for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea art. 3(1), Aug. 12, 1949, 6 U.S.T. 3217, 75 U.N.T.S. 85 [hereinafter Geneva Convention II]; Convention (III) Relative to the Treatment of Prisoners of War art. 3(1), Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135 [hereinafter Geneva Convention III]; Geneva Convention (IV), *supra* note 37, art. 3(1).

<sup>73</sup> See *supra* note 61 and accompanying text.

<sup>74</sup> Rome Statute, *supra* note 61, art. 8(2)(b)(i).

those of the United States and United Kingdom, incorporate this principle.<sup>75</sup> Rule 6 of the International Committee of the Red Cross's (ICRC) Customary International Law Rules also echoes this notion.<sup>76</sup>

Direct participation in hostilities turns on *conduct* rather than status.<sup>77</sup> That is, although direct participation in hostilities strips a civilian of her immunity from targeting “for such time” as she directly participates, she is *not* converted into a combatant.<sup>78</sup> Rather, she remains a civilian, albeit one who can be targeted in an armed conflict.<sup>79</sup> A civilian’s loss of immunity from attack via direct participation thus yields three main consequences with respect to military operations during an armed conflict.<sup>80</sup> First, a civilian who directly participates in hostilities may be “specifically and intentionally targeted,” so long as the attack complies with all other IHL requirements.<sup>81</sup> Second, so long as civilians directly participate in hostilities, the attacking party is not required to consider their death or injury in a proportionality analysis.<sup>82</sup> Third, attacks on civilian direct participants remain consistent with a party’s obligation under Article 57 of Additional Protocol I to take “constant care” to “spare the civilian population, civilians and civilian objects.”<sup>83</sup> That is, although civilians directly participating in hostilities retain their civilian status, an attacking party need not take appropriate precautions to insulate them from harm.<sup>84</sup>

Despite widespread acceptance of the principle of direct participation in hostilities,<sup>85</sup> the international legal community lacks a single definitive source regarding its scope and application.<sup>86</sup> Therefore, the boundaries of direct participation in hostilities are often addressed on a case-by-case basis.<sup>87</sup> In practice,

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<sup>75</sup> See DoD LAW OF WAR MANUAL, *supra* note 43, § 5.8, at 226 (“Civilians who take a direct part in hostilities forfeit protection from being made the object of attack.”); *id.* § 5.8.1.2 (describing how the United States “supports the customary principle on which Article 51(3) is based”); UK MANUAL, *supra* note 60, § 5.3.2.

<sup>76</sup> INTERNATIONAL COMMITTEE OF THE RED CROSS, RULE 6: CIVILIANS’ LOSS OF PROTECTION FROM ATTACK, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule6> (“Rule 6. Civilians are protected against attack unless and for such time as they take a direct part in hostilities.”).

<sup>77</sup> See Sean Watts, *Hays Parks and Direct Participation in Hostilities*, LIEBER INST.: W. POINT (Oct. 7, 2021), <https://lieber.westpoint.edu/hays-parks-direct-participation-hostilities/> (“Unlike the combatant-civilian distinction that resorts to legal status to withhold or assign protection, the direct participation standard is *conduct*-based.”) (emphasis added). See also Maurer, *supra* note 16 (describing how “conduct opens the person to the prospect of being made the lawful target of a direct attack”).

<sup>78</sup> See Watts, *supra* note 77 (“Civilians who take direct part in hostilities do not lose their civilian status. Rather, their conduct deprives them of protection from attack.”).

<sup>79</sup> See Schmitt, *supra* note 67, at 11.

<sup>80</sup> See *id.* at 13–14.

<sup>81</sup> *Id.* at 13.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.* at 13–14.

<sup>84</sup> *Id.*

<sup>85</sup> See Schmitt, *supra* note 71, at 699.

<sup>86</sup> See *id.*

<sup>87</sup> *Id.* at 705 (noting how “[s]tates tend to address direct participation issues in a case-by-case fashion”). See, e.g., U.S. NAVY, U.S. MARINE CORPS & U.S. COAST GUARD, NWP 1-14M/MCTP 11-10B/COMDTPUB P5800.7A, THE COMMANDER’S HANDBOOK ON THE LAW OF NAVAL OPERATIONS ¶ 8.2.2 (2022) (“The qualification of an act as direct participation in hostilities is a

parties often disagree about the scope and application of direct participation in hostilities.<sup>88</sup> Consequently, international actors and scholars have articulated varying standards for evaluating direct participation in hostilities.

### 1. *Differing Approaches to Direct Participation in Hostilities*

This paper will focus on two prominent approaches to defining direct participation in hostilities—the ICRC’s *Interpretive Guidance*<sup>89</sup> and the United States Department of Defense Law of War Manual (“DoD Law of War Manual”).<sup>90</sup>

#### a. ICRC’s *Interpretive Guidance*

The ICRC outlined a three-factor test for evaluating direct participation in hostilities.<sup>91</sup> First, the act must satisfy the “threshold of harm,” which means that the specific 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 attack.”<sup>92</sup> When determining whether an act “adversely affect[s]” an adversary’s military operations or capacity, the “qualitative gravity” of the impact does not matter.<sup>93</sup> Therefore, military harm is not restricted to death, injury, or destruction of military personnel and objects.<sup>94</sup> Rather, the ICRC defines military harm broadly, even noting that “transmitting tactical targeting information for an attack” would constitute an act that adversely affects an adversary’s military operations.<sup>95</sup> Moreover, the military harm stemming from a civilian’s direct participation need not materialize to satisfy the threshold of harm—the objective likelihood of the act resulting in harm is sufficient.<sup>96</sup> Harm is likely if it “may reasonably be expected to result from an act in the prevailing circumstances.”<sup>97</sup>

Second, to constitute direct participation in hostilities, the act must have a “direct causal link” to the “harm likely to result either from that act, or from a

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fact-dependent analysis that must be made after analyzing all relevant available facts in the circumstances prevailing at the time.”); UK MANUAL, *supra* note 60, § 5.3.3 (“Whether civilians are taking a direct part in hostilities is a question of fact.”); DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3, at 229 (describing how “[w]hether an act by a civilian constitutes taking a direct part in hostilities is likely to depend highly on the context”); Prosecutor v. Strugar, Case No. IT-01-42-A, Judgment, ¶ 178 (Int’l Crim. Trib. for the former Yugoslavia July 17, 2008) (“Such an enquiry [into direct participation in hostilities] must be undertaken on a case-by-case basis, having regard to the individual circumstances of the victim at the time of the alleged offence.”).

<sup>88</sup> See Dinstein, *supra* note 57, at 201.

<sup>89</sup> INTERNATIONAL COMMITTEE OF THE RED CROSS, INTERPRETIVE GUIDANCE ON THE NOTION OF DIRECT PARTICIPATION IN HOSTILITIES UNDER INTERNATIONAL HUMANITARIAN LAW (2009) [hereinafter INTERPRETIVE GUIDANCE].

<sup>90</sup> See generally DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.

<sup>91</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 46.

<sup>92</sup> *Id.* at 47.

<sup>93</sup> See *id.*

<sup>94</sup> *Id.*

<sup>95</sup> *Id.* at 48.

<sup>96</sup> *Id.* at 47.

<sup>97</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 47.

coordinated military operation of which that act constitutes an integral part.”<sup>98</sup> The causal link must be a “sufficiently close causal relation between the act and the resulting harm,”<sup>99</sup> regardless of the civilian’s temporal or geographic proximity.<sup>100</sup> The ICRC rejected the “materially facilitating harm” standard out of concerns of overinclusion, which would likely subject significant portions of the civilian population to direct attack.<sup>101</sup> Instead, direct causation shall be interpreted as requiring “one causal step.”<sup>102</sup> Despite the tight connection implicit in “one causal step,” the ICRC noted that “it is neither necessary nor sufficient that the act be indispensable to the causation of harm.”<sup>103</sup> For example, under the ICRC’s standard, a person acting as a lookout would still be considered a direct participant in hostilities even though his action is not indispensable to causing the harm.<sup>104</sup>

Third, the act must have a belligerent nexus such that the act was “specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another.”<sup>105</sup> The belligerent nexus requirement seeks to exclude from the scope of direct participation in hostilities any activities that occur during an armed conflict that satisfy the threshold of harm but are otherwise unconnected to the conflict.<sup>106</sup> For example, if an armed conflict were ongoing, a fatality during a shootout between police and hostage-takers in an armed robbery would not constitute direct participation in hostilities due to the lack of a belligerent nexus.<sup>107</sup> Although this fatality likely satisfied the threshold of harm, no belligerent nexus existed because the harm was not connected to supporting or undermining parties to the armed conflict.<sup>108</sup>

The belligerent nexus requirement is an objective inquiry that evaluates the design of the act rather than a civilian’s subjective intent.<sup>109</sup> Such an inquiry “must be based on information reasonably available to the person called on to make the determination,” namely, “objectively verifiable factors” supporting a belligerent nexus.<sup>110</sup> If this analysis suggests that a civilian’s conduct, understood in light of the circumstances at the time, “can reasonably be perceived as an act designed to support one party to the conflict” by causing the necessary threshold of harm, such conduct establishes a belligerent nexus.<sup>111</sup> If there is any doubt as to whether the civilian conduct in question satisfies the foregoing three elements of direct participation in hostilities, the ICRC’s *Interpretive Guidance* presumes that a civilian has *not* directly participated, thereby retaining his protection from attack.<sup>112</sup>

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<sup>98</sup> *Id.* at 50.

<sup>99</sup> *Id.* at 52.

<sup>100</sup> *Id.* at 55.

<sup>101</sup> *Id.* at 52.

<sup>102</sup> *Id.* at 53.

<sup>103</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 54.

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* at 58.

<sup>106</sup> *Id.* at 60.

<sup>107</sup> *See id.*

<sup>108</sup> *See id.*

<sup>109</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 59.

<sup>110</sup> *Id.* at 63.

<sup>111</sup> *Id.* at 63–64.

<sup>112</sup> *Id.* at 75–76.

Assuming that all three elements are satisfied, direct participation in hostilities extends to not only execution of the activities but also preparatory measures and “deployment to and return from the location of its execution, where they constitute an integral part of such a specific act or operation.”<sup>113</sup>

Scholars like Michael N. Schmitt have criticized the *Interpretive Guidance* for defining the elements of direct participation in hostilities too restrictively, which results in an “overly narrow interpretation.”<sup>114</sup> For example, Schmitt argues that by focusing solely on the adverse effect on the enemy, the threshold of harm element is underinclusive and should be reformulated to include acts that benefit a party’s military capacity.<sup>115</sup> Similarly, Schmitt also finds the definition of direct causation to be underinclusive, suggesting instead that causation be determined based on whether an act is an “integral part” of the harm.<sup>116</sup> Finally, Schmitt advocates for rephrasing the belligerent nexus requirement to include acts “in support of a party to the conflict *or* to the detriment of another,” which would capture more acts.<sup>117</sup> Although the *Interpretive Guidance*’s three-part framework provides a helpful baseline for analysis, countries like the United States have deviated from its standard and adopted their own version of direct participation in hostilities.

#### b. U.S. DoD Law of War Manual

At the outset, the DoD Law of War Manual states that although portions of the ICRC’s *Interpretive Guidance* cohere with customary international law, “the United States has not accepted significant parts of the ICRC’s interpretive guidance as accurately reflecting customary international law.”<sup>118</sup> Therefore, despite some overlap with the ICRC’s *Interpretive Guidance*, the DoD Law of War Manual establishes a separate standard for direct participation in hostilities. Notably, the DoD Law of War Manual articulates a broader version of direct participation in hostilities.

Under the U.S. standard, direct participation in hostilities encompasses acts “intended to cause actual harm to the enemy,” which includes acts that are “an integral part of combat operations or that effectively and substantially contribute to an adversary’s ability to conduct or sustain combat operations.”<sup>119</sup> For example, under certain circumstances, training and logistical support may constitute direct participation in hostilities.<sup>120</sup> By contrast, the *Interpretive Guidance* excludes training and “financial, administrative, or political support to armed actors” from activities that forfeit a civilian’s protection from attack.<sup>121</sup>

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<sup>113</sup> *Id.* at 65.

<sup>114</sup> Schmitt, *supra* note 71, at 720.

<sup>115</sup> *Id.* at 718–20.

<sup>116</sup> *Id.* at 727–29.

<sup>117</sup> *Id.* at 735.

<sup>118</sup> DoD LAW OF WAR MANUAL, *supra* note 43, § 5.8.1.2, at 227.

<sup>119</sup> *Id.* § 5.8.3, at 228–29.

<sup>120</sup> *Id.*

<sup>121</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 66.

Rather than articulate a more formalized test like the *Interpretive Guidance*'s three-part framework, the DoD Law of War Manual lists potentially relevant considerations.<sup>122</sup> Such factors include the degree to which the act harms the adversary's persons or objects, the extent of connection between the act and hostilities, the purpose motivating the act, the significance of the act to a party's military operations, and the degree to which the activity is viewed as a military one.<sup>123</sup> To supplement these considerations, the Manual also lists examples of activities that do and do not constitute direct participation in hostilities.<sup>124</sup> For the purposes of this paper, a particularly relevant example of taking a direct part in hostilities is "providing or relaying information of immediate use in combat operations, such as . . . acting as an artillery spotter or member of a ground observer corps or otherwise relaying information to be used to direct an airstrike, mortar attack or ambush; and acting as a guide or lookout for combatants conducting military operations."<sup>125</sup> Ultimately, the DoD Law of War Manual acknowledges that analyzing whether a civilian's act constitutes direct participation in hostilities depends largely on the context of individual situations.<sup>126</sup>

2. *Shared Problem in Analyzing Direct Participation in Hostilities: How Much Time is "For Such Time?"*

Regardless of which approach to direct participation in hostilities is adopted, a common issue arises—how much time is "for such time"? Since civilians remain protected from targeting "unless and for such time" as they directly participate in hostilities, the legal standard must address the duration of a civilian's loss of protection.<sup>127</sup> Since civilians do not constantly engage in hostile acts, a "revolving door" of civilian protection emerges wherein civilians lose and regain protection from attack whenever they stop and start directly participating.<sup>128</sup> How

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<sup>122</sup> DoD LAW OF WAR MANUAL, *supra* note 43, § 5.8.2.1.

<sup>123</sup> *Id.*

<sup>124</sup> *Id.* §§ 5.8.3.1, 5.8.3.2.

<sup>125</sup> *Id.* § 5.8.3.1, at 232.

<sup>126</sup> *Id.* § 5.8.3, at 229.

<sup>127</sup> Additional Protocol I, *supra* note 39, art. 51(3); INTERNATIONAL COMMITTEE OF THE RED CROSS, RULE 6: CIVILIANS' LOSS OF PROTECTION FROM ATTACK, <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule6>; Prosecutor v. Blaškić, Case No. IT-95-T, Judgment, ¶ 157 (Int'l Crim. Trib. for the former Yugoslavia Mar. 3, 2000) (recognizing Article 51(3) of Additional Protocol I as customary international law).

<sup>128</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 70; DoD LAW OF WAR MANUAL, *supra* note 43, § 5.8.4.2 (defining "revolving door" protection as "the off-and-on protection in a case where a civilian repeatedly forfeits and regains his or her protection from being made the object of attack depending on whether or not the person is taking a direct part in hostilities at that exact time").

to formulate an appropriate legal standard to address these “revolving door” civilian participants has sparked significant debate.<sup>129</sup>

Under the *Interpretive Guidance*, a civilian regains protection from targeting “each time his or her engagement in a hostile act ends.”<sup>130</sup> This acceptance of the “revolving door” of protection stems from the notion that a civilian’s past participation in hostilities cannot reasonably predict his future behavior.<sup>131</sup> Therefore, despite complicating an adversary’s military operations, the *Interpretive Guidance* standard seeks to “protect the civilian population from erroneous or arbitrary attack . . . as long as such participation occurs on a merely spontaneous, unorganized or sporadic basis.”<sup>132</sup>

Many have criticized the *Interpretive Guidance*’s standard for the duration of loss of protection, finding it to be too restrictive.<sup>133</sup> For example, Bill Boothby contends that the ICRC’s *Interpretive Guidance* gives “regularly participating civilians a privileged, unbalanced, and unjustified status of protection in comparison to members of the opposing armed forces, who are continuously targetable.”<sup>134</sup> Similarly, Yoram Dinstein rejects a narrow interpretation of “for such time,” arguing that when determining the extent of a civilian’s direct participation in hostilities, “it is necessary to go as far as is reasonably required both ‘upstream’ and ‘downstream’ from the actual engagement.”<sup>135</sup> Furthermore, Dinstein argues that a civilian may not regain immunity from targeting “until he unambiguously opts out through extended nonparticipation or an affirmative act of withdrawal.”<sup>136</sup> Sharing some of these criticisms, certain countries, like the United States, chose to formulate their own approach to the temporal aspect of loss of protection.<sup>137</sup>

Unlike the *Interpretive Guidance*, the DoD Law of War Manual does not offer “revolving door protection” for civilians.<sup>138</sup> Finding that such protection would unfairly advantage civilians taking a direct part in hostilities over lawful combatants,<sup>139</sup> who may be targeted whenever and wherever, the United States’

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<sup>129</sup> See, e.g., Nils Melzer, *Background Paper – Direct Participation in Hostilities under International Humanitarian Law – Expert Meeting of Oct. 25–26, 2004* 34 (“At one end of the spectrum were experts who preferred narrowly defining temporal scope and favoured strictly limiting loss of protection to the period where DPH is actually being carried out. At the other end were experts who said that, once a person had undertaken an act constituting DPH, that person must clearly express a will to definitively disengage and offer assurances that he or she will not resume hostilities in order to regain protection against direct attack. However, opinions varied greatly and could not easily be divided into two groups supporting distinct positions.”).

<sup>130</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 71.

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> See, e.g., Bill Boothby, “And for such time as”: *The Time Dimension to Direct Participation in Hostilities*, 42 N.Y.U. J. INT’L L. & POL. 741 (2010). See generally Dinstein, *supra* note 57.

<sup>134</sup> Boothby, *supra* note 133, at 743.

<sup>135</sup> Dinstein, *supra* note 57, at 202.

<sup>136</sup> *Id.* at 203.

<sup>137</sup> See, e.g., DOD LAW OF WAR MANUAL, *supra* note 43.

<sup>138</sup> *Id.* § 5.8.4.2.

<sup>139</sup> *Id.* (describing the United States’ disagreement with “posited rules of international law that, if accepted, would operate to give the so-called ‘farmer by day, guerrilla by night’ greater protections than lawful combatants”).

approach rejects a narrow interpretation of “for such time.”<sup>140</sup> Moreover, the DoD Law of War Manual expresses concerns that adoption of a “revolving door” of protection would potentially diminish the entire civilian population’s protection from direct attack.<sup>141</sup> Consequently, if a civilian is deemed to be engaging in a pattern of direct participation in hostilities, he is subject to attack, even in the intervals between hostile acts.<sup>142</sup> Therefore, the DoD Law of War Manual requires a civilian to “permanently cease[] participation in hostilities” to regain immunity from targeting.<sup>143</sup>

Although requiring a civilian to “permanently cease[] participation in hostilities” likely subjects more civilians to targeting, the DoD Law of War Manual offers the more practical approach to the “revolving door” problem. The *Interpretive Guidance* fails to account for the practical difficulty of evaluating when exactly a civilian stops directly participating in hostilities. Parties to an armed conflict often operate based on incomplete information,<sup>144</sup> so requiring parties to carefully examine civilian behavior before every use of force seems unrealistic. Permanent cessation is still a fact-intensive, variable inquiry,<sup>145</sup> but it creates a more operational standard upon which parties can rely.

## II. SOCIAL MEDIA, TECHNOLOGY, AND DIRECT PARTICIPATION IN HOSTILITIES: COMPLICATING THE ANALYSIS

Despite their diverging standards with respect to duration of loss of protection, neither the ICRC’s *Interpretive Guidance* nor the U.S. DoD Law of War Manual address the role of technology and social media in direct participation in hostilities. Such oversight is problematic given how these new means of engaging in warfare have complicated the legal analysis.

### A. *Civilian Use of Digital Technology: Direct Participation in Hostilities?*

Given its impact on Russia’s military operations and capacity, civilian use of digital technology raises the issue of whether Ukrainian civilians using the Diia, ePPO, and other messaging apps are directly participating in hostilities, thereby subjecting them to targeting. Under the standards articulated by either the ICRC’s *Interpretive Guidance* or the U.S. DoD Law of War Manual, Ukrainian civilians’ use of such apps likely constitutes direct participation in hostilities.<sup>146</sup>

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<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

<sup>143</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.4.1.

<sup>144</sup> *Id.* § 5.3 (describing how “imperfect or lacking” information “will frequently be the case during armed conflict”).

<sup>145</sup> *See id.* § 5.8.4.1 (“The assessment of whether a person has permanently ceased participation in hostilities must be based on a good faith assessment of the available information.”).

<sup>146</sup> *See* Olejnik, *supra* note 14 (describing how “a civilian . . . with the use of their smartphone[] potentially becomes an active participant in a military sensor system”); Pontus Winther, *Military Influence Operations & IHL: Implications of New Technologies*, HUMANITARIAN L. & POL’Y (Oct. 27, 2017), <https://blogs.icrc.org/law-and-policy/2017/10/27/military-influence-operations-ihl-implications-new-technologies/> (“A civilian providing tactical intelligence about one party to the



A Ukrainian civilian using the Diia or ePPO app satisfies all three elements of direct participation in hostilities in the ICRC's *Interpretive Guidance*. First, providing tactical information about Russian troop movements and assets to the Ukrainian army probably satisfies the threshold of harm because an adverse effect on Russian military operations or capacity is likely.<sup>147</sup> Granted, some types of information, such as generalized information not specifically tied to the battlefield or military operations, would fail to satisfy the threshold of harm requirement.<sup>148</sup> However, the functionality of the Diia app differs from “civilians merely answering questions asked by passing military personnel,” which the ICRC has not recognized as direct participation in hostilities.<sup>149</sup> Unlike the passive act of a civilian responding to a passing soldier's questions, apps repurposed for military use, like the Diia app, are far more active.

Civilians contributing such information to the Ukrainian military may arguably parallel the scenario of passing military personnel asking civilians questions.<sup>150</sup> However, the extent to which Ukrainian civilians transmit information independently and proactively through the app distinguishes the two situations. For example, rather than merely reacting to questions, civilians using the Diia app are empowered to act as spotters for the military, proactively reporting an adversary's military movements.<sup>151</sup> That is, “any Ukrainian adult may *voluntarily* use this app *at their discretion* if and when they believe they have spotted a hostile Russian airborne threat.”<sup>152</sup> Furthermore, even if the information provided through the app never impacts Russian military forces, the threshold of harm element requires only an “objective *likelihood*” of harm, not “*materialization* of harm.”<sup>153</sup> By pointing to how civilians' app usage reveals troop positions to the Ukrainian army, Russian forces could likely establish an objective likelihood of harm.<sup>154</sup>

Second, reporting coordinates of Russian military positions through the Diia app, which feeds directly to the Ukrainian army and may be used to launch a

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conflict to the other party risks being considered a person directly participating in hostilities.”); Schmitt & Biggerstaff, *supra* note 24 (concluding that direct participation in hostilities sometimes applies to use of the ePPO app). *But see* Kubo Mačák & Mauro Vignati, *Civilianization of Digital Operations: A Risky Trend*, LAWFARE (Apr. 5, 2023, 8:16 AM), <https://www.lawfareblog.com/civilianization-digital-operations-risky-trend> (arguing that “most forms of civilian involvement,” including “the scenario of the repurposing of civilian smartphone apps for military use,” do not constitute direct participation in hostilities under the ICRC's *Interpretive Guidance*).

<sup>147</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 47.

<sup>148</sup> *See* Mačák and Vignati, *supra* note 146.

<sup>149</sup> INTERNATIONAL COMMITTEE OF THE RED CROSS, SECOND EXPERT MEETING ON THE NOTION OF DIRECT PARTICIPATION IN HOSTILITIES (Oct. 25, 2004), at 5.

<sup>150</sup> Mačák & Vignati, *supra* note 146 (drawing a parallel between “civilians merely answering questions asked by passing military personnel” and sharing information through a repurposed app) (quoting INTERNATIONAL COMMITTEE OF THE RED CROSS, SECOND EXPERT MEETING ON THE NOTION OF DIRECT PARTICIPATION IN HOSTILITIES (Oct. 25, 2004), at 5)).

<sup>151</sup> *See* Feldstein, *supra* note 9 (describing how Ukrainians use the app to report sightings of Russian military forces).

<sup>152</sup> Maurer, *supra* note 16 (emphasis added).

<sup>153</sup> *Id.* (emphasis in original).

<sup>154</sup> *See* James, *supra* note 18.

military strike against Russia, constitutes a sufficiently direct causal link.<sup>155</sup> Since intelligence sharing through the Diia app involves numerous individuals such that “a specific act [may] not on its own directly cause the required threshold of harm,” direct causation can still be satisfied so long as the act “constitutes an integral part of a concrete and coordinated tactical operation that directly causes such harm.”<sup>156</sup> Some argue that Ukrainian civilians’ involvement satisfies direct causation only when civilians uses the app to collect and share information “as part of a coordinated operation *for the purposes of a specific attack*.”<sup>157</sup> However, such a purposive argument appears to conflate the direct causation and belligerent nexus requirements.

To satisfy direct causation, the *Interpretive Guidance* does not require a specific purpose or intent underlying a civilian’s act.<sup>158</sup> In fact, the *Interpretive Guidance* lists the “transmission of tactical intelligence to attacking forces” as an example of an act in a collective operation that satisfies direct causation.<sup>159</sup> Moreover, since an act need not be indispensable to fulfill direct causation, the *Interpretive Guidance* even notes that “a person serving as one of several lookouts” would “certainly be taking a direct part in hostilities although his contribution may not be indispensable to the causation of harm.”<sup>160</sup> Since Ukrainian civilians using the Diia app act as the “frontline eyes and ears for the Ukrainian army,”<sup>161</sup> their app usage is a sufficiently direct cause.

Third, a civilian’s use of the Diia app likely satisfies the belligerent nexus requirement because revealing Russian positions during an armed conflict “would objectively be ‘of a nature’ to harm the enemy.”<sup>162</sup> Since a belligerent nexus turns on the “objective purpose of the act” rather than a subjective mental inquiry, hostile intent can reasonably be inferred from a Ukrainian civilian’s app usage, especially amidst an existential fight.<sup>163</sup> Although transmitting information about an adversary’s military actions may “enable civilian warning and evacuation, support the work of civil defense organizations, or [be used] for other nonbelligerent purposes,”<sup>164</sup> the Diia app has thus far been framed as serving belligerent aims. For example, the Ukrainian Ministry of Digital Transformation described the Diia app as a tool “to inform the Armed Forces,” wherein “anyone can help our army locate Russian troops.”<sup>165</sup> Consequently, Ukrainians’ use of the Diia app suggests a specific design to support the Ukrainian military and weaken the Russian military, thereby establishing a belligerent nexus. Having satisfied all three elements, Ukrainian civilians’ use of the Diia app likely constitutes direct participation in hostilities under the *Interpretive Guidance*.

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<sup>155</sup> *See id.*

<sup>156</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 54–55.

<sup>157</sup> Mačák & Vignati, *supra* note 146 (emphasis added).

<sup>158</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 54.

<sup>159</sup> *Id.* at 55.

<sup>160</sup> *Id.* at 54.

<sup>161</sup> Feldstein, *supra* note 9.

<sup>162</sup> James, *supra* note 18.

<sup>163</sup> INTERPRETIVE GUIDANCE, *supra* note 89, at 59.

<sup>164</sup> Mačák & Vignati, *supra* note 146.

<sup>165</sup> Olejnik, *supra* note 14.

Applying the U.S. standard for direct participation in hostilities to the conduct at issue yields the same conclusion. Ukrainian civilians' app use likely satisfies most, if not all, of the relevant considerations listed in the DoD Law of War Manual.<sup>166</sup> As discussed above, civilian app usage likely "causes harm to the opposing party's persons or objects" because transmitting data about Russian military troops or assets to the Ukrainian army is "likely to affect adversely the military operations or military capacity of the opposing party," especially if Ukrainian forces issue a strike based on that information.<sup>167</sup> The nature of the Diia app, wherein civilians submit photos and videos of Russian forces directly to the Ukrainian government,<sup>168</sup> necessarily means that the act is "temporally or geographically near the fighting" because civilians must be near the conflict to document it.<sup>169</sup> However, even if ordinary Ukrainians were not physically close to the fighting, their app usage would likely still be connected to the hostilities because reporting information is intimately "connected to military operations."<sup>170</sup>

Much like the belligerent nexus analysis above,<sup>171</sup> civilians' intent "to advance the war aims of one party to the conflict to the detriment of the opposing party"<sup>172</sup> can likely be inferred from the Ukrainian government's public statements regarding the purpose of the Diia app. Given the Ukrainian Ministry of Digital Transformation's description of the app,<sup>173</sup> any civilian using the Diia app likely seeks to support Ukraine's war efforts via reporting, which necessarily undermines Russia's military capacity. Similarly, by aiding the Ukrainian army's strikes against Russian forces, Ukrainian civilians' app usage is militarily significant to Ukraine's war effort.<sup>174</sup> As discussed earlier, Ukrainians' transmittal of tactical information via the Diia app and other messaging services has served as the basis for Ukrainian strikes on Russian forces, which impair Russian military capacity.<sup>175</sup>

Also, since information from the app has been used to strike Russian military forces, Ukrainian civilians' use of the Diia app likely constitutes an activity that is "viewed inherently or traditionally as a military one" because the activity "involves making decisions on the conduct of hostilities," namely, "determining the use or application of combat power."<sup>176</sup> Finally, civilians using the Diia app to report Russian military movements fall neatly within one of the DoD Law of War Manual's examples of direct participation in hostilities—"providing or relaying

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<sup>166</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3.

<sup>167</sup> *Id.*; see Mačák & Vignati, *supra* note 146.

<sup>168</sup> Feldstein, *supra* note 9.

<sup>169</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3.

<sup>170</sup> *Id.*

<sup>171</sup> See *supra* note 165 and accompanying text.

<sup>172</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3.

<sup>173</sup> See, e.g., Olejnik, *supra* note 14; Defence Intelligence of the Ministry of Defence of Ukraine, *Defence Intelligence of Ukraine Addresses to Residents of Temporarily Occupied Crimea Regarding Cooperation with Ukraine's Defence Forces* (Apr. 5, 2023), <https://gur.gov.ua/en/content/hur-mo-ukrainy-zvertaietsia-do-meshkantsiv-tymchasovo-okupovanoho-krymu-shchodo-spivpratsi-z-sylamy-oborony-ukrainy.html>); Feldstein, *supra* note 9.

<sup>174</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3.

<sup>175</sup> See *supra* notes 26–32 and accompanying text.

<sup>176</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.3.

information of immediate use in combat operations.”<sup>177</sup> This example includes “acting as an artillery spotter or member of a ground observer corps,” “relaying information to be used to direct an airstrike,” and “acting as a guide or lookout for combatants conducting military operations,”<sup>178</sup> each of which aptly describes Ukrainian civilians’ activity on the Diia and ePPO apps.<sup>179</sup> Consequently, much like under the ICRC’s *Interpretive Guidance*, Ukrainian civilians’ use of Diia and other apps fulfills the standard for direct participation in hostilities as articulated in the U.S. DoD Law of War Manual.

### B. *Blurring the Lines Between Civilian and Combatant*

As digital technology enables civilians to become “uniquely involved in warfighting,” the distinction between civilians and combatants grows increasingly blurrier.<sup>180</sup> By acting as spotters for the Ukrainian army, civilians’ information sharing meaningfully contributes to the armed conflict, thereby incorporating civilians as a quasi-component of the military system.<sup>181</sup>

Recently, the ICRC expressed concern about such “civilianization of military cyber and other digital activities.”<sup>182</sup> Although civilians have historically assisted in war efforts, the “digitalization of societies . . . has fundamentally shifted the role of civilian involvement in conflicts in both quality and quantity.”<sup>183</sup> That is, due to increasing digitalization, the barriers to civilian involvement in military operations are lower than ever before.<sup>184</sup> Mauro Vignati, the ICRC’s advisor on the digital technologies of warfare, noted how the rise of crowdsourcing intelligence from civilians, among other digital developments, “draw[s] civilians into a space that is normally occupied by the military, potentially blurring the lines between civilians and combatants in cyberspace.”<sup>185</sup> In response to the ICRC’s concerns, the Ukrainian government has begun drafting a law to incorporate its volunteer

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<sup>177</sup> *Id.* § 5.8.3.1.

<sup>178</sup> *Id.*

<sup>179</sup> See Sabbagh, *supra* note 23 (describing how the ePPO app mirrors the Royal Observer Corps during the Battle of Britain); James, *supra* note 18 (explaining how civilians using the Diia app “act as front line reconnaissance operators”).

<sup>180</sup> Feldstein, *supra* note 9. See also Iphigenia Fistentzou, *Blurred Lines: Social Media in Armed Conflict*, 25 RICH. J.L. & TECH. 2, 5 (2019) (“The line distinguishing civilians from direct participants, however, becomes blurred when civilians collect and share information through social media that has real military effects for the conflicting parties.”).

<sup>181</sup> See Olejnik, *supra* note 14; Mačák & Vignati, *supra* note 146 (describing how “civilian-gathered information often has an immediate, real impact, as the information civilians send to their government could be followed by destructive military action”).

<sup>182</sup> See MALWARE NEWS, *Civilian Hackers Could Become Military Targets, Red Cross Warns* (Feb. 17, 2023), <https://malware.news/t/civilian-hackers-could-become-military-targets-red-cross-warns/67323>; Mačák & Vignati, *supra* note 146.

<sup>183</sup> Mačák & Vignati, *supra* note 146.

<sup>184</sup> See *id.*

<sup>185</sup> *Id.*

hacker army into the armed forces.<sup>186</sup> However, Ukraine has not yet addressed the legal blurriness created by civilians using the Diia and ePPO apps.

A blurred line between civilians and combatants exacerbates an underlying issue in the principle of direct participation in hostilities, namely, how much time is “for such time”?<sup>187</sup> When using smartphone apps like the Diia app, civilians can easily provide tactical information to armed forces at the push of a button.<sup>188</sup> This raises line-drawing problems with respect to a direct participation in hostilities analysis. For example, do civilians only lose their wartime protections when actively using the app? Some argue that such periodic exposure to targeting might make sense because a civilian’s participation may be “sporadic,” such as a “minute-long ‘status-switch,’ [which is] as fast as picking up the smartphone from one’s pocket, taking a photo, or typing a short message.”<sup>189</sup> However, this raises the quintessential “revolving door” problem, which some countries have refused to accommodate.<sup>190</sup> Therefore, depending on how a state approaches the “revolving door” issue, a civilian may be exposed to targeting for a much longer period.<sup>191</sup>

Moreover, if a civilian uses the app more frequently, the analysis becomes even more complicated.<sup>192</sup> For example, whether a civilian’s activity is sufficiently regular to constitute direct participation is a subjective, highly fact-dependent inquiry that would likely vary state-to-state.<sup>193</sup> Even if there were a uniform definition of what constitutes “regular” direct participation in hostilities, the issue becomes how military forces would determine *when* a citizen is using the app. With increasingly blurry lines between civilians and combatants, “parties to armed conflicts may gradually begin to err on the side of considering all individuals in the enemy population as involved in hostile acts.”<sup>194</sup> Given limited informational capacity during an armed conflict, it seems likely that the inquiry would devolve into a party to the conflict targeting any civilian holding a cell phone.<sup>195</sup> A civilian carrying a cell phone could thus transform into the equivalent of a civilian wielding a rifle.

However, a cell phone is a dual use item, which may be used for activities completely unrelated to an armed conflict. Cell phones are qualitatively different than something like a set of binoculars, which, in the context of an armed conflict, seemingly serve only the purpose of acting as a spotter. Consequently, the increasing digitalization of civilian involvement in war may “create[] massive

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<sup>186</sup> Shaun Waterman, *Ukraine Scrambles to Draft Cyber Law, Legalizing Its Volunteer Hacker Army*, NEWSWEEK (Mar. 14, 2023, 5:00 AM), <https://www.newsweek.com/ukraine-drafting-new-law-legalizing-volunteer-hacker-cyber-army-red-cross-1786814>.

<sup>187</sup> See *supra* notes 127–143 and accompanying text.

<sup>188</sup> Mačák & Vignati, *supra* note 146.

<sup>189</sup> Olejnik, *supra* note 14.

<sup>190</sup> See, e.g., DOD LAW OF WAR MANUAL, *supra* note 43, § 5.8.4.2.

<sup>191</sup> Schmitt & Biggerstaff, *supra* note 24.

<sup>192</sup> *Id.*

<sup>193</sup> See Olejnik, *supra* note 14.

<sup>194</sup> Mačák & Vignati, *supra* note 146.

<sup>195</sup> See Winther, *supra* note 146 (describing how “it is easy to imagine that a party to a conflict may perceive civilians as a threat once it realizes that those civilians are providing information about its units, positions, numbers, etc. to an enemy party to the conflict”).

threats to civilians with a mobile phone in their hands caught up in conflict.”<sup>196</sup> Therefore, eroding the distinction between civilians and combatants may potentially expose millions of civilians to significant consequences, including loss of wartime protections such as insulation from direct targeting and lack of POW protections.<sup>197</sup> These risks illustrate the need to update the law to account for the role of digital technology in warfare, so civilians may remain protected to the extent possible.

### III. RECOMMENDATIONS

Given technology’s ability to increasingly blur the boundaries between civilians and combatants,<sup>198</sup> both parties to a conflict should have an affirmative duty to warn civilians who directly participate in hostilities. A duty to warn seeks to ensure that civilians “[u]nderstand [their] noncombatant protection” and are “strategic with [their] digital engagement.”<sup>199</sup> Since direct participation in hostilities subjects civilians to lawful targeting,<sup>200</sup> civilians must be aware of the “actual and potential consequences of engaging with the [Diia and ePPO] app[s].”<sup>201</sup> Such awareness aims to prevent civilians from surrendering their protection unintentionally. Consequently, a defending party should be required to warn civilians about the potential legal consequences of using new forms of technology that facilitate involvement in military operations. Additionally, an attacking party should be required to warn civilians of its intent to target anyone who acts as a lookout, whether through an app or otherwise. Even if international humanitarian law does not explicitly state a warning requirement,<sup>202</sup> existing law nevertheless suggests that both attacking and defending states have a duty to warn.

A duty to warn stems initially from states’ general obligation under Article 51(1) of Additional Protocol I to protect civilians.<sup>203</sup> This obligation “not only call[s] for the *abstention* of acts that endanger civilians, but also calls for *active*

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<sup>196</sup> James, *supra* note 18.

<sup>197</sup> See Mačák & Vignati, *supra* note 146 (explaining how finding civilians to be direct participants in hostilities “would expose numerous civilians to grave risk of harm during armed conflict”); Schmitt & Biggerstaff, *supra* note 24 (describing how if Ukrainian app users constitute direct participants, “Russian forces need not consider any incidental harm to them in the proportionality analysis required before an attack or when assessing feasible precautions to avoid harming civilians”); Olejnik, *supra* note 14 (noting that Ukrainian app users may be characterized as “unlawful” or “irregular” combatants who are not entitled to prisoner of war protections like access to food and medicine and guaranteed hygienic conditions); James, *supra* note 18 (discussing how directly participating civilians “would not be entitled to POW status under GCIII or protected person status under GCIV for the period they are directly participating—causing further risks if detained in Russian prisons”).

<sup>198</sup> See *supra* Part II.B.

<sup>199</sup> James, *supra* note 18.

<sup>200</sup> See *supra* Part I.B.

<sup>201</sup> Olejnik, *supra* note 14.

<sup>202</sup> See Maurer, *supra* note 16 (arguing that states are not required “*explicitly* under international law” to warn users of the ePPO app) (emphasis in original)).

<sup>203</sup> Additional Protocol I, *supra* note 39, art. 51(1) (“The civilian population and individual civilians shall enjoy general protection against dangers arising from military operations.”).

*measures* to protect civilians.”<sup>204</sup> A duty to warn likely constitutes an active measure designed to protect civilians, as reflected in Article 26 of the 1907 Hague Regulations, which required an attacking party’s commanding officer to, “before commencing a bombardment . . . do all in his power to warn the authorities.”<sup>205</sup>

The “feasible precautions” requirement found in Article 58 of Additional Protocol I and the DoD Law of War Manual also justifies imposing a duty to warn on parties to a conflict. Article 58(c) states that “[t]he Parties to the conflict shall, to the maximum extent feasible . . . take the other necessary precautions to protect the civilian population, individual civilians and civilian objects under their control against the dangers resulting from military operations.”<sup>206</sup> By referring to “[t]he Parties to the conflict,” Article 58(c) presumably applies to both attacking and defending parties.

The ICRC’s 1987 Commentary on Article 58 confirms this reading. Despite noting that Article 58 focuses on “measures which every Power must take in its own territory in favour of its nationals, or in territory under its control,”<sup>207</sup> the Commentary further states that belligerents “themselves must also cooperate by taking all possible precautions for the benefit of their own population as in any case in their own interest.”<sup>208</sup> Therefore, Article 58(c) applies to “nations using force against others *and* those defending their territory from such attacks.”<sup>209</sup>

For both attacking and defending parties, a duty to warn constitutes a “necessary precaution[] to protect the civilian population” under Article 58 of Additional Protocol I.<sup>210</sup> For a defending state like Ukraine, warning civilians about potential consequences stemming from use of the Diia and ePPO apps empowers them to make an informed decision about their continued app usage. Armed with this knowledge, some civilians may refuse to download the apps or halt their use, which prevents them from being classified as targetable direct participants. Similarly, requiring an attacking state like Russia to warn civilians about their intent to target spotters, whether digital or otherwise, will potentially deter civilians from directly participating, thus preserving their protection from targeting.

The U.S. DoD Law of War Manual similarly requires attacking and defending parties<sup>211</sup> to “take feasible precautions to reduce the risk of harm to the civilian population and other protected persons and objects.”<sup>212</sup> Under the U.S. standard, whether precautions are feasible depends on context,<sup>213</sup> which includes factors such as the possibility of risk to a party’s own forces, the likelihood and

<sup>204</sup> Winther, *supra* note 146 (emphasis in original).

<sup>205</sup> Regulations Respecting the Laws and Customs of War on Land, annexed to Convention No. IV Respecting the Laws and Customs of War on Land, Oct. 18, 1907, 36 Stat. 2227, T.S. No. 539, art. 26 [hereinafter Hague Regulations].

<sup>206</sup> Additional Protocol I, *supra* note 39, art. 58(c).

<sup>207</sup> 1987 Commentary on Additional Protocol I, *supra* note 36, ¶ 2239.

<sup>208</sup> *Id.* ¶ 2240.

<sup>209</sup> See Maurer, *supra* note 16 (emphasis in original).

<sup>210</sup> Additional Protocol I, *supra* note 39, art. 58(c).

<sup>211</sup> DOD LAW OF WAR MANUAL, *supra* note 43, § 5.2.3 (describing how feasible precautions “must be taken when planning and conducting attacks” and “be taken by the party subject to attack”).

<sup>212</sup> *Id.*

<sup>213</sup> *Id.* § 5.14.

degree of humanitarian benefit, the impact on “alternative courses of action,” and the cost in terms of time, money, and other resources.<sup>214</sup> Although “feasible precautions” do not require “everything that is capable of being done,” a duty to warn likely constitutes a “reasonable” and “practical” precaution.<sup>215</sup> Warning about potential legal consequences of app usage or intent to target civilian lookouts is unlikely to increase the risk to a party’s own forces. As discussed above, warning civilians will yield a humanitarian benefit by preventing civilians from unintentionally exposing themselves to lawful targeting. Depending on the form of disclosure, warning civilians will likely require little monetary cost and time. Finally, warnings will not foreclose other courses of action because defending states will not be prohibited from promoting app usage, and attacking states will still be able to target civilians who directly participate in hostilities. Therefore, under the DoD Law of War Manual, states’ obligation to take “feasible precautions” supports finding a duty to warn.

Moreover, Article 57 of Additional Protocol I affirms the need for a duty to warn. Article 57(1) requires attacking parties to take “constant care” during military operations “to spare the civilian population, civilians, and civilian objects.”<sup>216</sup> Since a warning about intent to target spotters would likely deter some civilians from using the Diia app and becoming direct participants in hostilities, a duty to warn constitutes a form of “constant care” that “spare[s]” civilians.

Similarly, Article 57(2) establishes a legal rationale for requiring parties to an armed conflict to warn civilians who directly participate in hostilities. Under Article 57(2)(a)(ii), an attacking party shall “take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects.”<sup>217</sup> Although the 1987 Commentary interpreted Article 57(2)(a)(ii) narrowly by focusing on choice of weapons and military strike procedures,<sup>218</sup> the phrase “means and methods of attack” can be interpreted more broadly to encompass a duty to warn. In fact, warnings have been recognized as a method of attack.<sup>219</sup> For example, Allied forces during World War II warned civilians of impending airstrikes via radio or distribution of pamphlets.<sup>220</sup>

Article 57(2)(c) addresses a duty to warn explicitly by requiring “effective advance warning” of “attacks which may affect the civilian population.”<sup>221</sup> Article 57(2)(c) arguably applies to both defending and attacking parties because unlike

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<sup>214</sup> *Id.* § 5.2.3.2.

<sup>215</sup> *Id.* § 5.2.3.1.

<sup>216</sup> Additional Protocol, *supra* note 39, art. 57(1); 1987 Commentary on Additional Protocol I, *supra* note 36, ¶ 2191 (describing how paragraph 1 of Article 57 “is a general principle which imposes an important duty on belligerents with respect to civilian populations”).

<sup>217</sup> Additional Protocol, *supra* note 39, art. 57(2)(a)(ii).

<sup>218</sup> 1987 Commentary on Additional Protocol I, *supra* note 36, ¶ 2200 (describing how Allied forces during World War II conducted bombardments on factories in occupied German territories “on days or at times when the factories were empty” to “destroy the factories without killing the workers”).

<sup>219</sup> *See id.* ¶ 2222 (explaining how “[t]here have been many examples of such warnings in the past”).

<sup>220</sup> *Id.* ¶ 2224.

<sup>221</sup> Additional Protocol I, *supra* note 39, art. 57(2)(c).



Article 57(2)(a)(i), (ii), and (iii), Article 57(2)(c) is not framed as an obligation imposed on “those who plan or decide upon an attack.”<sup>222</sup> Typically interpreted to require at least a warning to “the local population in an area about to be attacked,”<sup>223</sup> Article 57(2)(c) may be interpreted even more broadly to require parties to warn civilians who are directly participating in hostilities.<sup>224</sup> Although direct participation in hostilities strips civilians of their protection from targeting, direct participants nevertheless retain their civilian status.<sup>225</sup> Therefore, the warning requirement in Article 57(2)(c) can reasonably be extended to attacks against civilians who directly participate in hostilities because such attacks may still “affect the civilian population.”<sup>226</sup>

Some scholars, like Dan Maurer, reject Article 57(2) as a legal basis for warning civilians who directly participate in hostilities, arguing that such an interpretation of Article 57(2) “may be beyond the drafters’ intentions.”<sup>227</sup> Focusing on the term “incidental” in Article 57(2)(a)(ii) and (iii), Maurer asserts that Article 57(2) “narrowly shields only those civilians who might be considered collateral damage.”<sup>228</sup> He further argues that since civilians who directly participate in hostilities may be lawfully targeted, direct participants do not constitute “collateral damage” and therefore do not fall within Article 57(2).<sup>229</sup> However, this argument fails in two ways. First, the revolving door problem makes it difficult to determine which civilians might constitute collateral damage. Second, Article 57(2)(c), which expressly mentions warning, applies generally to “the civilian population” without a qualifying word like “incidental.”<sup>230</sup> Read in conjunction with Article 57(1), the unqualified language of 57(2)(c) supports a duty to warn civilians who directly participate in hostilities.

In addition to Articles 57 and 58 of Additional Protocol I, states’ duty to train armed forces on international law may support an affirmative obligation to warn civilians directly participating in hostilities. Article 47 of Geneva Convention I and Article 83 of Additional Protocol I each require parties to an armed conflict to “disseminate” international legal standards “as widely as possible in their respective countries.”<sup>231</sup> Such widespread dissemination seeks to ensure that the entire population is familiar with the principles of international law.<sup>232</sup> Under Article 83 of Additional Protocol, this objective may be achieved in part by “encourag[ing] the study thereof by the civilian population.”<sup>233</sup> A defending party’s duty to warn falls within this obligation to train the population on international law

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<sup>222</sup> *Id.* art. 57(2)(a).

<sup>223</sup> Maurer, *supra* note 16.

<sup>224</sup> *See id.*

<sup>225</sup> *See* Watts, *supra* note 77 (“Civilians who take direct part in hostilities do not lose their civilian status. Rather, their conduct deprives them of protection from attack.”).

<sup>226</sup> Additional Protocol I, *supra* note 39, art. 57(2)(c).

<sup>227</sup> Maurer, *supra* note 16.

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> *See* Additional Protocol I, *supra* note 39, art. 57(2)(c).

<sup>231</sup> Geneva Convention I, *supra* note 72, art. 47; Additional Protocol I, *supra* note 39, art. 83.

<sup>232</sup> *See* Geneva Convention I, *supra* note 72, art. 47.

<sup>233</sup> Additional Protocol I, *supra* note 39, art. 83.

because such a warning would educate civilians about the consequences of their app usage under international law.

To accomplish the purpose of these legal obligations, namely, to protect civilians from military harm as much as possible,<sup>234</sup> defending and attacking parties should have an affirmative duty to warn all civilians within the relevant country. For a defending party like Ukraine, the warning should be two-fold. First, the Ukrainian government should create a disclaimer in the Diia and ePPO apps. Every time a civilian opens the app, he or she will see the warning and be required to agree to the terms. Such a disclaimer seeks to alert civilians to the potential consequences of their behavior, thereby ensuring that their decision to participate is an informed one.

However, standing alone, a disclaimer in the apps is insufficient warning.<sup>235</sup> Including the warning solely within the app could subject civilians to risk by requiring civilians to download the app to access the warning. Depending on the legal standard, some states may consider the presence of the app on a civilian's phone sufficient to establish direct participation of hostilities. Therefore, a defending party's warning may be ultimately counterproductive. Moreover, much like terms of use in other apps, users may skip past the warning without reading, thus rendering the warning essentially useless. Consequently, in addition to a disclaimer in the app, a defending party should disseminate its warning to the entire civilian population, not merely those who have downloaded the app.

To satisfy its duty to warn, an attacking party should notify the entire civilian population of the defending state that it intends to target any civilian who acts as a spotter, including anyone using an app like Diia or ePPO. Similar to the defending party's warning, such notice ensures that civilians who choose to directly participate in hostilities are aware of the potential consequences.

In addition to imposing an affirmative duty to warn on both parties to a conflict, a defending party should also be required to disclose any technological disablement to the ICRC and the attacking party. That is, if a defending state like Ukraine disables the Diia app in certain areas within the country, this change should be shared to foreclose attacks on civilians. Once aware of such information, an attacking party like Russia could not rely on direct participation in hostilities as a rationale for targeting civilians in that area. Furthermore, as technology becomes more deeply engrained in modern warfare, parties to an armed conflict may develop a shared database of civilians using these kinds of apps. Parties to a conflict could use the data aggregated in this repository to inform their targeting, which would prevent attacks on sporadic app users.

The foregoing discussion by no means exhausts all possible legal and policy solutions, yet hopefully, it begins a dialogue about how best to address the effects of technology on civilians' participation in warfare. As technology, like the Diia

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<sup>234</sup> See Additional Protocol I, *supra* note 39, art. 51(1) (requiring states to protect the civilian population and individual civilians "against dangers arising from military operations"); *id.* art. 58(c) (imposing a duty to take "necessary precautions to protect the civilian population"); *id.* art. 57(1) (requiring "constant care" to "spare the civilian population, civilians, and civilian objects"); *id.* art. 57(2)(a)(ii) (obliging attacking parties to "take all feasible precautions" to reduce "incidental loss of civilian life, injury to civilians and damage to civilian objects").

<sup>235</sup> Maurer, *supra* note 16.

app, continues to transform the relationship between civilians and combatants in armed conflict, the legal standard regarding direct participation in hostilities must evolve as well.<sup>236</sup> As noted during the Nuremberg Trials, “the law is not static, but by continual adaptation follows the needs of a changing world.”<sup>237</sup> Notably, lawmakers must remember that whatever standards are established now will set a precedent.<sup>238</sup> The nature of the conflict between Ukraine and Russia complicates this task because Ukraine is in an existential fight, battling against Russian aggression and lawlessness by whatever means necessary.<sup>239</sup> However, creating a standard that benefits a victimized party like Ukraine in the present may unduly strengthen a future party. For example, if the United States went to war against China, an overly protective rule regarding civilians’ direct participation in hostilities via new technology may significantly advantage the Chinese military and hinder U.S. military operations. Therefore, although prompted by the heart wrenching conflict in Ukraine, a new legal standard governing technology and direct participation in hostilities must be developed in a thoughtful and forward-thinking manner.

In the interim, the Martens Clause must guide parties’ conduct.<sup>240</sup> Absent a clear international legal standard governing the use of new technologies in war, parties to an armed conflict must remember that “populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and the requirements of the public conscience.”<sup>241</sup> With this dictate in mind, parties must seek to preserve humanity amidst increasingly blurry boundaries in war.

#### IV. CONCLUSION

In conclusion, new forms of technology have transformed the nature of warfare by offering widespread opportunities for civilians to directly participate in hostilities. For example, the Diia and ePPO apps empower civilians to act as spotters, using their smartphones to report Russian military movements and assets to the Ukrainian armed forces.<sup>242</sup> Under the standards articulated by the ICRC’s

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<sup>236</sup> Olejnik, *supra* note 14 (“These novel uses of technology could signal the need to adapt the rules, or even to create a place for establishing new ones.”).

<sup>237</sup> The Law of the Charter, 22 TRIAL OF THE MAJOR WAR CRIMINALS BEFORE THE NUREMBERG MILITARY TRIBUNALS UNDER CONTROL COUNCIL LAW, at 464 (1948).

<sup>238</sup> Olejnik, *supra* note 14 (describing how “activities now could influence future models of conduct, and after some time, these could become global norms,” which “may have consequences for future armed conflicts”).

<sup>239</sup> *See id.* (explaining how “Ukraine faces an existential threat, and it must be expected to do everything possible with the resources it has at hand”).

<sup>240</sup> Vitaliy Ivanenko, *The Origins, Causes and Enduring Significance of the Martens Clause: A View From Russia*, 104 INT’L REV. OF THE RED CROSS 1708, 1723–24 (2022).

<sup>241</sup> THE HAGUE CONVENTIONS AND DECLARATIONS OF 1899 AND 1907 101–02 (James Brown Scott ed., 1918). *See also* DOD LAW OF WAR MANUAL, *supra* note 43, § 19.8.3 (“The Martens clause reflects the idea that when no specific rule applies, the principles of the law of war form the general guide for conduct during war.”).

<sup>242</sup> *See supra* notes 14–17 and accompanying text.

*Interpretive Guidance* and the U.S. DoD Law of War Manual, such information sharing likely constitutes direct participation in hostilities.<sup>243</sup> By blurring the line between civilians and combatants, technology like the Diia and ePPO apps threatens to subject millions of civilians to lawful targeting in war.<sup>244</sup> Consequently, the law must be updated to reflect the technological realities of warfare, so civilians may remain as protected as possible.<sup>245</sup> At a minimum, both the attacking and defending parties to a conflict should have an affirmative duty to warn civilians of the potential consequences of their direct participation in hostilities.<sup>246</sup> Hopefully, moving forward, the international legal community will be able to generate clarity amidst an increasingly blurry legal landscape.

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<sup>243</sup> See *supra* Part II.A.

<sup>244</sup> See *supra* note 198 and accompanying text.

<sup>245</sup> See *id.*

<sup>246</sup> See *supra* Part III.