





Cover Photo: Aftermath of mass Russian attack on civilian infrastructure in Kyiv (Oct. 17, 2022). *See* Appendix I, Case No. 8. Source: Telegram Channel of President Volodymyr Zelenskyy (@V_Zelenskiy_official), TELEGRAM (Oct. 17, 2022), https://t.me/V_Zelenskiy_official/3675.

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EXECUTIVE SUMMARY

February 24, 2025 marked three years since Russia launched its unlawful and devastating full-scale invasion of Ukraine. According to the United Nations Office of the High Commissioner for Human Rights, since February 2022 Russia's war has claimed more than 12,300 civilian lives, including over 650 children, and left another 27,800 injured—a toll likely underestimated due to verification challenges.¹ Beyond the staggering human cost, Russian aerial attacks have destroyed 80% of Ukraine's energy infrastructure² and damaged or destroyed at least 1,203 health care facilities, 3,800 educational institutions, and more than 250,000 buildings housing approximately 3.4 million people.³ With a record-high number of civilian casualties reported in September 2024,⁴ the conflict's deleterious effects are only increasing as the war enters its fourth year. The rise in civilian deaths is a direct result of Russia's relentless aerial campaign, characterized by the use of drones, long-range missiles, and glide bombs to strike densely populated civilian areas and critical infrastructure.

This Report demonstrates that destruction of civilian infrastructure and civilian casualties are not merely a byproduct of war but rather a deliberate tactic to inflict acute suffering on Ukraine's civilian population. Aerial attacks are executed pursuant to Russia's State policy of "total war," which envisions demoralizing Ukraine's civilians and destroying civilian life as a means to achieve victory. The Kremlin's stated goal is for Ukraine to be "reorganized, re-established and returned to its natural state as part of the Russian world." In practice, this total war strategy is carried out through the persistent aerial bombardment of civilians, civilian infrastructure, and all necessary underpinnings of civilian life. These attacks represent an effort by Russian officials to collectively punish and demoralize Ukrainians such that they either pressure their government to surrender, or are killed or dispersed in sufficient numbers so as to no longer comprise a distinct national group.

The evidence and legal analysis presented in this Report provide a strong basis to conclude that pursuant to this total war strategy, Russian officials and their collaborators have committed multiple crimes recognized under international law. In particular, this Report demonstrates that Russian aerial attacks against Ukraine's critical infrastructure constitute the crimes against humanity of extermination and other inhumane acts, and the war crimes of intentionally directing attacks against civilian objects, disproportionate attacks, and starvation. Furthermore, this Report shows that Russian attacks on civilians and civilian objects constitute the crimes against humanity of murder, extermination, and persecution, and the war crimes of intentionally directing attacks against civilians, civilian objects, and specially protected objects. Finally, this Report offers an analytical

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¹ U.N. Office of the High Commissioner of Human Rights ("OHCHR"), *Ukraine: Deputy High Commissioner decries* dangerous escalation and calls for path to peace (Jan. 8, 2025), https://perma.cc/2ZV6-P4HY; UN Hum. Rights Off. of the High Commissioner, 3 Years since the full-scale invasion of Ukraine: 24 February 2022-2025, Key facts and findings about the impact on human rights 1 (2025), https://perma.cc/MH5Y-8HA6.

² Sofia Ferreira Santos & Will Vernon, *Zelensky condemns 'inhumane' Christmas Day attack*, BBC (Dec. 25, 2024), https://perma.cc/KYC2-YFL9.

³ Kyiv School of Economics, Report on damages to infrastructure from the destruction caused by Russia's military aggression against Ukraine as of January 2024, (Apr. 2024), https://perma.cc/FM2K-LGCP.

⁴ UN HRMMU, Report on the Human Rights Situation in Ukraine, 1 September-30 November 2024 ¶ 15 (2024), https://perma.cc/W28R-Q8AG.

⁵ Haley Nelson, *Ukraine faces it most perilous winter yet*, ATLANTIC COUNCIL (Dec. 6, 2024), https://perma.cc/6FSS-F4Y5.

⁶ Clara Apt, Russia's Eliminationist Rhetoric Against Ukraine: A Collection, JUST SECURITY (Aug. 26, 2024), https://perma.cc/F5R4-8W75.

framework to prove one of the most challenging legal elements of these crimes—Russian officials' intent to commit them.

Goals and Methodology

This Report seeks to assist national and international accountability and truth-seeking efforts related to Russia's aerial attacks in Ukraine. Domestic efforts to secure accountability for Russia's conduct are proceeding alongside ongoing investigations at the International Criminal Court ("ICC"). Notably, in March and June 2024, the ICC Pre-Trial Chamber II issued arrest warrants for Russian Lieutenant General Sergei Kobylash, Russian Navy Admiral Viktor Sokolov, former Russian Minister of Defense Sergei Shoigu, and Chief of the Russian General Staff of the Armed Forces and First Deputy Minister of Defense Valery Gerasimov, in connection with Russia's unlawful attacks against civilian objects and energy infrastructure. However, domestic legal processes may play an increasingly integral role as the as the ICC faces existential threats from state non-cooperation and economic coercion via sanctions. Accordingly, this Report can support accountability and truth-seeking efforts wherever they are pursued, ensuring that justice is delivered for crimes inflicted on Ukraine's civilian population and that an accurate, impartial record of Russia's conduct is preserved. Accountability and truth-seeking are also necessary to deter current and future perpetrators by demonstrating that the international legal system will not abide impunity for atrocity crimes and distortion of facts.

To produce this Report, the International Partnership for Human Rights ("IPHR") and the International Human Rights Clinic ("IHRC") (hereinafter "Authors") conducted extensive factual and legal research on the pattern and scale of Russian aerial attacks. Over the course of an 18-month investigation, the Authors identified hundreds of drone and missile attacks, then selected 22 specific cases for in-depth analysis. After collecting evidence through on-the-ground fact-finding, witness testimonies, open-source intelligence, and satellite imagery, the Authors applied relevant legal standards to demonstrate that Russia's aerial attacks constitute crimes against humanity and war crimes.

The 22 cases examined in this Report are emblematic of Russia's broader aerial campaign across Ukraine. Based on the facts in these 22 cases, the Authors identify two distinct patterns of Russian aerial attacks: (1) attacks on critical energy infrastructure, including electrical grids and power plants, during cold winter months, and (2) year-round attacks on civilians and civilian infrastructure, including densely populated urban areas, residential buildings, hospitals, schools, and cultural objects. The Report analyzes each pattern separately, applying relevant international legal standards to argue that both types of attacks rise to the level of numerous crimes against humanity and war crimes.

For both patterns of attacks, the Report presents an analytical framework to demonstrate Russian officials' intent to commit these crimes. To date, no international tribunal has held individual perpetrators responsible for crimes against humanity or war crimes resulting from unlawful drone and missile attacks. This outcome is due, in part, to the difficulties of demonstrating the requisite intent. The physical distance that drones and missiles place between their operators and victims renders it challenging for prosecutors to prove that a perpetrator acted with the necessary knowledge and intent. Notwithstanding modern weaponry's tendency to obfuscate responsibility,

⁷ International Criminal Court, *Situation in Ukraine*, https://perma.cc/8C3A-MN2X.

the Authors have collected and analyzed robust evidence to show that Russia's aerial attacks on Ukraine's civilian population and infrastructure constitute international crimes, and that the requisite intent can be inferred from three sets of evidence.

Specifically, the Report examines a compilation of statements from high-level Russian officials regarding specific strikes, and Russia's war effort generally, to demonstrate the Russian government's intent to cause civilian suffering. Further, it identifies patterns of attacks, repeated year after year across Ukraine, that evidence Russia's consistent and intentional policy to harm civilians. Finally, it examines the technical characteristics of highly-precise weapons used by Russia, proving that the devastating civilian impacts of aerial attacks are not accidental collateral damage but rather the intended outcome. Taken together, these three streams of evidence show that Russian officials acted with the knowledge and intent necessary to hold them accountable for crimes against humanity and war crimes.

Legal Framework: War Crimes and Crimes against Humanity

This Report draws its applicable legal framework from the Rome Statute of the ICC, given that it is the most authoritative source of international criminal law and Ukraine is a State Party. The Report additionally relies on the case law of the ICC and its predecessors, the *ad hoc* tribunals for the Former Yugoslavia and Rwanda, to evaluate and apply relevant international criminal law standards. Specifically, the Report focuses on four crimes against humanity defined in the Rome Statue: murder, extermination, persecution, and other inhumane acts. It also focuses on five war crimes defined in the Rome Statute: intentionally directing attacks against civilians, civilian objects, and specially protected objects, intentionally launching disproportionate attacks, and intentionally using starvation as a method of warfare.

War crimes constitute "grave breaches" of international humanitarian law ("IHL") committed in the context of and associated with armed conflict. This Report identifies multiple war crimes Russia has committed in Ukraine, based on Russia's deliberate targeting of specially protected objects, civilian objects, and civilians themselves, as well as disproportionate attacks in which civilian suffering clearly outweighs any potential military advantage gained by Russia. In addition, the Report identifies the intentional use of starvation tactics through attacks on critical energy infrastructure, since these attacks deprive civilians of legally protected objects and, in turn, access to basic necessities such as health care, water, and communication systems.

Crimes against humanity, while often including many of the same underlying acts as war crimes, are committed as part of a "widespread or systematic attack directed against a civilian population" and must be executed in "furtherance of a state or organizational policy." This Report establishes that the attacks under examination were not isolated incidents but rather part of a systematic and widespread campaign pursuant to Russia's State policy to wage "total war" against Ukraine's civilian population, and inflict such a degree of suffering that Ukrainians would either flee or surrender. For the purposes of this Report, the relevant crimes against humanity include murder, extermination, persecution, and other inhumane acts.

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⁸ Rome Statute of the International Criminal Court ("Rome Statute") (2002), art. 8.

⁹ Rome Statute, art. 7.

Key Findings: Russia's Aerial Attacks on Critical Energy Infrastructure Rise to the Level of Crimes Against Humanity and War Crimes

Since the start of the full-scale invasion, Russian forces have conducted a widespread and systematic campaign targeting Ukraine's critical energy infrastructure through missile and drone strikes. Russia began striking Ukraine's energy infrastructure in October 2022 and, by January 2023, had launched at least 16 massive attacks on energy infrastructure across 19 of Ukraine's 24 regions¹⁰ with as many as 1,500¹¹ drones and missiles.¹² By September 2024, Russia's aerial campaign has destroyed 80% of Ukraine's energy infrastructure.¹³ Taking place during the coldest months of the year, Russian attacks on energy infrastructure result in lengthy blackouts and disrupt heating and water supply, health care, and critical information services, endangering civilian lives. This Report analyzes nine specific Russian attacks on energy infrastructure¹⁴ and demonstrates that they amount to crimes against humanity and war crimes.

Russia's aerial attacks on critical energy infrastructure rise to the level of the crimes against humanity of extermination and other inhumane acts.

Russia's aerial attacks on energy infrastructure satisfy the contextual elements of crimes against humanity. The three-year-long recurring pattern of high-precision missile and drone strikes against energy objects across Ukraine underscores the improbability of their random occurrence, and illustrates their widespread and systematic nature. Further, there is a clear nexus between individual strikes and the overall attack. The nine analyzed strikes are not isolated acts unrelated to Russia's broader campaign, 15 but rather form part of that campaign given their common nature, aims, and consequences. Russia's attacks were executed pursuant to its State policy of "total war." This State policy is not only reasonably inferred from the pattern of attacks, but also explicitly supported by public statements of high-level Russian officials endorsing a total war against Ukraine. 16 Russian

https://perma.cc/58RK-PDEN; David Bennett et al., *The Scale of Russian Attacks on Ukraine's Energy Infrastructure, Visualized*, WASHINGTON POST (Oct. 17, 2024), https://perma.cc/5T8S-ZA6S.

¹⁰ Ian Williams, Putin's Missile War: Russia's Strike Campaign in Ukraine, CSIS 43-4 (Aug. 16, 2023),

https://perma.cc/MJ9M-QATQ; UN HRMMU, Report on the Human Rights Situation in Ukraine, 1 August 2022 - 31 January 2023 ¶ 39 (2023), https://perma.cc/83NK-SBR3. See also International Partnership for Human Rights (IPHR), Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine 12–5, 17–22 (Feb. 28, 2023),

¹¹ Ukraine Energy Damage Assessment WORLD BANK & UNDP 4 (2023), https://perma.cc/CW77-UXWX.

¹² Ian Williams & CSIS, Putin's Missile War: Russia's Strike Campaign in Ukraine 23–31, 43–4; IPHR, Enabling War Crimes, at 12–5, 17–22.

¹³ Santos & Vernon, Zelensky condemns 'inhumane' Christmas Day attack.

¹⁴ See Appendix I (Case Nos. 5, 6, 7, 8, 9, 10, 12, 13, 14).

¹⁵ Prosecutor v. Germain Katanga, ICC-01/04-01/07, ICC TC II Judgment, ¶ 1124 (Mar. 7, 2014)

¹⁶ See e.g., FIDH et al., Communication submitted under Article 15 of the Rome Statute of the International Criminal Court, Situation in Ukraine: Hate Speech as the Crime Against Humanity of Persecution (2024), https://perma.cc/X662-2CCX. Alexey Gromov and Sergey Kiryienko serve as the two First Deputies of the Chief of Staff of the Presidential Executive Office. While Gromov oversees the Presidential Press and Information Office and the Presidential Directorate for Public Relations and Communications Office, Kiriyenko is responsible for the Presidential Directorate for Social Projects and the Presidential Domestic Policy Directorate. The primary narratives are disseminated from the Presidential Administration to the heads or official owners of both traditional and non-traditional media, either through direct verbal instructions or via email. FIDH's communication reveals that Ukraine and its Armed Forces are consistently labeled as "Kyivan Nazis" or the "Kyivan neo-Nazi regime," allegedly acting "under the direction of Washington." Further, acts of Ukrainian resistance are framed as "terrorist acts" contributing to the broader effort by Russian officials to demonize and dehumanize Ukrainians by portraying them as embodiments of pure evil

officials characterize civilian suffering as a "consequence" of Ukraine's refusal to negotiate¹⁷ and as retaliation for Ukraine's military advances.¹⁸ Russia's recent legislative measures to criminalize pro-Ukrainian views and culture as expressions of "Nazism"¹⁹ reinforce this policy. Finally, Russian officials were aware that the individual strikes on critical infrastructure formed part of a widespread and systematic attack on Ukraine's civilian population. They repeatedly lauded severe civilian harm resulting from specific aerial attacks. Russian soldiers' intercepted calls,²⁰ as well as news coverage by major Russian media outlets,²¹ acknowledged civilian suffering caused by the airstrikes. It is simply implausible that Russian officials were unaware that specific air strikes formed part of a broader attack on the civilian population.

The Report then demonstrates how the underlying acts of extermination and other inhumane acts rise to the level of crimes against humanity.

With respect to extermination, these attacks were part of a mass killing of civilians that, by February 2025, had claimed between 12,654 and 30,000 civilian lives. Russian aerial attacks on energy infrastructure have created conditions of life calculated to bring about the destruction of part of the Ukrainian civilian population and lead to civilian deaths. Russia has been methodically targeting Ukraine's electric grid since October 2022, destroying 80% of it by September 2024. Russian attacks on energy infrastructure during the cold winter months, when electricity consumption increases and civilians are especially vulnerable, have caused lengthy blackouts and catastrophic reverberating effects. Prolonged blackouts, impaired access to critical information, and the disruption of water, heating, and health care services, especially when paired with extreme winter temperatures, have created conditions of life under which civilian deaths are not only possible but likely and highly foreseeable. The civilian deaths described in the Report, caused by the infliction of

¹⁷ AFP, Civilians Suffering as a 'Consequence' of Kyiv's Refusal to Negotiate – Kremlin, MOSCOW TIMES (Nov. 17, 2022), https://perma.cc/K8EK-JW4Y.

¹⁸ See Appendix I (Case Nos. 8, 15).

¹⁹ FIDH et al., Situation in Ukraine: Hate Speech.

²⁰ See Erika Kinetz, Intercepted calls from the front lines in Ukraine show a growing number of Russia soldiers want out, AP News (Nov. 26, 2023), https://perma.cc/W7QT-LB25; Sabrina Tavernise, The Battle for Azovstal: A Soldier's Story, N.Y. TIMES (May 18, 2022).

²¹ See Devastating Russian attacks on Ukrainian infrastructure: What we know so far, RUSSIA TODAY (Mar. 22, 2024), https://perma.cc/4GHN-RAMK; Moscow details massive strikes against Ukrainian Infrastructure, RUSSIA TODAY (Mar. 22, 2024), https://perma.cc/6ARP-4YYB; AFP, Russian Strikes Cut Power for Nearly Half a Million Homes in Ukraine, MOSCOW TIMES (May 6, 2024), https://perma.cc/27TH-CU7M; In Brief: What we know about massive attack on Ukraine's energy infrastructure, TASS (Aug. 26, 2024), https://perma.cc/BKY3-3LQD; Mayor says 80% of Kiev residents left without water, TASS (Oct. 31, 2022), https://perma.cc/NWD6-J73M; Seven Ukrainian regions experiencing rolling blackouts on November 1, TASS (Nov. 1, 2022), https://perma.cc/9HVD-FURZ; National operator reports emergency blackouts planned throughout Ukraine, TASS (Dec. 5, 2022), https://perma.cc/AL9H-5YBW.

²² UN Hum. Rights Off. of the High Commissioner, 3 Years since the full-scale invasion of Ukraine: 24 February 2022-2025, Key facts and findings about the impact on human rights (2025), https://perma.cc/MH5Y-8HA6; Center for Preventive Action, War in Ukraine, COUNCIL ON FOREIGN RELATIONS (Apr. 24, 2024), https://perma.cc/36M7-38PJ; Report 2022/23: The State of the World's Human Rights: Ukraine 2022, AMNESTY INTERNATIONAL (2023), https://perma.cc/ZYT6-8WG5; Ukraine: 42 civilian casualties every day in two years of war, OXFAM INTERNATIONAL (Feb. 22, 2024), https://perma.cc/3BXJ-SPN9.

²³ Santos & Vernon, Zelensky condemns 'inhumane' Christmas Day attack.

such deadly conditions, represent only a small fraction of the civilian deaths attributable to Russian aerial attacks.²⁴

Russian attacks on energy infrastructure also amount to the crime against humanity of other inhumane acts, as these attacks inflicted great suffering and serious damage to civilians' mental and physical health. Beyond physical harm resulting from disrupted access to heat, clean water, medical care, and information critical to survival, the psychological toll of Russia's aerial attacks has been severe. According to the UN Human Rights Monitoring Mission to Ukraine ("UN HRMMU"), prolonged power outages and disruptions to essential services produce heightened anxiety, panic, fear, and isolation, particularly among those with preexisting mental health conditions. ²⁵ In the aftermath of the second winter of the war, some 15 million Ukrainians—nearly half of the entire population—required psychological support due to the war's impacts, with three to four million requiring medication, according to Ukraine's Ministry of Health. 26 Cumulatively, the degree of suffering experienced by Ukrainian civilians under relentless aerial attacks is of a character similar to other underlying acts for crimes against humanity, such as extermination and persecution. Specifically, the conditions of life inflicted by Russia's attacks were of a nature to bring about mass civilian deaths, thus resembling extermination. Additionally, Russia's energy attacks deprived Ukrainian civilians of their fundamental rights, including the rights to life, health, liberty, and human dignity, closely mirroring the crime against humanity of persecution.

Finally, the Report provides evidence to meet the requisite knowledge and intent threshold necessary to hold perpetrators accountable for these crimes against humanity. As Russia's three-yearlong campaign has progressed, it has become indisputable that these aerial attacks inevitably cause civilian suffering and death. The recurring pattern of Russian airstrikes against critical energy infrastructure, with precise weapons during the coldest months when access to heat, water, health care, and humanitarian information is a matter of survival, indicates that such strikes were executed not only with an intent to debilitate Ukraine's infrastructure but also to inflict civilian suffering and deadly conditions of life. Each new aerial attack, with immediate and reverberating effects widely covered by Russian, Ukrainian, and international media, as well as UN reports, made it ever less plausible that Russian officials did not know or intend to cause the resulting death and suffering. Beyond such reporting, numerous Russian officials' statements reveal that they knew and intended the attacks to cause civilian harm and death. For example, top-level Russian government representatives stated that Ukraine could end "all kinds of suffering of the local population" by acceding to Russian demands²⁷ or else be subject to conditions making it "impossible to survive."²⁸ Officials also threatened that Ukrainians would be left "without gas, without light, and without everything else" to "freeze and rot over there." In addition, the use of precise weaponry provides

²⁴ According to UN HRMMU, while the full extent of deaths resulting from Russian strikes on energy infrastructure remains difficult to quantify, the long-term consequences will far exceed the immediate harms currently documented. UN Hum. Rights Off. of the High Commissioner, *Attacks on Ukraine's Energy Infrastructure: Harm to the Civilian Population: UN Human Rights Monitoring Mission in Ukraine* ("UN HRMMU") 1 (2024), https://perma.cc/3BWD-XZYG.

²⁵ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8.

²⁶ Agnieszka Pikulicka-Wilczewska, *As Russia's War Rages, Ukraine's Mental Health Crisis Spirals*, AL JAZEERA (Apr. 11, 2024), https://perma.cc/RM34-WDLP.

²⁷ Global Rights Compliance, "The Hope Left Us": Russia's Siege, Starvation, and Capture of Mariupol City 57 (2024), https://perma.cc/4PS8-7T4N.

²⁸ Apt, Russia's Eliminationist Rhetoric.

²⁹ Apt, Russia's Eliminationist Rhetoric (citing Julia Davis (@JuliaDavisNews), X (Nov. 19, 2022), https://perma.cc/E53N-VKA3.

compelling evidence of deliberate targeting and indicates the perpetrators' intent. Seven of the nine analyzed attacks against energy infrastructure were carried out using Shahed-136/131 drones³⁰ and four involved Kh-101 missiles,³¹ both of which are high-precision weapons.³² Given the weapons' advanced capabilities and accuracy, Russia's repeated targeting of critical infrastructure with these drones and missiles provides compelling evidence that these strikes were deliberate rather than the result of any technical error. Accordingly, Russian officials had the requisite knowledge and intent to exterminate Ukrainian civilians and cause their suffering through targeted strikes crippling Ukraine's critical energy infrastructure.

Russia's aerial attacks on critical energy infrastructure constitute the war crimes of intentionally directing attacks against civilian objects, starvation, and disproportionate attacks.

The nine selected cases of aerial attacks on energy infrastructure³³ satisfy contextual elements of war crimes, which must take place "in the context of" and be "associated with" an armed conflict.³⁴ Russia's aerial attacks were perpetrated on Ukraine's territory during an international armed conflict between Russia and Ukraine that started in February 2014,³⁵ escalated following Russia's full-scale Russian in February 2022, and is ongoing.³⁶ In line with international case law, the attacks involved Russian military and civilian perpetrators and Ukrainian civilian victims, and served Russia's military goal to conquer Ukraine.³⁷ Thus, the attacks satisfy the contextual elements of war crimes.

The Report then demonstrates how the underlying acts of intentionally directing attacks against civilian objects, disproportionate attacks, and starvation constitute war crimes.

Intentional attacks against civilian objects are prohibited under international law. Only objects serving a military purpose can be lawful targets of attack, according to the IHL principle of

³⁰ See Appendix I (Case Nos. 7, 8, 9, 10, 12, 13, 14).

³¹ See Appendix I (Case Nos. 5, 7, 12, 13).

³² For supporting information relevant to these weapons, *see* Appendix II. The Shahed-136 UAV utilizes a combination of GPS and GLONASS, allowing it to strike targets with minimal deviation. Additionally, the Shahed-136 is equipped with a commercial-grade digital communication chip that enables mid-flight updates to the target's location, further enhancing its accuracy. These advanced capabilities make it highly unlikely that any use of the weapon in contravention of international law resulted from technical errors. Similarly, the Kh-101 is a high-precision air-launched cruise missile that utilizes GLONASS for trajectory correction, achieving a nominal circular probable deviation of approximately seven meters. Its flight path requires extensive pre-flight planning, including simulations of the entire trajectory from the launch site to the target. Given the missile's accuracy and the requirement for careful planning, Russia's repeated targeting of critical infrastructure with the Kh-101 provides compelling evidence that these strikes were deliberate.

³³ See Appendix I (Case Nos. 5, 6, 7, 8, 9, 10, 12, 13, 14).

³⁴ See ICC, Elements of Crimes (2011), arts. 8(2)(b)(i)–(ii), (ix); ROME STATUTE OF THE INTERNATIONAL CRIMINAL COURT: ARTICLE-BY-ARTICLE COMMENTARY 349–52 (Kai Ambos ed., 2022).

³⁵ International Armed Conflict in Ukraine, RULAC GENEVA ACADEMY (Jun. 7, 2023), https://archive.ph/TeWVO. The Office of the Prosecutor opened preliminary examinations into the situation in Ukraine for alleged crimes occurring after 20 February 2014 in Crimea and eastern Ukraine, Office of the Prosecutor, Report on Preliminary Examination Activities 2017, INTERNATIONAL CRIMINAL COURT (2017), https://archive.ph/0YdLg.

³⁶ G.A. Res. ES-11/1 (Mar. 18, 2022), https://archive.ph/abVAM.

³⁷ Prosecutor v. Jean-Pierre Bemba Gombo, ICC-01/05-01/08-3343, ICC TC III Judgment, ¶ 143 (Mar. 21, 2016); Prosecutor v. Kunarac et al., IT-96-23 & IT-96-23/1-A, ICTY AC Judgment, ¶ 59 (Jun. 12, 2022). Prosecutor v. Georges Rutaganda, ICTR-96-3, ICTR AC Judgment, ¶ 569 (May 26, 2003).

distinction.³⁸ If an object fails to make an "effective contribution to military action" and if its "total or partial destruction, capture or neutralization" does not offer a "definite military advantage," it is a civilian object and thus cannot be targeted.³⁹

Russian aerial attacks on energy infrastructure do not comply with the principle of distinction and thus unlawfully target civilian objects. The sheer intensity and geographic scope of Russia's attacks indicate Russia's strategy of treating Ukraine's entire power grid as a single military objective, rather than assessing each target on a case-by-case basis to determine whether it was a legitimate military objective. Given the frequency and widespread nature of Russia's attacks on Ukraine's energy infrastructure, it is implausible that, before executing each strike, Russia genuinely and adequately distinguished between parts of the electric grid that are potentially legitimate military objectives and those that are civilian objects. Accordingly, Russia's repeated strikes on Ukraine's energy infrastructure constitute the war crime of intentionally directing attacks at civilian objects.

Further, energy infrastructure enjoys special protection under IHL as an object indispensable to civilians' survival ("OIS") due to its role in the provision of other indispensable objects like food, heat, water, communication systems, and health care. ⁴¹ International law prohibits attacking OIS even when they constitute legitimate military objectives if their destruction is expected to leave the civilian population with such inadequate food or water as to cause its starvation or movement. ⁴² This prohibition covers all possible of modes of deprivation ⁴³ and is largely context-specific as to the "variety of needs of populations in all geographical areas." ⁴⁴

Starvation of civilians as a method of war itself constitutes a separate war crime.⁴⁵ Building off the broad understanding of OIS as inclusive of all possible modes of deprivation, the act of starvation includes not only deprivation of food but also deprivation of any resource essential to civilians' survival. As previously noted, the well-documented destruction of Ukraine's energy infrastructure by Russian forces has resulted in the severe deprivation of critical resources including heat, water, health care, and communication.⁴⁶ Consequently, Russia's attacks on energy infrastructure likely amount to the war crime of starvation, a crime invoked but never before independently prosecuted by a modern international tribunal.

³⁸ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), arts. 52(3), 57(1), June 8, 1977, 1125 U.N.T.S. 3 (hereinafter "AP I").

³⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), art. 52(5), June 8, 1977, 1125 U.N.T.S. 3 (hereinafter "AP I").

⁴⁰ AP I, art. 51(4)(a).

⁴¹ AP I, art. 54.

⁴² International Committee of the Red Cross, *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating the Protection of Victims of International Armed Conflicts (AP I)* ¶ 2110 (1977) [hereinafter "ICRC AP I Commentary"].

⁴³ ICRC AP I Commentary, at ¶ 2102.

⁴⁴ ICRC AP I Commentary, at ¶ 2103; Ambos, Rome Statute Commentary, at 586–7;

K. Dörmann et al., Elements of War Crimes Under the Rome Statute of the International Criminal Court: Sources and Commentary 388 (Cambridge Univ. Press 2003); Global Rights Compliance, "The Hope Left Us", at 52; D. Akande & E. Gillard, Conflict-induced Food Insecurity and the War Crime of Starvation of Civilians as a Method of Warfare: The Underlying Rules of International Humanitarian Law, 17 J. Int. Crim. Justice 753, 758–9 (2019); Anna Mykytenko & Maksym Vishchyk, "All Our Hope Is in the Famine": Why an Investigation into Starvation Crimes in Ukraine Is Urgently Needed, OpinioJuris (2022), https://perma.cc/8QQS-TP9A.

⁴⁵ AP I, arts. 54(3)(a)-(b).

⁴⁶ Santos & Vernon, Zelensky condemns 'inhumane' Christmas Day attack.

Even if there are instances where Russia's attacks on Ukraine's energy infrastructure are ultimately proven to have targeted legitimate military objectives, such attacks would still amount to the war crime of intentionally launching a disproportionate attack. Under IHL, the targeting of legitimate military objects is still subject to scrutiny under the principle of proportionality, 47 which denotes that any collateral damage to civilians must be carefully weighed against the concrete and direct military advantage anticipated from attacking a military objective. The reverberating effects of attacks on Ukraine's critical infrastructure, including deprivation of essential services to civilians, must be factored into any proportionality assessment. 48 Hypothetical, speculative, or indeterminate military advantage, as well as broader political or economic objectives, cannot justify such attacks. 49 The only military benefits Russia could potentially derive from these attacks involve the marginal, temporary disruption of Ukraine's military activities reliant on impacted energy infrastructure. ⁵⁰ As this Report establishes, the devastating nationwide impacts on Ukraine's civilians are clearly excessive in comparison to any potential anticipated military advantage Russia might gain by attacking Ukraine's energy infrastructure. Thus, Russian attacks against Ukraine's energy infrastructure, even in instances where it could be a military object, amount to the war crime of disproportionate attacks.

Finally, the requisite mental element is satisfied for all three alleged war crimes, based on three sets of analyzed evidence: weapons characteristics, patterns of attacks, and Russian officials' statements. First, the use of high-precision weapons⁵¹ provides compelling evidence that these attacks were deliberately aimed at civilians and civilian objects. Civilian harm was not an incidental consequence of attacks aimed at legitimate military objectives, but rather the intended outcome. Second, the pattern of attacks, including their intensity and geographic scope, further demonstrates Russian officials' intent to attack civilians. Russia routinely unleashes tens to hundreds of drones and missiles⁵² simultaneously striking targets across Ukraine,⁵³ indicating an intent to inflict severe civilian suffering on a mass scale. Additionally, the timing of the attacks, targeting essential infrastructure during the cold winter months when the civilian population is especially vulnerable, underscores Russia's intent to deprive Ukrainian civilians of OIS. Finally, widespread media coverage of the devastating effects of these attacks, and Russian officials' comments about both specific attacks and the broader Russian aerial campaign, underscore Russian leaders' knowledge and intent to target energy infrastructure and deprive civilians of essential resources to punish them into submission.

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⁴⁷ AP I, at arts. 51(5)(b), 57(2)(a)(iii), 57(2)(b).

⁴⁸ Wolfgang Benedek et al. & OSCE, Report on Violations of International Humanitarian and Human Rights Law, War Crimes and Crimes against Humanity Committed in Ukraine Since 24 February 2022 29 (2022), https://perma.cc/Y4XB-DHQT; see also Michael N. Schmitt & Major Michael Schauss, Uncertainty in the Law of Targeting, Towards a Cognitive Framework, 10 HARVARD NAT'L SECURITY J. 148, 173 (2019).

⁴⁹ Katanga, ICC TC II Judgment, ¶ 893 (Mar. 7, 2014); ICRC AP I Commentary, at ¶ 2209; ICRC, The Principles of Proportionality in the Rules Governing the Conduct of Hostilities under International Humanitarian Law 18 (2016), https://perma.cc/YJS3-EC8F; Michael Schmitt, Ukraine Symposium – Attacking Power Infrastructure under International Humanitarian Law, Lieber Inst. (Oct. 20, 2022), https://perma.cc/JPK2-KBNQ; ICRC AP I Commentary, ¶ 2024; Yoram Dinstein, Legitimate Military Objectives under the Current Jus in Bello, 31 ISR. Y.B. Hum. RTS. 1, 5 (2001); Henry Shue & David Wippman, Limiting Attacks on Dual-Use Facilities Performing Indispensable Civilian Functions, 35 CORNELL INT'L L.J. 7. 559, 561 (2002).

⁵⁰ Schmitt, Ukraine Symposium – Attacking Power Infrastructure.

⁵¹ For an overview of weapons used and their technical characteristics, *see* Appendix II.

⁵² See Russian Firepower Strike Tracker: Analyzing Missile Attacks in Ukraine, CSIS, https://perma.cc/T8Z5-MLAU.

⁵³ See Ukraine Conflict: Interactive Map, ACLED, https://perma.cc/46LU-TWPN.

Key Findings: Russia's Aerial Attacks on Densely Populated Civilian Areas and Civilian Objects Rise to the Level of Crimes Against Humanity and War Crimes

In addition to strikes on critical infrastructure, Russia's aerial attacks target densely populated civilian areas and civilian objects across Ukraine. According to the UN HRMMU, civilian casualties rose by 30% from 2023 to 2024 as Russia increased its use of aerial bombs, long-range missiles, and drones in populated urban centers. The pattern of these attacks is so pronounced that some experts have labeled it "urbicide"—a distinct form of mass violence characterized by the deliberate destruction of vital civilian infrastructure undergirded by a logic of collective punishment. The Report analyzes 17 specific Russian attacks on densely populated civilian centers and civilian infrastructure and establishes that these attacks amount to both crimes against humanity and war crimes.

Russia's aerial attacks on densely populated civilian areas and civilian objects rise to the level of the crimes against humanity of murder, extermination, and persecution.

Russia's aerial attacks on civilian infrastructure satisfy the contextual elements of crimes against humanity. Examining 17 specific attacks⁵⁷ targeting densely populated urban areas and civilian buildings including houses, schools, hospitals, and cultural sites across multiple regions, the Report concludes that these attacks form part of a widespread and systematic attack against Ukraine's civilian population. As noted above, Russia's widespread⁵⁸ aerial attacks have killed thousands of civilians across 22 Ukrainian regions,⁵⁹ including at least 111 civilians killed in the 17 selected attacks. These attacks have caused widespread damage and destroyed thousands of civilian buildings in 19 regions and the city of Kyiv.⁶⁰ The cases analyzed in this Report resulted in damage or destruction to at least 15 schools and educational buildings, eight hospitals and medical facilities, two cultural sites, and numerous other civilian buildings. Moreover, the systematic nature of Russia's attacks is evident from "a series of repeated actions" and "continual repetition of the same modus operandi." Over the last three years, Russia has repeatedly targeted densely populated urban

⁵⁸ Prosecutor v. William Samoei Ruto, Henry Kiprono Kosgey, & Joshua Arap Sang, ICC-01/09-01/11, ICC PTC II Decision, ¶¶ 176–7 (Jan. 23, 2012) ("There are substantial grounds to believe that the attack perpetrated was widespread. Viewed as a whole, the evidence shows that the attack was massive, frequent, carried out collectively with considerable seriousness and directed against a large number of civilian victims"). *See also* Prosecutor v. Omar Hassan Ahmad Al Bashir, ICC-02/05-01/09-3, ICC PTC I Decision, ¶ 81 (Mar. 4, 2009) ("The Chamber has previously held that this language excludes random or isolated acts of violence, and that the term 'widespread' refers to the large-scale nature of the attack, as well as to the number of victims, while the term 'systematic' pertains to the organised nature of the acts of violence and to the improbability of their random occurrence").

⁵⁴ United Nations, Civilian Harm and Human Rights Abuses Persist in Ukraine as War Enters Fourth Year (Feb. 21, 2025), https://perma.cc/KR7A-6VUN.

⁵⁵ Aaron Clements-Hunt, Russia's Campaign of Urbicide in Ukraine, NEW LINES INST. (Jun. 7, 2022), https://perma.cc/92X7-9UVR.

⁵⁶ See Appendix I (Case Nos. 1, 2, 3, 4, 6, 8, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22).

⁵⁷ See id.

⁵⁹ OHCHR, Treatment of Prisoners of War, at 4.

⁶⁰ Over 10,000 Claims for Damage or Destruction to Residential Housing Submitted to the Register of Damage for Ukraine, REGISTER OF DAMAGE FOR UKRAINE (Oct. 1, 2024), https://perma.cc/FM6M-VZPN.

⁶¹ See Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014); Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

centers and residential areas, underscoring the improbability that these attacks are random rather than systematic. Indeed, a senior UN official reporting to the Security Council described civilian casualties resulting from Russia's "relentless attacks" on Ukrainian cities and towns as a "daily destructive pattern."

Like Russia's attacks on critical infrastructure discussed above, Russia's targeting of populated civilian areas is intended to "spread terror among the entire civilian population" and thereby force Ukrainian civilians to flee or surrender. Civilians are not an "incidental victim" of Russia's policy of total war but rather the intended target. Accordingly, the broader Russian attack was "directed against [the] civilian population" of Ukraine. The 17 strikes analyzed in the Report are not isolated acts unrelated to Russia's broader campaign. Instead, their common nature, aims, and consequences make them part of the broader attack, thus demonstrating the nexus between these individual strikes and overall attack. Finally, Russian officials' statements regarding the attacks, combined with widespread reporting about the resulting civilian harm from international media, human rights organizations, and UN reports, underscores that Russian officials were aware that their aerial attacks constituted part of a widespread and systematic attack against the civilian population.

Next, the Report presents a detailed analysis of murder, extermination, and persecution as crimes against humanity.

Russian missile and drone strikes examined in the Report satisfy the requisite elements of murder as a crime against humanity. These aerial attacks resulted in at least 111 civilian deaths, were conducted as part of a widespread and systematic attack against the civilian population, and took place in densely populated areas at times where civilians were likely to be present, demonstrating a strategy to maximize civilian harm. In particular, the perpetrators acted with the necessary awareness that "death(s) would occur in the ordinary course of events," given that in multiple attacks discussed in the Report, barrages of highly-precise drones and missiles targeted crowded civilian areas as people were commuting to work and taking children to school.⁷⁰ There was no discernable military

⁶² Russian Attacks 'A Daily Destructive Pattern' in Ukraine, Security Council Hears, UNITED NATIONS (Apr. 11, 2024), https://perma.cc/FQU9-89MA.

⁶³ Russian Attacks on Kyiv and Cities Across Ukraine Are an Escalation of Aggression and Apparent Violations of Laws of War, AMNESTY INTERNATIONAL (Oct. 10, 2022), https://perma.cc/B3V9-5WQ4.

⁶⁴ See Situation in the Republic of Kenya, ICC-01/09, ICC PTC II Decision, ¶ 82 (Mar. 31, 2010);

⁶⁵ Prosecutor v. Ntaganda, ICC-01/04-02/06, ICC PTC II Decision, ¶ 23 (Jun. 9, 2014).

⁶⁶ Katanga, ICC TC II Judgment, ¶ 1124 (Mar. 7, 2014).

⁶⁷ See, e.g., Apt, Russia's Eliminationist Rhetoric.

⁶⁸ Hervé Bar for AFP, Civilians Flee East Ukraine, Warnings of 'Horrific' Abuses, MOSCOW TIMES (Apr. 8, 2022), https://perma.cc/ZAA9-6S8D; AFP, Ukrainian Theater Sheltering 'More Than 1,000' Civilians Bombed, MOSCOW TIMES (Mar. 17, 2022), https://perma.cc/Q63E-ZD4R; Pjotr Sauer, Russia confirms it carried out Vinnytsia strike as fears grow in east Ukraine, GUARDIAN (Jul. 15, 2022), https://perma.cc/7PQP-LXRR; Marc Santora, Civilian Terror: Russia Hit Ukrainian Cities With Waves of Drones, N.Y. TIMES (Nov. 7, 2024), https://perma.cc/LX67-CEGD.

⁶⁹ Report of the 34th Special Session of the Human Rights Council on the Deteriorating Human Rights Situation in Ukraine Stemming from the Russian Aggression, UNIVERSAL RIGHTS GROUP (May 13, 2022), https://perma.cc/A783-ER3M; United Nations, Russian attacks on civilian targets in Ukraine could be a war crime: UN rights office (Mar. 11, 2022), https://perma.cc/7QWG-D2HQ; OHCHR, Update by the Chair of the Independent International Commission of Inquiry on Ukraine, at the 51st session of the Human Rights Council (Sep. 23, 2022), https://perma.cc/YEW9-JAVE.

⁷⁰ See Bemba, ICC TC III Judgment, ¶ 90 (Mar. 21, 2016); Katanga, ICC TC II Judgment, ¶¶ 781–2 (Mar. 7, 2014).

advantage to justify these attacks; rather, the evidence presented indicates that the attacks were motivated by retaliatory intent.⁷¹

In the context of the mass killing of civilians, Russia's attacks on civilians and civilian objects amount to the crime against humanity of extermination, as evidenced by both the direct and indirect effects of these attacks. Firstly, continuous mass attacks on residential buildings, shopping centers, concert halls, and dormitories directly result in an overwhelming number of deaths. With 82% of civilian casualties occurring in "towns and cities under attack," Russia's systematic strikes, using high-precision weapons and failing to take required precautions, have effectively turned cities under siege into "death zones" for Ukrainian civilians. 72 Russia's attacks on medical facilities cause two types of lethal consequences—the direct killing of patients and medical personnel, and the indirect killing of civilians through decimation of the health care system such that it can no longer provide routine and life-saving care. 73 These attacks thus create conditions of life calculated to bring about the destruction of part of the civilian population that constitute extermination. Russian forces' requisite intent and knowledge that their conduct formed part of a widespread and systematic attack can be readily discerned from several types of evidence. The timing of these strikes—during daytime hours in busy locations where civilians were likely to be present, or at night when civilians were likely sleeping in their homes—combined with the systematic nature of the attacks⁷⁴ and the absence of discernible legitimate military objectives, suggest a clear intent to inflict high civilian casualties. Statements by high-ranking Russian officials and experts, claiming that Ukraine "must be destroyed completely"75 and that Ukrainians "will face total destruction, where their wives, their kids, mothers and fathers live,"76 indicate, at minimum, an intent to target densely populated urban areas, necessarily killing scores of civilians. In addition, the use of high-precision weaponry like Kalibr missiles, UMPDB D30-SN bombs, and Iskander missiles, strongly indicates that the perpetrators intentionally targeted these specific civilian targets.

Finally, Russia's aerial attacks against civilians and civilian infrastructure amount to the crime against humanity of persecution. The Report shows how Russia's attacks intentionally and severely deprive Ukrainians, as a national and perceived political collectivity, of fundamental rights to life, education, cultural life, and health care, by reason of their group identity. Russian officials' declared intent is to target the Ukrainian nation, both physically and ideologically, and eliminate any manifestation of its collective identity. They claim that there is "no historical basis" for the "idea of Ukrainian people as a nation separate from the Russians" and equate support for Ukrainian

⁷¹ For example, in Case No. 8, one of the weapons bore the marking "for Belgorod," suggesting the attack was launched in retaliation for Ukraine's attacks on the Russian border city. *See* Appendix I (Case No. 8). In Case No. 6, Putin indicated that the attack was a response to Ukraine's attack on the Crimea bridge. *See* Appendix I (Case No. 6).

⁷² Civilian Casualties in Ukraine Surge by 28% Oper Six Months. ACTION ON ARMED VIOLENCE (AQAV) (Sep. 20, 2024).

⁷² Civilian Casualties in Ukraine Surge by 28% Over Six Months, ACTION ON ARMED VIOLENCE (AOAV) (Sep. 20, 2024), https://perma.cc/GD5S-YZUM.

⁷³ Olha Fokaf, *Hospital Bombing Was Latest Act in Russia's War on Ukrainian Healthcare*, ATLANTIC COUNCIL (Jul. 11, 2024), https://perma.cc/2XS4-CJP3.

⁷⁴ See Civilian Casualties in Ukraine Surge by 28% Over Six Months, ACTION ON ARMED VIOLENCE ("AOAV") (Sep. 20, 2024), https://perma.cc/GD5S-YZUM (as evidenced by AOAV's finding that 82% of strikes occurred in dense urban areas).

⁷⁵ Apt, Russia's Eliminationist Rhetoric (citing the Telegram post of Dmitry Medvedev on Aug. 19, 2023).

⁷⁶ Russian Media Monitor, Vladislav Shurygin says Ukrainians are animals, YOUTUBE (Nov. 11, 2024), https://perma.cc/9PPJ-4ESJ.

⁷⁷ Rome Statute, art. 7(2)(g).

⁷⁸ Vladimir Putin, On the Historical Unity of Russians and Ukrainians (Jul. 12, 2021), https://perma.cc/43FD-SCX8

independence to "a type of Nazism" that "poisons" Ukrainian society.⁷⁹ These remarks lay the groundwork for—and are evidence of—the specific discriminatory intent that fuels Russia's deprivation of Ukrainians' fundamental rights, and that is necessary to prove persecution.

Russia's persecutory attacks on civilians and civilian objects, including nine attacks analyzed in the Report⁸⁰ that claimed 66 civilian lives, illustrate Russia's intentional and severe deprivation of the right to life contrary to international law. Similarly, Russia has deprived civilians of the fundamental right to the highest attainable standard of physical and mental health in three analyzed cases of attacks against hospitals, 81 which represent a mere fraction of at least 1,300 Russian attacks on health care facilities. 82 Through attacks on educational institutions, including eight attacks analyzed in the Report targeting 17 educational facilities, 83 Russia has deprived Ukrainian children of their fundamental right to education, including studies in Ukrainian language, culture, and history. Between September 2022 and October 2023 alone, Russian forces damaged 3,428 educational facilities and completely obliterated 365 others. 84 These relentless attacks, coupled with the aggressive imposition of Russian culture, history, and language (so-called "Russification") in schools in occupied territories, 85 showcase Russia's persecutory intent to make Ukrainians "part of the one Russian people."86 By either destroying Ukrainian schools or forcibly imposing the Russian educational curriculum on Ukrainian schools under occupation, Russia deprives Ukrainian children of "their own cultural identity, language, and values," eroding future generations' understanding of what it means to be Ukrainian. In addition, Russia has persistently attacked Ukraine's cultural objects, including in two attacks examined in this Report that damaged a concert hall and a historic building.⁸⁸ Russia's systematic targeting of museums, archives, and libraries in an effort to dismantle significant foundations of Ukrainian identity⁸⁹ has damaged over 457 cultural objects in Ukraine.⁹⁰ In sum, Russian attacks against educational institutions and cultural objects, coupled with attacks targeting medical facilities and populated urban areas, make plain that Russia is persecuting Ukrainian civilians due to their Ukrainian nationality and perceived political ideology. These attacks are a deliberate effort to eradicate integral elements of Ukraine's history, identity, and statehood, and rise to the level of persecution as a crime against humanity.

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⁷⁹ Apt, Russia's Eliminationist Rhetoric.

⁸⁰ See Appendix I (Case Nos. 2, 3, 4, 8, 11, 15, 16, 17, 20).

⁸¹ See Appendix I (Case Nos. 3, 10, 19).

⁸² \$155 billion – the total amount of damages, KSE.

⁸³ See Appendix I (Case Nos. 2, 6, 10, 15, 16, 17, 18, 20).

⁸⁴ "Tanks on the Playground": Attacks on Schools and Military Use of Schools in Ukraine, Human Rights Watch (2023), https://perma.cc/YFD4-QP55.

⁸⁵ *Id*.

⁸⁶ Denys Azarov et al., *Understanding Russia's Actions in Ukraine as the Crime of Genocide*, 21 J. INT'L CRIM. JUSTICE 233 (2023).

⁸⁷ Education under Occupation: Forced Russification of the School System in Occupied Ukrainian Territories, HUMAN RIGHTS WATCH (2024), https://perma.cc/BR4T-KSCX.

⁸⁸ See Appendix I (Case Nos. 3, 17).

⁸⁹ Human Rights Watch & International Human Rights Clinic at Harvard Law School (HRW & IHRC), Destroying Cultural Heritage: Explosive Weapons' Effects in Armed Conflict and Measures to Strengthen Protection (Apr. 18, 2024), https://perma.cc/W5R8-EXJX.

⁹⁰ Damaged Cultural Sites in Ukraine Verified by UNESCO, UNESCO (Feb. 7, 2024), https://perma.cc/KMV2-FFEF.

Russia's aerial attacks on densely populated civilian areas and objects constitute the war crimes of intentionally directing attacks against civilians, civilian objects, and specially protected objects.

Eleven aerial attacks against civilian objects analyzed in the Report⁹¹ amount to the war crimes of intentionally directing attacks against civilians, civilian objects, and specially protected objects. The contextual elements for these war crimes mirrors the analysis set forth above with respect to attacks on critical infrastructure.

Russia has attacked civilian objects rather than military objectives, violating the IHL principle of distinction. For example, Russia's strikes targeted residential and commercial areas where civilians and civilian objects were foreseeably present, including apartment buildings, homes, businesses, and hypermarkets, as well as specially protected objects, such as educational facilities and cultural sites. The eleven attacks killed 85 civilians, including one pregnant woman and five children, and injured 295 more, including 18 children. Russia's use of high-precision weapons, combined with the absence of evidence of military use or discernable military objectives in the areas under attack, reinforce the conclusion that civilian and civilian objects were the intended targets. In at least two cases, civilian areas were attacked with drones bearing an inscription indicating the attacks were retaliation for Ukraine's military operations in Russia and Russian-controlled territories. These inscriptions reinforce the inference that Russia intended to target civilians and civilian infrastructure.

The requisite mental element is satisfied for all three alleged war crimes. For each war crime, "the perpetrator meant to cause the consequence or is aware that it will occur in the ordinary course of events." Intent can be inferred by considering "the means and methods used during the attack, the number and status of the victims, [and] the discriminatory nature of the attack." Given the high-precision weapons deployed, the pattern of repeated strikes against civilian objects in locations and at times where civilians are likely to be present, the absence of necessary precautions, and the fact that these attacks killed or injured 380 civilians, it is reasonable to conclude that Russian officials intended "the civilian population as such or individual civilians not taking direct part in hostilities" and "civilian objects" to be the object of the attack, satisfying the requisite level of intent.

The Need for Accountability and an Accurate Historical Record

The aerial attacks analyzed in this Report illustrate how drones and missiles are shaping contemporary warfare. Russia's use of drones and missiles in Ukraine has expanded the boundaries of hostilities beyond specific combat zones to encompass the entire country, endangering Ukraine's civilian population as a whole. This phenomenon is not an incidental collateral effect of conflict but a central component of Russia's strategy to wage war against Ukrainian civilians. The clearly

⁹¹ See Appendix I (Case Nos. 3, 4, 8, 11, 15, 16, 17, 18, 20, 21, 22).

⁹² See AP I, art. 51.

⁹³ See Appendix I (Case Nos. 3, 17).

⁹⁴ See Rome Statute, arts. 8(2)(b)(i)–(ii), art. 30.

⁹⁵ Katanga, ICC TC II Decision, ¶ 807 (Mar. 7, 2014) (citing Elements, General Introduction, ¶ 3; Kunarac et al., ICTY AC Judgment, ¶ 91 (Jun. 12, 2002); Prosecutor v. Stanislav Galić, IT-98-29, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006); Prosecutor v. Blaškić, IT-95-14-T, ICTY TC Judgment, ¶ 512 (Mar. 3, 2000)).

⁹⁶ Rome Statute, art. 8(2)(b)(i).

⁹⁷ Id. at art. 8(2)(b)(ii).

⁹⁸ Id. at arts. 8(2)(b)(i)-(ii).

discernable criminal purpose, and the sheer scale at which Russia is deploying drones and missiles, has hastened modern warfare's return to a relic of the past—total war, where everyone and everything, including vital civilian infrastructure and civilian morale, can be attacked to achieve victory.

After decades of progress building international legal institutions and developing jurisprudence, Russia's conduct in Ukraine presents a fundamental challenge to the international legal order and the protection of human rights. At the same time, overwhelming evidence of Russia's crimes against humanity and war crimes offers a unique opportunity for international law to meet the moment, demonstrate its enduring relevance, and play a role in maintaining peace and security for Ukraine and globally.

The Authors urge governments and international institutions to document and prosecute Russia's aerial attacks so that responsible actors can be held accountable and an accurate historical record of Russia's conduct in Ukraine is preserved. When repressive regimes shape the history of their oppression, they do so in ways that distort and legitimize their own actions, and impede progress towards a more just, peaceful, and secure world. When political and military officials commit atrocities without facing legal consequences, it fosters a culture of impunity that emboldens other bad actors. Breaking the cycle of disinformation and impunity is not just a legal necessity—it is a moral obligation that we owe to millions of Ukrainians, who are resisting Russian aggression and protecting our shared human values.

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APPENDIX I: AERIAL ATTACKS UNDER EXAMINATION

APPENDIX II: WEAPONS USED BY THE RUSSIAN ARMED FORCES IN UKRAINE

Table of Abbreviations

Abbreviation	Definition
AOAV	Action on Armed Violence
COI	Independent International Commission of Inquiry on Ukraine
DPR	So-Called Donetsk People's Republic
ECtHR	European Court of Human Rights
EU	European Union
GPS	Global Positioning System
HRC	United Nations Human Rights Committee
HRMMU	United Nations Human Rights Monitoring Mission to Ukraine
IAC	International Armed Conflict
IACtHR	Inter-American Court of Human Rights
ICC	International Criminal Court
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic Social and Cultural Rights
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
ICTR	International Criminal Tribunal for Rwanda
ICTY	International Criminal Tribunal for the Former Yugoslavia
IDP	Internally Displaced Person
IHL	International Humanitarian Law
IHRC	International Human Rights Clinic
IHRL	International Human Rights Law
IPHR	International Partnership for Human Rights
LPR	So-Called Luhansk People's Republic
NGO	Non-Governmental Organization
NIAC	Non-International Armed Conflict
OHCHR	United Nations Office of the High Commissioner for Human Rights
OIS	Objects indispensable to the survival of civilians
OTP	Office of the Prosecutor, International Criminal Court
PHR	Physicians for Human Rights
PIL	Public International Law
UAV	Unmanned Aerial Vehicle
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
VCLT	Vienna Convention on the Law of Treaties
WHO	World Health Organization

I. Introduction

The International Partnership for Human Rights ("IPHR")¹ and the International Human Rights Clinic ("IHRC") at Harvard Law School² (hereinafter "Authors") have prepared this Report to support ongoing documentation, investigation, and prosecution efforts of alleged crimes against humanity and war crimes committed by Russian officials and their collaborators in Ukraine in the context of and in association with Russia's aggression against Ukraine, beginning in February 2022.

Based on the evidence and materials presented in this Report, the Authors submit that there is a reasonable basis to conclude that in the context of specific attacks spotlighted in this document, Russian officials and their collaborators have committed multiple crimes, as defined under the Rome Statute of the International Criminal Court ("ICC"), across various regions of Ukraine.³ The crimes identified in this Report include:

- Crime against humanity of murder (Art. 7(1)(a));
- Crime against humanity of extermination (Art. 7(1)(b));
- Crime against humanity of persecution (Art. 7(1)(h));
- Crime against humanity of other inhumane acts (Art. 7(1)(k));
- War crime of intentionally directing attacks against civilians (Art. 8(2)(b)(i));
- War crime of intentionally directing attacks against civilian objects (Art. 8(2)(b)(ii));
- War crime of intentionally directing attacks against specially protected objects (Art. 8(2)(b)(ix));
- War crime of intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians clearly excessive in relation to the concrete and direct overall military advantage anticipated (Art. 8(2)(b)(iv)); and
- War crime of intentionally using starvation of civilians as a method of warfare (Art. 8(2)(b)(xxv)).

This Report proceeds in six sections. Section II explains the methods and interpretation tools employed in the Report. Section III provides a brief factual overview of the conflict to date.

Section IV outlines the relevant legal standards for crimes against humanity and war crimes, drawing on the Rome Statute, the ICC's Elements of Crimes ("Elements"), legal commentaries, and

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¹ IPHR is an independent, non-governmental organization founded in 2008. With a presence in Brussels, Kyiv, and Tbilisi, IPHR works closely with civil society groups in Eastern Europe, South Caucuses, and Central Asia to raise human rights concerns at the international level and promote respect for the rights of vulnerable communities. IPHR has been documenting atrocity crimes committed in the context of Russia's war on Ukraine since 2014 and has been using collected evidence for accountability purposes.

² The IHRC works at the cutting edge of education and advocacy to advance tangible change in human rights. IHRC engages in litigation, research, fact-finding, and advocacy in partnership with human rights organizations around the world, as well as communities and individuals directly affected by abuse. The IHRC's expertise spans six broad practice areas: (1) accountability and remedies, (2) armed conflict and civilian protection, (3) climate justice and the environment, (4) gender, race, and non-discrimination, (5) protecting fundamental freedoms, and (6) social and economic justice. Ten clinical students contributed to the research, analysis, and drafting of this Report, working under the supervision of Clinical Professor of Law Susan Farbstein and Clinical Teaching Fellow Daniel Levine-Spound. This document does not purport to represent the institutional views of Harvard Law School or Harvard University.

³ This Report refers to and relies upon legal standards articulated in the Rome Statute because it provides the most authoritative statement of international criminal law.

jurisprudence from the ICC and *ad hoc* tribunals.⁴ It first explores the elements of four relevant crimes against humanity: murder, extermination, persecution, and other inhumane acts. It subsequently details the elements of five selected war crimes: intentionally directing attacks against the civilian population, intentionally directing attacks against civilian objects, intentionally directing attacks against specially protected objects, intentionally launching attacks with knowledge that such attacks will cause loss of life or civilian harm clearly excessive to the concrete and direct overall military advantage anticipated, and intentionally using starvation of civilians as a method of warfare.

Section V and VI apply these legal standards to analyze two categories of attacks in depth: attacks on critical energy infrastructure and attacks on civilians and civilian objects, including specially protected objects. This analysis demonstrates that attacks against critical infrastructure constitute the crimes against humanity of extermination and other inhumane acts, and the war crimes of directing attacks against civilian objects, disproportionate attacks, and starvation. This analysis also demonstrates that attacks on civilians and civilian objects constitute the crimes against humanity of murder, extermination, and persecution, and the war crimes of directing attacks against civilians, directing attacks against civilian objects, and attacks on specially protected objects. Given the length and breadth of this Report, each case reference is supported by the facts most relevant to the analysis at hand, with more comprehensive factual details and citations provided in Appendix I.⁵

The Report is accompanied by two appendices:

- Appendix I provides a detailed overview of each attack referenced in the Report.
- Appendix II provides an overview of the types of weapons implicated in these attacks, including the Shahed-136 Unmanned Aerial Vehicle ("UAV" or "drone"), Iskander (9K720 Iskander) Missile System, Kalibr missiles, Tornado-S multiple rocket launchers, Kh-101 (X-101) missiles, UMPB D30-SN Bomb, and KAB family of guided bombs.

This Report adopts a policy of strategic disengagement from Russia's anticipated counterarguments, focusing solely on objective, fact-based analysis grounded in international humanitarian law ("IHL") and public international law ("PIL"). In adopting such an approach, this Report underscores the legal obligations violated by Russia's acts and advocates for accountability at the highest levels.

In sum, this Report demonstrates the urgent need for justice, ensuring that those responsible for atrocities in Ukraine are held accountable under international law. Through this approach, the Authors seek to advance justice and reinforce the rule of law.

II. Methodology

This section outlines the Authors' methodology in preparing this Report, which analyzes aerial attacks carried out since Russia launched its full-scale invasion of Ukraine in February 2022.

⁴ This Report will not assess potential perpetrators and modes of liability, which require further investigation.

⁵ The repetition of facts related to each attack allows each subsection of this document to largely stand alone, in tandem with Appendix I, rather than requiring cross-referencing among different subsections.

a. Factual Methodology

Recognizing the complexity and scale of the conflict, the Authors' methodology reflects a rigorous, multi-layered investigation. The Authors combined extensive fieldwork, witness testimonies, evidence collection, open-source intelligence, and forensic analysis performed by multiple organizations with relevant expertise, including IPHR and IHRC. Drawing on diverse sources, the Authors' methodology prioritizes precision and reliability. By integrating detailed criteria for case selection and leveraging comprehensive datasets, this approach aims to provide a robust framework for concluding that the documented acts amount to crimes against humanity and war crimes.

Focusing on incidents between March 2022 and March 2024, the Report concludes that these acts constitute both crimes against humanity and war crimes. IPHR documented hundreds of suspected war crimes and crimes against humanity carried out by Russian forces following the full-scale invasion of Ukraine. These attacks and resultant crimes occurred across the entire territory of Ukraine, and were not limited to combat zones in the eastern and southern parts of the country. Each identified incident was then thoroughly investigated by analysts and recorded in detailed databases, enabling comprehensive tracking and examinations of the attacks. IPHR relied on multiple sources of evidence, including witness testimony, open-source information, the Ukrainian and Russian governments' official statements about specific attacks, news reports, and social media sources such as Telegram, Facebook, and X. When possible, the Authors engaged in the analysis of video footage, physical wreckage, and munition remnants to identify the nature and location of the impact sight, as well as the weapons employed in each attack.

Subsequently, upon review of the large dataset originally provided by IPHR, the IHRC developed selection criteria to identify the most promising cases of both crimes against humanity and war crimes. This criteria-based approach considered various factors, including but not limited to:

- Whether the attack resulted in civilian deaths or injuries, either directly or through reverberating effects;
- Whether any evidence indicated the presence of the Ukrainian military at or near the sites of the attacks;
- Whether Russia employed inherently indiscriminate or precise weapons; and
- Whether the attacks were systematic or widespread.

The IHRC, in consultation with IPHR, then applied these criteria to select the 22 specific attacks discussed in this Report. Once identified, the Authors collected additional materials from reliable reports and open-source materials about the 22 attacks, to supplement information already gathered through fieldwork and forensic analysis. Such information included official reports from international organizations, including United Nations ("UN") bodies and reputable non-governmental organizations ("NGOs"). For broader contextual information, IHRC also consulted publicly available secondary sources, such as news reports, social media posts, investigative articles, and academic publications.

b. Legal Methodology

This Report examines specific aerial attacks and applies relevant international legal standards to determine whether these attacks amount to crimes against humanity and war crimes as defined in the Rome Statute. It relies up the Rome Statute as the most authoritative and comprehensive source of international criminal law norms, ratified by Ukraine, and thus applicable in its territory. The Authors employ established techniques of legal interpretation to ensure a precise and principled application of international law. The general rules of interpretation codified in Articles 31–33 of the Vienna Convention on the Law of Treaties ("VCLT"), which are applicable to the interpretation of the Rome Statute, are central to this approach. These rules provide a structured framework for understanding the provisions of the Rome Statute, emphasizing good faith, the ordinary meaning of the text, and its context and purpose.

The Rome Statute itself, through Article 21, outlines the hierarchy of sources relevant for the interpretation and application of crimes defined under Articles 7 and 8. Primary among these are the Statute and its Elements, although the Elements are non-binding and serve merely as guidance to assist interpretation. Additionally, Article 21 incorporates applicable treaties, principles, and rules of international law, including those of the international law of armed conflict, as secondary sources. Two provisions of the Rome Statute hold particular significance for interpretation. Article 21(3) mandates that the Statute's interpretation and application be consistent with internationally recognized human rights standards, while Article 22(2) requires that the definitions of crimes be strictly construed and not extended by analogy. 9

With regard to the war crimes defined under Article 8 of the Rome Statute, a comprehensive understanding of individual crimes requires reference to the relevant rules of international humanitarian law ("IHL"). The Elements explicitly acknowledge this necessity, stipulating that the interpretation of war crimes must align with the established framework of the law of armed conflict. This alignment is further reinforced by the chapeau of Article 8(2), which directly references the Geneva Conventions and the broader framework of international law. ¹⁰ Accordingly, this Report relies on IHL as a foundational reference to interpret the constituent elements of the war crimes addressed.

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⁶ See International Criminal Court, Situation in Ukraine, https://perma.cc/8C3A-MN2X.

⁷ Cf. Prosecutor v. Jean-Pierre Bemba Gombo, ICC-01/05-01/08-3343, ICC TC III Judgment, ¶¶ 75–6 (Mar. 21, 2016) ("[. . .] the interpretation of the Statute is governed, first and foremost, by the VCLT, specifically Articles 31 and 32"); Situation in the Democratic Republic of Congo, ICC-01/04-168, ICC AC Judgment, ¶ 33 (Jul. 24, 2006).

⁸ Where these sources do not provide sufficient clarity, the ICC may apply general principles of law derived from national legal systems. Prosecutor v. Omar Hassan Ahmad Al Bashir, ICC-02/05-01/09-3, ICC PTC I Decision, ¶ 128 (Mar. 4, 2009) ("[...] the Majority considers that the Elements of Crimes and the Rules must be applied unless the competent Chamber finds an irreconcilable contradiction between these documents on the one hand, and the Statute on the other hand."); Al-Bashir, ICC TC III Dissenting Opinion of Judge Ušacka, ¶ 17 (Mar. 4, 2009) (disagreeing with majority and emphasizing that the elements shall merely assist the Court).

⁹ Cf. Bemba, ICC TC III Judgment, ¶¶ 83, 86 (Mar. 16, 2016) (principle of legality does not prohibit recourse to other sources of law "whenever necessary to determine the precise content of the definition of a specific criminal conduct"). ¹⁰ Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06-1962, ICC AC Judgment, ¶ 53 (Jun. 15, 2017) ("Thus, the specific reference to the 'established framework of international law' within Article 8 (2) (b) and (e) of the Statute permits recourse to customary and conventional international law regardless of whether any lacuna exists, to ensure an interpretation of Article 8 of the Statute that is fully consistent with, in particular, international humanitarian law").

c. Disengagement from Propaganda or Misinformation

This Report deliberately disengages with speculative or propagandistic claims by Russian actors, maintaining an objective approach grounded in impartial legal analysis of reliable, verifiable evidence. Russia has consistently demonstrated a lack of intention to cooperate constructively with entities seeking accountability for war crimes and crimes against humanity. Its efforts have largely focused on disruption, often relying on propaganda and speculative arguments to obscure the facts and distort the applicable legal framework. This Report seeks to avoid inadvertently legitimizing Russia's strategy by refraining from engaging with these tactics. The burden of substantiating any counterclaims lies with Russia.

This approach serves a broader purpose of ensuring that the narrative presented in the Report is grounded in an impartial and fact-based presentation. Where necessary, the Report assesses the presence of military objectives near civilians or civilian objects, without validating unsubstantiated claims. Similarly, the Report emphasizes the civilian character of critical infrastructure and addresses any claims of dual use only where they are supported by clear evidence. This approach also sends a clear message, rejecting Russia's deliberate use of disinformation as a warfare tactic.

III. Factual Overview: Russia's Full-Scale Invasion of Ukraine

In February 2022, Russia launched a full-scale military invasion of Ukraine, occupying large parts of the southern and eastern regions of the country. The invasion marked a continuation of Russian operations initiated in March 2014, when Russia occupied and annexed Crimea after a period of political unrest in Ukraine and started a proxy war in Donbas. From February 2022 to the present, the Russian military has conducted numerous missile and UAV strikes across Ukraine, from Kherson and Mariupol (southern Ukraine), to Lviv (western Ukraine), to Kharkiv and Sumy (eastern Ukraine), to Kyiv (central Ukraine).¹³

Russian attacks have routinely targeted critical infrastructure in Ukraine, substantially and detrimentally impacting civilians' standards of living and wellbeing across the country. Indeed, Russian missile and drone strikes damaged at least 40% of Ukraine's energy infrastructure in the first year of the invasion, causing blackouts, water shortages, and a lack of heating, particularly during the

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¹¹ Kremlin Spokesman response to the ICC Prosecutor Karim Khan's statement expressing a desire to cooperate with Moscow regarding the situation in Ukraine: the ICC's claim coined as "absurd," emphasizing that Russia does not recognize the court's jurisdiction, does not consider its verdicts legitimate, and sees no reason for cooperation. See ICC's claim of intent to cooperate with Russia absurd, Kremlin spokesman tells TASS, TASS (Jun. 25, 2024), https://perma.cc/ERX5-H78W.

¹² For instance, Russian officials have consistently claimed, particularly in the context of deadly attacks resulting in tragic civilian casualties, that "Ukrainian troops continue to station in public premises, including schools, and use civilians as human shields." *See* Russian Embassy (@RussianEmbassy), X (May 4, 2022), https://perma.cc/R78Y-XBRR. Throughout the invasion, Russian officials have repeatedly asserted that the Ukrainian army employs "civilians as human shields." *See* Russian Embassy (@RussianEmbassy), X (Apr. 28, 2023), https://perma.cc/76QQ-G7JY.

¹³ Visual Journalism Team, *Ukraine in maps: Tracking the war with Russia*, BBC (Feb. 21, 2024), https://perma.cc/CZ85-M84F; Javier Galán et al., *How the map of Ukraine has changed in three months of war*, EL País (May 24, 2022), https://perma.cc/26JZ-V7C3.

cold winter months.¹⁴ By the end of 2024, Russian aerial attacks had destroyed 80% of Ukraine's energy infrastructure.¹⁵ Russian attacks have also impacted Ukrainians' access to healthcare. From February 2022 through the end of 2023, Physicians for Human Rights ("PHR") reported at least 1,522 attacks on Ukraine's health care systems, resulting in the deaths of 198 health care workers.¹⁶ By the end of 2024, Russia's aerial attacks had damaged or destroyed at least 1,203 health care facilities across the country.¹⁷ In addition, Russian missile strikes targeted humanitarian convoys trying to access areas where civilians needed medical assistance.¹⁸

According to the United Nations Office of the High Commissioner for Human Rights, since February 2022 Russia's war has claimed more than 12,300 civilian lives, including over 650 children, and left another 27,800 injured—a toll likely underestimated due to verification challenges.¹⁹ In the first two years following the invasion, Russian air strikes caused over 30,000 civilian casualties, damaged or destroyed more than 250,000 buildings housing approximately 3.4 million people, internally displaced approximately four million people (with another 6.8 million fleeing the country), and left 14.6 million people in need of humanitarian assistance in Ukraine.²⁰ The war's deleterious effects on Ukrainian civilians are only increasing as the war enters its fourth year. In the summer of 2024 alone, at least 589 civilians were killed and 2,685 were injured,²¹ with a record-high number of civilian casualties reported in September 2024.²²

Russia's frequent use of explosive weapons with wide area effects—including artillery, cruise and ballistic missiles, and air strikes from UAVs²³—accounts for more than 90% of all civilian casualties.²⁴ Given that the vast majority of these casualties have occurred in territory controlled by Ukraine, the United Nations Office of the High Commissioner for Human Rights ("UN OHCHR") has concluded that most civilian casualties resulted from attacks by the Russian military.²⁵ At the

https://perma.cc/W28R-Q8AG

¹⁴ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, Human Rights Watch (HRW) (Dec. 6, 2022) https://perma.cc/S38H-3VMD; Report 2022/23: The State of the World's Human Rights: Ukraine 2022, Amnesty International (Mar. 27, 2023), https://perma.cc/AVV7-WLBV.

¹⁵ Sofia Ferreira Santos & Will Vernon, *Zelensky condemns 'inhumane' Christmas Day attack*, BBC (Dec. 25, 2024), https://perma.cc/KYC2-YFL9.

¹⁶ Physicians for Human Rights and Truth Hounds ("PHR & TH"), Health Care in the Dark: The Impacts of Russian Attacks on Energy in Ukraine (2024), https://perma.cc/CD9T-8RXE.

¹⁷ Kyiv School of Economics, Report on damages to infrastructure from the destruction caused by Russia's military aggression against Ukraine as of January 2024, (Apr. 2024), https://perma.cc/FM2K-LGCP.

¹⁸ Report 2022/23: The State of the World's Human Rights: Ukraine 2022, AMNESTY INTERNATIONAL (Mar. 27, 2023); Ukraine: Missile attack on humanitarian convoy in Zaporizhzhia further proof of Russia's 'utter disregard for civilian lives,' AMNESTY INTERNATIONAL (Sept. 30, 2022), https://perma.cc/Z6E5-KSJC.

¹⁹ U.N. Office of the High Commissioner of Human Rights ("OHCHR"), *Ukraine: Deputy High Commissioner decries dangerous escalation and calls for path to peace* (Jan. 8, 2025), https://perma.cc/2ZV6-P4HY.

²⁰ Center for Preventive Action, War in Ukraine, COUNCIL ON FOREIGN RELATIONS (Apr. 24, 2024), https://perma.cc/7AEG-YTN6; Report 2022/23: The State of the World's Human Rights: Ukraine 2022, AMNESTY INTERNATIONAL (March 27, 2023); Ukraine: 42 civilian casualties every day in two years of war, OXFAM INTERNATIONAL (Feb. 22, 2024), https://perma.cc/3BXJ-SPN9; Kyiv School of Economics, Report on damages to infrastructure from the destruction caused by Russia's military aggression at 8.

 ²¹ U.N. Office of the High Commissioner of Human Rights (OHCHR), Treatment of Prisoners of War and Update on the Human Rights Situation in Ukraine: 1 June 24 – 31 August 2024 10 (2024), https://perma.cc/ASF3-59QA.
 ²² UN HRMMU, Report on the Human Rights Situation in Ukraine, 1 September-30 November 2024 ¶ 15 (2024),

²³ The terms UAVs, drones, and loitering munitions are used interchangeably throughout this Report.

²⁴ U.N. Office of the High Commissioner of Human Rights (OHCHR), Two-Year Update: Protection of Civilians: Impact of Hostilities on Civilians since 24 February 2022 3 (2024); see also OHCHR, Treatment of Prisoners of War.

²⁵ OHCHR, Two-Year Update, at 3.

same time, the Russia military's use of long-range missiles and drones has led to significant casualties far from the frontline.²⁶ These attacks have occurred in waves, with spikes in missile use by Russia in July 2023, December 2023 through January 2024, and July 2024.²⁷

The international community has widely condemned Russia's illegal invasion and subsequent violations of international law, including in a 2023 UN General Assembly ("UNGA") resolution. Notably, the UNGA referred to Russia's actions in Ukraine as "the aggression by the Russian Federation against Ukraine," and highlighted "the continuous attacks against critical infrastructure across Ukraine with devastating consequences for civilians." In March and June 2024, the ICC Pre-Trial Chamber II issued arrest warrants for Russian Lieutenant General Sergei Kobylash, Russian Navy Admiral Viktor Sokolov, former Russian Minister of Defense Sergei Shoigu, and Chief of the Russian General Staff of the Armed Forces and First Deputy Minister of Defence Valery Gerasimov, in connection with Russia's unlawful attacks against civilian objects and energy infrastructure. In the context of these ongoing developments, and building off the work already conducted by the ICC's Office of the Prosecutor ("OTP"), this Report identifies relevant cases for investigation and provides in-depth legal analysis to aid future proceedings addressing aerial attacks.

IV. Legal Standards: Crimes Against Humanity and War Crimes

There is compelling evidence that Russia's UAV and missile attacks in Ukraine amount to crimes against humanity and war crimes as defined by the Rome Statute. This section explores the elements of selected crimes against humanity and war crimes that are particularly apposite to Russia's aerial attacks in Ukraine. Drawing on the Rome Statute, the Elements, relevant commentaries, and jurisprudence from the ICC and *ad hoc* tribunals, this section articulates the relevant legal standards for selected crimes.

a. Crimes Against Humanity

Crimes against humanity encompass a series of acts enumerated in Article 7 of the Rome Statute when perpetrated in the context of "a widespread or systematic attack directed against any civilian population." The predicate acts examined in this Report—including murder, extermination, persecution, and other inhumane acts—must satisfy contextual elements common to all crimes against humanity. This section first addresses those five contextual elements. Subsequently, it discusses the specific elements of selected crimes against humanity applicable in the context of Russia's UAV and missile attacks in Ukraine: (1) murder, (2) extermination, (3) persecution, and (4) other inhumane acts.

i. Contextual Elements

According to Article 7(1) of the Rome Statute, an underlying act may amount to a crime against humanity if it satisfies the following criteria:

²⁶ *Id.* at 3–4.

²⁷ *Id.* at 4.

²⁸ See G.A. Res. ES-11/6 (Mar. 2, 2023).

²⁹ Id.

³⁰ International Criminal Court, Situation in Ukraine, https://perma.cc/8C3A-MN2X.

³¹ Rome Statute of the International Criminal Court ("Rome Statute") (2002), art. 7.

- 1) Forms part of a widespread or systematic attack;
- 2) Forms part of an attack directed against a civilian population;
- 3) Is committed pursuant to a State or organizational policy;
- 4) Possesses an identifiable nexus between the individual act and the attack; and
- 5) The perpetrator acted with knowledge that the act formed part of such attack.³²

1. Widespread or Systematic Nature of the Attack

To qualify as a crime against humanity, an underlying act must constitute part of a "widespread or systematic attack."³³ This disjunctive test aims to "exclude isolated or random acts from the notion of crimes against humanity."³⁴ The term "widespread" refers to the "large scale nature of the attack and the number of targeted persons."³⁵ "Systematic" is defined as "the organised nature of the acts of violence and the improbability of their random occurrence."³⁶ Various factors are relevant for assessing systematicity, including whether the attack was thoroughly organized, ³⁷ followed a regular pattern, ³⁸ was grounded in a common policy, ³⁹ involved significant public or private resources, ⁴⁰ or implicated high-level political and military authorities. ⁴¹ Consequently, "evidence of planning, organisation or direction by a State or organisation may be relevant to prove both the policy and systematic nature of the attack."⁴² An attack's systematicity may additionally be inferred from a regular pattern of attacks, or "the existence of a 'pattern of crimes' reflected in the non-accidental repetition of similar criminal conduct on a regular basis."⁴³ As the ICC has explained, courts will consider:

...[W]hether a series of repeated actions seeking to produce always the same effects on a civilian population was undertaken with consideration – identical acts or similarities in criminal practices, continual repetition of a same *modus operandi*, similar treatment meted out to victims or consistency in such treatment across a wide geographic area.⁴⁴

³² *Id*.

³³ *Id*.

³⁴ Prosecutor v. Jean-Pierre Bemba Gombo, ICC-01/05-01/08, ICC PTC II Decision, ¶ 33 (Jun. 10, 2008).

³⁵ Prosecutor v. Gbagbo, ICC-02/11-01/11, ICC PTC I Decision, ¶ 222 (Jun. 12, 2014); Prosecutor v. Germain Katanga, ICC-01/04-01/07, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); see Situation in the Republic of Kenya, ICC-01/09, ICC PTC II Decision, ¶ 95 (Mar. 31, 2010); Prosecutor v. Jean-Pierre Bemba Gombo, ICC-01/05-01/08, ICC PTC II Decision, ¶ 83 (Jun. 15, 2009); Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06, ICC TC VI Judgment, ¶ 691 (Jul. 8, 2019).

³⁶ Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); see Gbagbo, ICC PTC I Decision, ¶ 223 (Jun. 12, 2014); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

³⁷ Situation in Cote D'Ivoire, ICC-02/11, ICC PTC III Decision, ¶¶ 43, 94 (Nov. 15, 2011); Gbagbo, ICC PTC I Decision, ¶ 216 (Jun. 12, 2014).

³⁸ Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); Gbagbo, ICC PTC I Decision, ¶ 223 (Jun. 12, 2014); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

³⁹ Situation in Cote D'Ivoire, ICC PTC III Decision, ¶ 43 (Nov. 15, 2011); Gbagbo, ICC PTC I Decision, ¶ 216 (Jun. 12, 2014).

⁴⁰ Kenya, ICC PTC II Decision, ¶ 96 (Mar. 31, 2010).

⁴¹ *Id*.

⁴² Gbagbo, ICC PTC I Decision, ¶ 216 (Jun. 12, 2014).

⁴³ Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); see Gbagbo, ICC PTC I Decision, ¶ 223 (Jun. 12, 2014); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

⁴⁴ Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014); see Ntaganda, ICC TC VI Judgment, ¶ 693 (Jul. 8, 2019).

2. Attack Directed Against Civilian Population

Pursuant to Article 7(2)(a) of the Rome Statute, an "attack directed against any civilian population" is "a course of conduct involving the multiple commission of acts referred to in article 7, paragraph 1, of the Statute against any civilian population, pursuant to or in furtherance of a State or organizational policy to commit such attack."⁴⁵ The attack need not be a military attack. However, it must amount to "more than a few isolated incidents or acts."⁴⁷ Accordingly, the ICC has consistently defined an attack as "a campaign, an operation, or series of actions" as opposed to a single isolated act. ⁴⁸

The object of such attacks must be a civilian population. The ICC generally embraces an expansive definition of "civilian," excluding only "members of armed forces and other legitimate combatants." As noted above, civilians who are no longer taking part in hostilities, former combatants who have laid down arms, and those who are *hors de combat*, such as the wounded and detained, fall within the ambit of "civilian" for the purposes of a crime against humanity. ⁵⁰

In ascertaining whether an attack was directed against a civilian population, the ICC has made clear that prosecutors need not demonstrate that "the entire civilian population of the geographical area in question was being targeted," but the population must be "the primary object of the attack in question" and not "merely be an incidental victim." The civilian population need not be the sole target, however—an attack might predominantly target a civilian population while simultaneously targeting a legitimate military objective. ⁵² As noted in *Ntaganda*: ⁵³

[The Court] may 'consider whether a military operation, alleged to form part of the alleged attack against a civilian population, complied with the requirements of IHL, including the principle of distinction between legitimate targets and protected persons or objects and the duty to take precautionary measures.⁵⁵⁴

⁴⁵ ICC, Elements of Crimes (2011), art. 7, Introduction, ¶ 3; see Katanga, ICC TC II Judgment, ¶ 1101 (Mar. 7, 2014); Gbagbo, ICC PTC I Decision, ¶ 209 (Jun. 12, 2014).

⁴⁶ Katanga, ICC TC II Judgment, ¶ 1101 (Mar. 7, 2014); see Ntaganda, ICC TC VI Judgment, ¶ 662 (Jul. 8, 2019); Bemba, ICC PTC II Decision, ¶ 75 (Jun. 15, 2009); Kenya, ICC PTC II Decision, ¶ 80 (Mar. 31, 2010); see also Prosecutor v. Galić, IT-98-29-T, ICTY TC I Judgment and Opinion, ¶ 141 (Dec. 5, 2003).

⁴⁷ Bemba, ICC PTC II Decision, ¶ 81 (Jun. 15, 2009).

⁴⁸ Katanga, ICC TC II Judgment, ¶ 1101 (Mar. 7, 2014); Kenya, ICC PTC II Decision, ¶ 80 (Mar. 31, 2010); Gbagbo, ICC PTC I Decision, ¶ 209 (Jun. 12, 2014).

⁴⁹ Bemba, ICC PTC II Decision, ¶ 78 (Jun. 15, 2009). However, some Tribunal jurisprudence upholds a stringent definition of civilian which excludes prisoners of war and combatants. *See, e.g.*, Prosecutor v. Martić, IT-95-11-A, ICTY AC Judgment (Oct. 8, 2008). For an example of a more expansive view of the definition of a civilian, *see, e.g.*, Kayishema & Ruzindana, ICTR-95-1-T, ICTR TC Judgment, ¶ 127 (May 21, 1999).

⁵⁰ See Galić, ICTY TC Judgment, ¶ 143; Prosecutor v. Blaškić, IT-95-14-T, ICTY TC Judgment, ¶ 214 (Mar. 3, 2000); Prosecutor v. Akayesu, ICTR-96-4, ICTR TC I Judgment, ¶ 582 (Sept. 2, 1998).

⁵¹ Kenya, ICC PTC II Decision, ¶ 82 (Mar. 31, 2010).

⁵² Katanga, ICC TC II Judgment, ¶ 1104 (Mar. 7, 2014).

⁵³ Prosecutor v. Bosco Ntaganda, ICC-01/04-02/06 A A2, ICC AC Judgment, ¶ 411 (Mar. 30, 2021).

⁵⁴ *Id*.

3. Pursuant to a State or Organizational Policy

To constitute a crime against humanity, the attack must be executed in "furtherance of a state or organizational policy to commit such acts." The policy to perpetrate an attack against the civilian population must be formulated by either a State or organization. The State policy need not "have been conceived at the highest level of the State machinery" nor be formalized or explicitly defined, provided that the attack was "planned, directed, or organized" rather than constituting "spontaneous or isolated acts of violence." In fact, the ICC has found that a policy to direct an attack towards a civilian population may "only crystallise and develop as such actions are set in train and undertaken by perpetrators." Accordingly, the existence of a plan might only become evident "once the acts have been committed and in the light of the overall operation or course of conduct pursued." Moreover, to constitute an attack on a civilian population, the policy need not direct an attack against a particular group or geographic area.

Absent evidence of a formal plan, a policy may be properly discerned from "repeated actions occurring according to the same sequence, or the existence of preparations or collective mobilization orchestrated and coordinated by that state organization." The ICC, for example, has inferred the existence of a policy from shared characteristics across victims of the attack, such as "nationality, ethnicity or other distinguishing features, including (perceived) political affiliation."

4. Nexus Between Individual Acts and the Attack

Crimes against humanity require a nexus between the perpetrator's individual act and the attack.⁶⁴ To prove the existence of such a nexus, both ICC and *ad hoc* tribunal jurisprudence indicate that it is sufficient for a perpetrator's act to constitute "part of" the widespread or systematic attack.⁶⁵ In contrast, "[i]solated acts that clearly differ in their nature, aims and consequences from other acts that form part of an attack, fall [beyond] article 7(1) of the Statute."⁶⁶

The requisite nexus may be deduced from shared characteristics across attacks. A non-exhaustive list of relevant characteristics includes: "[t]he nature of [the] acts, the population that was targeted, the identity of the perpetrators and the chronology of relevant events." These may be

⁵⁵ Rome Statute, art. 7(2)(a).

⁵⁶ Id.; see Katanga, ICC TC II Judgment, ¶ 1117 (Mar. 7, 2014).

 $^{^{57}}$ Katanga, ICC TC II Judgment, \P 1117 (Mar. 7, 2014).

⁵⁸ Bemba, ICC PTC II, ¶ 81 (Jun. 15, 2009); see Gbagbo, ICC PTC I Decision, ¶ 215 (Jun. 12, 2014).

⁵⁹ Katanga, ICC TC II Judgment, ¶ 1100 (Mar. 7, 2014).

⁶⁰ Id.

⁶¹ *Id.* at ¶ 1108.

⁶² Id. at ¶ 1109. But see Prosecutor v. Gbagbo, ICC-02/11-01/11, ICC PTC I Decision, ¶ 44(3) (Jun. 3, 2013) (explicitly requesting "specific information about meetings at which the policy/plan was allegedly adopted as well as how the existence and content of this policy/plan was communicated or made known to the members. . . once it was adopted").

⁶³ Gbagbo, ICC PTC I Decision, ¶ 209 (Jun. 12, 2014).

⁶⁴ Rome Statute, art. 7(1).

 $^{^{65}}$ Katanga, ICC TC II Judgment, \P 1124 (Mar. 7, 2014).

⁶⁶ *Id*.

⁶⁷ Gbagbo, ICC PTC I Decision, ¶ 212 (Jun. 12, 2014).

revealed through an "objective assessment of the characteristics, aims, nature, and/or consequences of the acts concerned." ⁶⁸

5. Knowledge of the Attack

A perpetrator's act only qualifies as a crime against humanity when the perpetrator possesses knowledge of the widespread and systematic attack, and that his or her individual acts form part of said attack.⁶⁹ In articulating the requisite *mens rea* for crimes against humanity in *Bemba*, ICC Pre-Trial Chamber II defined "knowledge" as "awareness that a circumstance exists or a consequence will occur in the ordinary course of events."⁷⁰

The Elements explain that the knowledge requirement "should not be interpreted as requiring proof that the perpetrator had knowledge of all characteristics of the attack or the precise details of the plan or policy of the State or organization." In fact, the perpetrator's individual motive to act is immaterial to establishing the requisite knowledge—it is sufficient to demonstrate that either the perpetrator or those at whose behest they are acting possessed knowledge of the fact that his or her actions constituted a part of the attack.⁷²

ii. Selected Crimes Against Humanity

Prohibited acts may constitute crimes against humanity provided that the aforementioned contextual elements are satisfied. Given the nature of Russia's missile and drone attacks in Ukraine, this Report addresses the following crimes against humanity: (1) murder; (2) extermination; (3) persecution; and (4) other inhumane acts. This subsection specifically focuses on the non-contextual elements of each crime.

1. Murder

Pursuant to the Elements for Article 7(1)(a) of the Rome Statute, the crime against humanity of murder is composed of the following elements:

- 1) "The perpetrator killed one or more persons";⁷³
- 2) "The conduct was committed as part of a widespread or systematic attack against a civilian population"; and
- 3) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population."⁷⁴

⁷² Katanga, ICC TC Judgment, ¶ 1125 (Mar. 7, 2014); see Gbagbo, ICC PTC I Decision, ¶ 214 (Jun. 12, 2014); see also Prosecutor v. Sainovic et al., IT-05-87-A, ICTY AC Judgment, ¶ 277 (Jan. 23, 2014).

⁶⁸ Ntaganda, ICC TC VI, ¶ 696 (Jul. 8, 2019); see Kenya, ICC PTC II Decision, ¶ 98 (Mar. 21, 2010); Gbagbo, ICC PTC I Decision, ¶ 212 (Jun. 12, 2014).

⁶⁹ Rome Statute, art. 7(1); see Bemba, ICC PTC II Decision, ¶ 88 (Jun. 15, 2009); Katanga, ICC TC Judgment, ¶ 1125 (Mar. 7, 2014); Gbagbo, ICC PTC I Decision, ¶ 214 (Jun. 12, 2014).

⁷⁰ Bemba, ICC PTC II Decision, ¶ 87 (Jun. 15, 2009).

⁷¹ Elements, art. 7, Introduction, ¶ 2.

⁷³ Elements, art. 7(1)(a)(1), n. 7 clarifies that "the term 'killed' is interchangeable with the term 'caused death." ⁷⁴ *Id*.

Both ICC and *ad hoc* tribunal jurisprudence define murder as "unlawfully and intentionally causing the death of a human being" whether through affirmative act or omission.⁷⁵ To prove murder, the prosecution must demonstrate a causal link between the accused's conduct and the resulting death.⁷⁶ It is not necessary to establish the precise identity of the victim or the perpetrator to satisfy the *actus reus* of the crime.⁷⁷ In addition, the prosecution may submit circumstantial evidence to prove the victim's (or victims') death[s] if it is "the only reasonable inference that can be drawn therefrom."

Given that murder—as articulated in the Rome Statute and the Elements—does not include a specific *mens rea*, Article 30 of the Rome Statute requires that the perpetrator act "with intent and knowledge" in the absence of another articulated mental state.⁷⁹ To satisfy the requisite *mens rea*, the prosecution therefore must demonstrate that the perpetrator(s) either "meant to kill or to cause the death of one or more persons" or "were aware that the death(s) would occur in the ordinary course of events."⁸⁰ Intent may also be established through evidence that the defendant was aware with "virtual certainty" that their actions would result in the victim's (or victims') death(s).⁸¹ Additionally, the prosecution must prove that "the perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack against a civilian population."⁸²

2. Extermination

Under the Elements for Article 7(1)(b), the crime against humanity of extermination is composed of the following elements:

- 1) "The perpetrator killed one or more persons, including by inflicting conditions of life calculated to bring about the destruction of part of a population";
- 2) "The conduct constituted, or took place as part of, a mass killing of members of a civilian population";
- 3) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 4) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." 83

⁷⁵ See Katanga, ICC TC II Judgment, ¶¶ 766–7 (Mar. 7, 2014); Kenya, ICC PTC II Decision, ¶¶ 141, 142–50 (Mar. 31, 2010); Bemba, ICC PTC II Decision, ¶ 132 (Jun. 15, 2009); Bemba, ICC TC III Judgment, ¶ 87 (Mar. 21, 2016); see also Akayesu, ICTR TC I Judgment, ¶ 589 (Sept. 2, 1998); Prosecutor v. Kupreskic et al., IT-95-16-T, ICTY TC Judgment, ¶ 560 (Jan. 14, 2000).

⁷⁶ Katanga, ICC TC II Judgment, ¶ 767 (Mar. 7, 2014); see Bemba, ICC PTC II Decision, ¶ 132 (Jun. 15, 2009); see also Prosecutor v. Kordic & Cerkez, T-95-14/2-T, ICTY TC Judgment, ¶ 234 (Feb. 26, 2001); Kupreskic et al., ICTY TC Judgment, ¶ 560 (Jan. 14, 2000).

⁷⁷ Bemba, ICC TC III Judgment, ¶ 88 (Mar. 21, 2016).

⁷⁸ Bemba, ICC TC III Judgment, ¶ 88 (Mar. 21, 2016); see Katanga, ICC TC II Judgment, ¶ 768 (Mar. 7, 2014).

⁷⁹ Rome Statute, art. 30; see Katanga, ICC TC II Judgment, ¶ 780 (Mar. 7, 2014).

⁸⁰ Bemba, ICC TC III Judgment, ¶ 90 (Mar. 21, 2016); *see* Katanga, ICC TC II Judgment, ¶¶ 781–2 (Mar. 7, 2014) (stating that the prosecution must demonstrate that "the perpetrator acted deliberately or failed to act (1) in order to cause the death of one or more persons or (2) whereas he or she was aware that death would occur in the ordinary course of events").

⁸¹ Katanga, ICC TC II Judgment, ¶ 776 (Mar. 7, 2014).

⁸² *Id.* at ¶¶ 781–82.

⁸³ Elements, art. 7(1)(b).

Under the Rome Statute, the requisite *actus reus* of extermination differs from that of murder in two primary ways. First, the definition of extermination explicitly includes indirect killings. Secondly, extermination requires that the relevant killings constitute part of "a mass killing of members of a civilian population."⁸⁴

In the extermination context, indirect killing refers to "systematically subject[ing] a large number of people to conditions of living that would lead to their deaths." Such deadly living conditions can by created by, for instance, withholding basic necessities to sustain life or the prevention of proper medical care. Further, under *ad hoc* tribunal jurisprudence, an individual can be convicted for extermination exclusively on the basis of planning to create deadly conditions, provided that the prosecution demonstrates a nexus between the perpetrator's planning and resulting killings. Provided that the prosecution demonstrates a nexus between the perpetrator's planning and resulting killings.

Regarding the "mass killing" requirement, *ad hoc* tribunal jurisprudence has consistently affirmed that a mass killing "may be understood to be 'large scale" yet need not exceed a particular quantitative threshold. The existence of a "mass killing" may therefore "be determined on a case-by-case basis using a commonsense approach." Accordingly, even a single killing might amount to extermination if it occurred in the broader context of a mass killing, and if the perpetrator acted with knowledge of this context. 90

To establish the requisite *mens rea* for extermination, the prosecution must demonstrate pursuant to Article 7(1)(b) of the Elements that the accused "knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." Additionally, per Article 30 of the Rome Statute, the prosecution ought to prove that the material elements of extermination discussed in this subsection were perpetrated "with intent and knowledge."

3. Persecution

Per Article 7(1)(h) of the Rome Statute, "persecution against any identifiable group or collectivity on political, racial, national, ethnic, cultural, religious, gender as defined in paragraph 3, or other grounds that are universally recognized as impermissible under international law, in connection with any act referred to in this paragraph or any crime within the jurisdiction of the [ICC]" constitutes a crime against humanity "when committed as part of a widespread or systematic attack directed against a civilian population, with knowledge of the attack." Article 7(2)(g) further

⁸⁸ *Id.* at ¶ 145.

⁸⁴ Al Bashir, ICC PTC I Decision, ¶ 96 (Mar. 4, 2009); see also Akayesu, ICTR TC I Judgment, ¶ 591 (Sept. 2, 1998).

⁸⁵ Prosecutor v. Milomir Stakić, IT-97-24-A, ICTY AC Judgment, ¶ 260 (Mar. 22, 2006); Kayishema & Ruzindana, ICTR TC Judgment, ¶ 144 (May 21, 1999) ("mass killing of others or...creation of conditions of life that lead to mass killing of others"); Prosecutor v. Krstić, IT-98-33-T, ICTY TC Judgment, ¶ 503 (Aug. 2, 2001) ("there must be evidence that a particular population was targeted and that its members were killed or otherwise subjected to conditions of life calculated to bring about the destruction of a numerically significant part of the population").

⁸⁶ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146 (May 21, 1999).

⁸⁷ Id.

⁸⁹ Id. See also Stakić, ICTY AC Judgment, ¶ 260 (Mar. 22, 2006).

⁹⁰ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146–47 (May 21, 1999).

⁹¹ Elements, art. 7(1)(b).

⁹² Rome Statute, art. 30.

⁹³ Id. at art. 7(1)(h).

clarifies that "persecution' means the "intentional and severe deprivation of fundamental rights contrary to international law by reason of identity of the group or collectivity." The elements of the crime against humanity of persecution are enumerated in the Elements for Article 7(1)(h):

- 1) "The perpetrator severely deprived, contrary to international law, one or more persons of fundamental rights";
- 2) "The perpetrator targeted such person or persons by reason of the identity of the group or collectivity or targeted the group or collectivity as such";
- 3) "Such targeting was based on political, racial, national, ethnic, cultural, religious, gender as defined in article 7, paragraph 3, of the Statute, or other grounds that are universally recognized as impermissible under international law";
- 4) "The conduct was committed in connection with any act referred to in article 7, paragraph 1, of the Statute or any crime within the jurisdiction of the court";
- 5) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 6) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." ⁹⁵

In *Ntaganda*, the ICC Trial Chamber recognized that any prohibited act amounting to a crime against humanity "will, in principle, result in a deprivation of fundamental rights of one or more individuals," satisfying the severity threshold for persecution. ⁹⁶ The Trial Chamber further adopted a case-by-case analysis of the severity of the perpetrator's acts, following a careful consideration of "their context and with consideration of their cumulative effect" and, in particular, whether they resulted in a "gross or blatant' denial of fundamental rights." ⁹⁷

Persecution requires specific discriminatory intent beyond the requisite *mens rea* for all crimes against humanity articulated in Article 30 of the Rome Statute. Such discriminatory intent may be assessed based on "the subjective perception of belonging of both the perpetrator and the victim." The targeted group towards which persecutory acts are directed may be defined either positively or negatively. For instance, a perpetrator may have directed the underlying acts towards members of a particular protected group or those excluded from a certain group. Yet "not all victims of the crime of persecution are required to be members, sympathisers, allies of, or in any other way related to, the protected group." Finally, a perpetrator acting with mixed intent does not

⁹⁵ Elements, art. 7(1)(h). To designate fundamental rights for the purposes of persecution, the ICC has looked to various international human rights conventions and instruments, including the Universal Declaration of Human Rights, the two UN Covenants on Human Rights, and rights laid out in international humanitarian law. Ntaganda, ICC TC VI Judgment, ¶ 991 (Jul. 8, 2019). These rights include, but not are not limited to: "the right to life, liberty, and security of the person, the right not to be subjected to cruel, inhuman or degrading treatment or punishment, and the right not to be subjected to arbitrary arrest, detention or exile." *See also* Situation in the Republic of Burundi, ICC-01/17-X, ICC PTC III Decision, ¶ 132 (Nov. 9, 2017).

⁹⁴ *Id.* at art. 7(2)(g).

⁹⁶ Ntaganda, ICC TC VI Judgment, ¶ 994 (Jul. 8, 2019).

⁹⁷ *Id.* at ¶ 992 (citing Kupreškić et al., ICTY TC Judgment, ¶¶ 615, 620−22 (Jan. 14, 2000)).

⁹⁸ Elements, art. 7(1)(h), Elements, art. 6; see Kupreškić et al., ICTY TC Judgment, ¶ 633 (Jan. 14, 2000); Kordić & Cerkez, ICTY TC I Judgment, ¶¶ 202, 217 (Feb. 26, 2001); Blaškić, ICTY TC Judgment, ¶ 235 (Mar. 3, 2000).

⁹⁹ Ntaganda, ICC TC VI Judgment, ¶ 1010 (Jul. 8, 2019).

 $^{^{100}}$ *Id.* at ¶ 1009.

 $^{^{101}}$ *Id.* at ¶ 1011.

preclude a finding of persecution so long as discriminatory intent is present with regards to the persecutory acts.

Notably, *ad hoc* tribunal jurisprudence suggests that attacks on property may amount to persecution if committed with the requisite discriminatory intent.¹⁰²

4. Other Inhumane Acts

Article 7(1)(k) of the Rome Statute stipulates that "other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health" may amount to a crime against humanity provided that the requisite contextual elements are met. ¹⁰³ The ICC characterizes other inhumane acts as a "residual category" and has sometimes included other inhumane acts in conjunction with charges for other crimes against humanity. ¹⁰⁴ However, the ICC instructs that the standard for other inhumane acts ought to be "interpreted conservatively and must not be used to expand uncritically the scope of crimes against humanity." ¹⁰⁵ Per the Elements for Article 7(1)(k), the crime against humanity of other inhumane acts is composed of the following elements:

- 1) "The perpetrator inflicted great suffering, or serious injury to body or to mental or physical health, by means of an inhumane act";
- 2) "Such act was of a character similar to any other act referred to in article 7, paragraph 1, of the Statute";
- 3) "The perpetrator was aware of the factual circumstances that established the character of the act";
- 4) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 5) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." ¹⁰⁶

Proving the crime of other inhumane acts is contingent on a finding that the perpetrator's acts were of similar character to other prohibited acts enumerated in Article 7 of the Rome Statute. To assess the character of the acts in question, the ICC examines "the nature and gravity of the act" based on numerous factors, including "the violent nature of the crime, the vulnerability of the

¹⁰⁶ Elements, art. 7(1)(k).

¹⁰² See, e.g., Blaškić, ICTY TC Judgment, ¶ 233 (Mar. 3, 2000); Blaškić, IT-95-14-A, ICTY AC Judgment, ¶ 13 (Jul. 29, 2004); Kordic & Cerkez, ICTY TC I Judgment, ¶¶ 202−3, 205−7 (Feb. 26, 2001) (holding that these following acts may amount to the crime of persecution if performed with discriminatory intent: "attack, or bombardment, by whatever means, of undefended towns, villages, dwellings or buildings", "wanton destruction of cities, towns or village", "plunder of public or private property", and "destruction or wilful damage done to institutions dedicated to religion. . . or education").

¹⁰³ Rome Statute, art. 7(1)(k).

¹⁰⁴ At other times, however, the ICC has avoiding charging an alleged perpetrator with other inhumane acts alongside other prohibited acts, leaving its application uncertain. *See* Prosecutor v. Muthaura et al., ICC-01/09-02/11, ICC PTC II Decision, ¶ 269 (Jan. 23, 2012).

¹⁰⁵ *Id*.

¹⁰⁷ Elements, art. 7(1)(k), n. 30.

victims, and the effects of the crime on the physical and mental health of the victims."¹⁰⁸ Further, with respect to the requisite *mens rea* for other inhumane acts, the Rome Statute explicitly requires intentional conduct, namely that the perpetrator "intentionally caus[e] great suffering".¹⁰⁹ In contrast, *ad hoc* tribunal jurisprudence has permitted a more expansive approach, allowing both intent and knowledge to satisfy the mental element.¹¹⁰

b. War Crimes

A war crime "is a serious violation of the laws and customs applicable in armed conflict... which gives rise to individual criminal responsibility under international law." Not all violations of IHL amount to war crimes. Rather, the following four criteria must be satisfied for specific conduct to amount to a war crime: (1) the conduct took place in the context of an armed conflict; (2) there is a "nexus of the conduct to the armed conflict"; (3) the conduct violates "a specific rule of IHL"; and (4) the IHL violation in question is "criminalized under international law" and the conduct "fulfill[s] all requisite material and mental elements" of the specific war crime. 112

The ICC has jurisdiction over a broad range of war crimes committed in both international armed conflicts ("IAC") and non-international armed conflicts ("NIAC"). This Report will focus on five war crimes:

- 1) "Intentionally directing attacks against the civilian population as such or against individual civilians not taking direct part in hostilities";¹¹⁴
- 2) "Intentionally directing attacks against civilian objects, that is, objects which are not military objectives";¹¹⁵
- 3) "Intentionally directing attacks against buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals and places

¹¹⁰ See, e.g., Lukić & Lukić, ICTY TC Judgment, ¶ 962 (Jul. 20, 2009) (holding that the requisite mens rea is that "'at the time of the act or omission, the perpetrator had the intention to inflict serious physical or mental suffering or to commit a serious attack upon the human dignity of the victim' or the accused knew that his acts or omissions were likely to cause serious physical or mental suffering or a serious attack upon the human dignity of the victim"); Kayishema & Ruzindana, ICTR TC Judgment, ¶ 153 (May 21, 1999); Galić, ICTY TC I Judgment and Opinion, ¶ 154 (Dec. 5, 2003).

¹⁰⁸ Prosecutor v. Dominic Ongwen, ICC-02/04-01/15 A A2, ICC AC Amici Curiae Brief on Forced Marriage, ¶ 28 (Dec. 22, 2021); *see also* Prosecutor v. Lukić & Lukić, IT-98-32/1-T, ICTY TC III Judgment, ¶ 961 (Jul. 20, 2009) (*citing* Prosecutor v. Martic, IT-95-11-T, ICTY TC Judgment, ¶ 84 (Jun. 12, 2007)) ("In determining whether the act or omission is of 'similar seriousness' to the other crimes enumerated in Article 5, it is necessary to consider 'all factual circumstances, including the nature of the act or omission, the context within which it occurred, the individual circumstances of the victim as well as the physical and mental effects on the victim.' While it is not necessary that the victim suffered long-term effects from the act, the fact that it had long-term effects can be relevant to an assessment of the seriousness of the act").

¹⁰⁹ Rome Statute, art. 7(1)(k).

¹¹¹ CRYER ET AL., AN INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE 259 (Cambridge Univ. Press 4th ed. 2019); ROME STATUTE OF THE INTERNATIONAL CRIMINAL COURT: ARTICLE-BY-ARTICLE COMMENTARY 331 (Kai Ambos ed., 2022).

¹¹² *Id*.

¹¹³ Rome Statute, art. 8(2); CRYER ET AL., AN INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE, at 268; see ROBERT CRYER, PROSECUTING INTERNATIONAL CRIMES, at 268–86 (Cambridge Univ. Press 2005); see WILLIAM SCHABAS, INTRODUCTION TO THE INTERNATIONAL CRIMINAL COURT 91 (Cambridge Univ. Press 4th ed. 2011). ¹¹⁴ Rome Statute, art. 8(2)(b)(i).

¹¹⁵ Id. at art. 8(2)(b)(ii).

- where the sick and wounded are collected, provided they are not military objectives";¹¹⁶
- 4) "Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians . . . which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated";¹¹⁷ and
- 5) "Intentionally using starvation of civilians as a method of warfare by depriving them of objects indispensable to their survival". 118

These war crimes have been selected based on their relevance to Russian UAV and missile attacks in Ukraine. The selected war crimes are all applicable in IACs, including the ongoing armed conflict between Russia and Ukraine. 120

i. Contextual Elements

This section begins with a discussion of the first two contextual elements common to all four war crimes: (1) the existence of an armed conflict and (2) the nexus between the conduct and the armed conflict. The remaining two contextual elements—requiring an IHL violation which is criminalized under international law—are fulfilled in all cases where the conduct amounts to a war crime and will therefore not be discussed further in this section. The section then explores the requisite *mens rea*. Finally, the section analyzes the specific elements of each of the five war crimes address in this Report.

1. Existence of an Armed Conflict and Nexus to the Armed Conflict

An armed conflict is defined as "a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State." Although the nature of war crimes varies substantially, "[t]he essential element for any war crime is the nexus with armed conflict." 122

War crimes must take place "in the context of" and be "associated with" an armed conflict. 123 The "context" requirement refers to the geographic and temporal context of armed conflict—the conduct must occur during an armed conflict and on the territory in which the armed conflict takes place. 124 The association requirement refers to a specific nexus between the perpetrator's conduct and the conflict, thus excluding acts unrelated to the armed conflict that take

117 *Id.* at art. 8(2)(b)(iv).

¹¹⁶ *Id.* at art. 8(2)(b)(ix).

¹¹⁸ *Id.* at art. 8(2)(b)(xxv).

¹¹⁹ CRYER ET AL., AN INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE, at 274 (*citing* Prosecutor v. Dusko Tadić, ICTY AC Decision, ¶ 70 (Oct. 2, 1995); Bemba, ICC TC III Judgment, ¶ 128 (Mar. 21, 2016)).

¹²⁰ See Cordula Droege, Armed Conflict in Ukraine: A Recap of Basic Rules, HUMANITARIAN L. & POL'Y (Mar. 17, 2022), https://perma.cc/7NCU-RXRS; See also International Armed Conflict in Ukraine, RULAC – GENEVA ACADEMY (last updated Jun. 7, 2023), https://perma.cc/RRF7-W4H9.

¹²¹ Tadić, ICTY AC Decision, ¶ 70 (Oct. 2, 1995).

¹²² CRYER ET AL., AN INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE, at 270.

¹²³ See Elements, arts. 8(2)(b)(i)–(ii), (ix).

¹²⁴ Ambos, Rome Statute Commentary, at 349–52.

place within the geographic and temporal scope of the conflict. As observed by the International Criminal Tribunal for Yugoslavia ("ICTY"), the distinction between a war crime and a "purely domestic offense is that a war crime is shaped by or dependent upon the environment – the armed conflict – in which it is committed."¹²⁵

2. Requisite Mens Rea

Article 30 of the Rome Statute "sets out a default rule for the mental elements of crimes within the [ICC's] jurisdiction." It reads as follows: "[u]nless otherwise provided, a person shall be criminally responsible and liable for punishment for a crime within the jurisdiction of the [ICC] only if the material elements are committed with intent and knowledge." A person has intent "[i]n relation to conduct" when "that person means to engage in the conduct," while "intent in relation to a consequence" entails that a "person means to cause that consequence or is aware that it will occur in the ordinary course of events." Awareness that "a consequence will occur" can be understood as "virtual certainty that [the events] will occur" as a consequence of the perpetrator's actions. This understanding is consistent with the drafting history of the Rome Statute, whereby recklessness was dropped as a standard.

ii. Selected War Crimes

1. Intentionally Directing Attacks Against Civilians¹³¹

Article 8(2)(b)(i) of the Rome Statute criminalizes intentional attacks "against the civilian population as such or against individual civilians not taking direct part in hostilities." The crime consists of the following elements:

- 1) "The perpetrator directed an attack";
- 2) "The object of the attack was a civilian population as such or individual civilians not taking direct part in hostilities";
- 3) "The perpetrator intended¹³³ the civilian population as such or individual civilians not taking direct part in hostilities to be the object of the attack";

¹²⁸ *Id.* at arts. 30(2)(a)–(b).

¹²⁵ Prosecutor v. Kunarac et al., IT-96-23 & IT-96-23/1-A, ICTY AC Judgment, ¶ 58 (Jun. 12, 2022).

¹²⁶ Ambos, Rome Statute Commentary, at 1329.

¹²⁷ Rome Statute, art. 30(1).

¹²⁹ Prosecutor v. Lubanga, ICC AC Judgment, ¶ 6 (Dec. 1, 2014) (overturning the pre-trial chamber's implementation of *dolus eventualis*); *see also* Katanga, ICC TC II Judgment, ¶¶ 775–7 (Mar. 7, 2014) ("it is nigh on possible for him or her to envisage that the consequence will not occur").

¹³⁰ Sarah Finnin, Mental Elements under Article 30 of the Rome Statute of the International Criminal Court: A Comparative Analysis, 61 INT'L & COMP. L.Q. 325, 344–5 (2012).

¹³¹ Some of the analysis in this sub-section is drawn from cases which reference non-international armed conflicts (NIACs). However, the ICC has recognized that any difference between the NIAC crime of intentional attacks against civilians and the international armed conflict crime of intentional attacks, as laid out in the Elements of Crimes in the Rome Statute, is "inconsequential." Katanga, ICC TC II Judgment, ¶ 796, n. 1834 (Mar. 7, 2014).

¹³² Rome Statute, art. 8(2)(b)(i).

¹³³ Where the Statute and Elements do not provide a specific mental element, Art. 30 definition of intent and knowledge apply. As discussed above, the ICC is reading the default *mens rea* standard in Article 30 into the elements of the crime. *See* Ntaganda, ICC TC VI Judgment, ¶ 859, n. 2519 (Jul. 8, 2019).

- 4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 5) "The perpetrator was aware of the factual circumstances that established the existence of an armed conflict" 134

As described above, the fourth and fifth elements apply generally to war crimes under the Rome Statute and do not require further explanation here. However, other elements of the crime merit additional discussion.

First, the term "attack" is drawn from IHL and refers to "acts of violence against the adversary, whether in offense or defence." The definition of attack should be broadly construed, encompassing "any combat action" irrespective of "whether the acts are committed by an aggressor or by the party acting in self-defense." Importantly, there is no requirement to show that any result ensued from the attack as "the material element is established where the attack is launched." In other words, the criteria for what constitutes an attack do not require that civilians ultimately suffer any consequences, such as death or injury.

Secondly, the object of the attack must be the "civilian population as such or individual civilians not taking direct part in hostilities." In IHL, civilians are defined negatively as all individuals who are *not* combatants and thus not legally targetable. The civilian population "comprises all persons who are civilians" and does not "lose its civilian character" due to the presence of persons who are not civilians therein." Under IHL, the civilian population "shall not be the object of attack," a protection that applies to individual civilians "unless and for such time as they take a direct part in hostilities." The prohibition of attacks against civilians is absolute and "cannot be counterbalanced by military necessity."

¹³⁴ Elements, art. 8(2)(b)(i).

¹³⁵ Katanga, ICC TC II Judgment, ¶ 798 (Mar. 7, 2014) (*citing* Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), art. 13(2), June 8, 1977, 1125 U.N.T.S. 609 (hereinafter "AP II")). While AP II specifically applies in NIAC, AP I—which applies to IAC—similarly defines an attack as "acts of violence against the adversary, whether in offence or in defence." Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), art. 49(1), June 8, 1977, 1125 U.N.T.S. 3 (hereinafter "AP I").

¹³⁶ Ambos, Rome Statute Commentary, at 399.

¹³⁷ Katanga, ICC TC II Judgment, ¶ 799 (Mar. 7, 2014).

¹³⁸ Elements, art. 8(2)(b)(i).

¹³⁹ AP I, art. 50 defines a civilian as "any person who does not belong to one of the categories of persons referred to in art. 4 A(1), (2), (3) and (6) of the Third Convention and in Article 43 of this Protocol. In case of doubt whether a person is a civilian, that person shall be considered to be a civilian." AP I, art. 43 notes that "[t]he armed forces of a Party to a conflict consist of all organized armed forces, groups and units which are under a command responsible to that Party for the conduct of its subordinates....Members of the armed forces of a Party to a conflict (other than medical personnel and chaplains covered by Article 33 of the Third Convention) are combatants, that is to say, they have the right to participate directly in hostilities."

¹⁴⁰ AP I, arts. 50(2)–(3).

¹⁴¹ *Id.* While there is no definition of "direct participation in hostilities" ("DPH") in the 1949 Geneva Conventions or the Additional Protocols, the loss of protection for DPH only occurs "for such time as" the civilian in question is DPH. *Id.*

¹⁴² Katanga, ICC TC II Judgment, ¶ 800 (Mar. 7, 2014). This is a key principle of the law that has been described in criminal law at the ICC and at the ICJ. *See* Legality of the Threat of Use of Nuclear Weapons, Advisory Opinion, ICJ Rep. 1996, ¶ 78 (Jul. 8, 1996).

Though the elements of the crime refer to the civilian population as the "object" of the attack, indiscriminate attacks may also qualify as intentional attacks against the civilian population or individual civilians. Indiscriminate attacks are not explicitly defined as a war crime under the Rome Statute. However, Article 51(4) of Additional Protocol I ("AP I") defines indiscriminate attacks as attacks which: (a) "are not directed at a specific military objective," (b) "employ a method or means of combat which cannot be directed at a specific military objective," or (c) "employ a method or means of combat the effects of which cannot be limited as required by this Protocol." ICC jurisprudence suggests that, in certain circumstances, indiscriminate attacks may satisfy the elements of the war crime of intentionally directing attacks against civilians. Notably, in *Katanga*, the ICC Trial Chamber found that the crime may be established where the damage is "so great that it appears . . . that the perpetrator meant to target civilian objectives" and that use of indiscriminate weapons may "show that the attack was directed at the civilian population or individual civilians."

The jurisprudence of *ad hoc* tribunals has similarly found that indiscriminate attacks can "assist in determining whether the attack was directed at the civilian population." To make this determination, the ICTY has considered factual information including:

[The] distance between the victim and the most probable source of fire; distance between the location where the victim was hit and the confrontation line; combat activity going on at the time and the location of the incident, as well as relevant nearby presence of military activities or facilities; appearance of the victim – as to age, gender, clothing; the activity the victim could appear to be engaged in; visibility of the victim due to weather, unobstructed line of sight or daylight. 146

In *Katanga*, the ICC described the requisite *mens rea* of the attack—in line with Article 30 of the Rome Statute—as follows:

[T]he perpetrator must have (1) intentionally directed an attack; (2) intended the civilian population or individual civilians to be the object of the attack; (3) been aware of the civilian character of the population or of civilians . . . [and] (4) been aware of the factual circumstances that established the . . . armed conflict. 147

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¹⁴³ AP I, art. 51(4).

¹⁴⁴ Katanga, ICC TC II Judgment, ¶ 802 (Mar. 7, 2014) (citing AP II, art. 51(4)); Galić, ICTY TC I Judgment and Opinion, ¶ 57 (Dec. 5, 2003); Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006); Martić, ICTY TC Judgment, ¶ 69 (Jun. 12, 2007); Ntaganda, ICC TC VI Judgment, ¶¶ 921–6 (Jul. 8, 2019) ("The crime under Article 8(2)(e)(i) of the Statute may encompass attacks that are carried out in an indiscriminate manner, that is by targeting an area, as opposed to specific objects, or not targeting specific military objects or persons taking a direct part in hostilities, so long as the perpetrator was aware of the presence of civilians in the relevant area. It may also include attacks that are launched without taking necessary precautions to spare the civilian population or individual civilians. . . . the use of, inter alia, the type of heavy weapons in the possession of the UPC/FPLC against them, without awareness of the situation on the ground, or any information as to the concentration of fighters or the number of civilians, and without the taking of any precautions, was unlawful").

¹⁴⁵ Galić, ICTY AC Judgment, ¶¶ 132–3 (Nov. 30, 2006).

¹⁴⁶ *Id.*147 In this interpretation, the ICC departs from the jurispr

¹⁴⁷ In this interpretation, the ICC departs from the jurisprudence of the *ad hoc* tribunals, which required proof "that the attack was launched wilfully and in knowledge of circumstances giving rise to the expectation of excessive civilian casualties. *Id.* at $\P\P$ 58–9.

Notably, the ICC has inferred the requisite mental element for attacks against civilians by analyzing "the means and methods used during the attack, the number and status of the victims, and the discriminatory nature of the attack." Indiscriminate attacks may satisfy the requisite *mens rea* "so long as the perpetrator was aware of the presence of civilians in the relevant area." ¹⁴⁹

2. Intentionally Directing Attacks Against Civilian Objects

Article 8(2)(b)(ii) of the Rome Statute criminalizes attacks against civilian objects. The elements are as follows:

- 1) "The perpetrator directed an attack";
- 2) "The object of the attack was civilian objects, that is, objects which are not military objectives";
- 3) "The perpetrator intended such civilian objects to be the object of the attack";
- 4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." ¹⁵⁰

The Elements describe civilian objects as those "which are not military objectives." This definition stems from Article 52(2) of AP I which states that military objectives are objects which "by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage." Attacks "merely on civilian morale" are excluded, as are attacks when "the advantage searched is merely 'political,' or economic or financial." Moreover, the military advantage "must be concrete and perceptible rather than hypothetical and speculative," and the contribution (of an object's destruction) must be "directed towards the actual war-fighting capabilities of a party to an armed conflict." Finally, AP I specifies that if there is doubt as to the status of an object that is usually used for civilian purposes, such as a school or a house, it shall be presumed that the object is not a military objective.

Regarding the requisite *mens rea*, the approach is similar to that discussed in the previous subsection. ¹⁵⁶ Given that the crime of intentionally directing attacks against civilian objects does not prescribe a *mens rea*, the default standard articulated in Article 30 of the Rome Statute applies: "the

¹⁴⁸ Katanga, ICC TC II Judgment, ¶ 807 (Mar. 7, 2014) (*citing* Kunarac, ICTY AC Judgment, ¶ 91 (Jun. 12, 2002)); Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006); Blaškić, ICTY TC Judgment, ¶ 512 (Mar. 3, 2000). *See*, e.g., Prosecutor v. Katanga and Ngudjolo Chui, ICC-01/04-01/07, ICC PTC I Decision, ¶ 265 (Sept. 30, 2008).

¹⁴⁹ Ntaganda, ICC TC VI Judgment, ¶ 921 (Jul. 8, 2019).

¹⁵⁰ Elements, art. 8(2)(b)(ii).

¹⁵¹ Id.

¹⁵² AP I, art. 52(2). See also Ntaganda, ICC TC VI Judgment, ¶ 1146 (Jul. 8, 2019).

¹⁵³ Ambos, Rome Statute Commentary, at 407.

¹⁵⁴ Id. at 407, 409.

¹⁵⁵ AP I, art. 52(3).

¹⁵⁶ Ambos, Rome Statute Commentary, at 410.

perpetrator meant to cause the consequence or is aware that it will occur in the ordinary course of events."¹⁵⁷

ICC and *ad hoc* tribunal jurisprudence indicate that intent may be inferred in cases of indiscriminate attacks against civilian objects. For example, the ICC Trial Chamber has found that violations of Article 8(2)(e)(i) of the Rome Statute—which prohibits attacks against civilians in NIACs¹⁵⁸—may include attacks carried out indiscriminately "by targeting an area, as opposed to specific objects, or not targeting specific military objects."¹⁵⁹ The ICTY has also considered whether "it was reasonable to believe, in the circumstances of the person(s) contemplating the attack, including the information available to the latter, that the object was being used to make an effective contribution to military action."¹⁶⁰

3. Intentionally Directing Attacks Against Specially Protected Objects

Article 8(2)(b)(ix) of the Rome Statute criminalizes intentional attacks against "buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not military objectives." The elements of the crime are as follows:

- 1) "The perpetrator directed an attack";
- 2) "The object of the attack was one or more buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives";
- 3) "The perpetrator intended such building or buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives, to be the object of the attack";
- 4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." ¹⁶²

Case law for the destruction of specially protected objects at the ICC is limited to NIACs. However, in *Mahdi*, the Trial Chamber recognized that the crime of attacks against specially protected objects has "nearly identical elements" in its NIAC and IAC analogues. ¹⁶³ Therefore, both *Ntaganda* and *Mahdi* are instructive. While specially protected objects benefit generally from the protection afforded to all civilian objects—unless and for such time as they constitute military

¹⁵⁷ Id. at 403.

¹⁵⁸ Rome Statute, art. 8(b)(e)(i).

 $^{^{159}}$ Ntaganda, ICC TC VI Judgment, ¶ 921 (Jul. 8, 2019). Although the ICC was not analyzing a war crime explicitly related to attacks against civilian objects, the reasoning likely holds.

¹⁶⁰ Prosecutor v. Karadžić, MICT-13-55-A, IRMCT AC Judgment, ¶ 489 (Mar. 20, 2019).

¹⁶¹ Rome Statute, art. 8(2)(b)(ix).

¹⁶² Elements, art. 8(2)(b)(ix).

¹⁶³ Prosecutor v. Mahdi, ICC-01/12-01/15-171, ICC TC VIII Decision, ¶ 17 (Sept. 27, 2016).

objectives—they may also benefit from specific, "enhanced" protection. 164 Potentially relevant provisions from treaty law include the following:

- "Fixed establishments and mobile medical units of the Medical Service may in no circumstances be attacked, but shall at all times be respected and protected by the Parties to the conflict";165
- "[I]t is prohibited . . . to commit any acts of hostility directed against the historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples";166
- The prohibition "from any use of the [cultural] property and its immediate surroundings or of the appliances in use for its protection for purposes which are likely to expose it to destruction or damage in the event of armed conflict; and by refraining from any act of hostility, directed against such property";167

In Ntaganda, the ICC addressed the temporal aspect of an object's protected status. Considering attacks against medical facilities, the Trial Chamber noted that protections "shall not cease unless they [protected objects] are used to commit hostile acts, outside their humanitarian function."168 The Trial Chamber stressed that "even under such circumstances, their protection only ceases 'after a warning has been given setting, whenever appropriate, a reasonable time-limit, and after such warning has remained unheeded.""169 In analyzing a specific attack against a particular health care facility, the Trial Chamber held that:

Because persons seeking treatment were present at the Sayo health centre . . . the health centre was in use as a medical facility at the time of the attack. The evidence . . . provides no indication that the health centre in Sayo was used, at the time of the attack, in any manner which would invalidate its protected status so as to turn it into a military objective. 170

Ntaganda also provides insight into the requisite mens rea. Notably, the perpetrator must be aware of the special nature of the object¹⁷¹ and intend for it to be the object of the attack. ¹⁷² For

¹⁶⁴ Id. at ¶ 14 ("Subsequent international instruments reflect the enhanced protection of cultural property, including Additional Protocols I and II to the Geneva Conventions and the Second Protocol to the Hague Convention of 1954.") ¹⁶⁵ Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (1949), art. 19.

¹⁶⁶ AP I, art. 53(a).

¹⁶⁷ Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954), art. 4. ¹⁶⁸ Ntaganda, ICC TC VI Judgment, ¶ 1146 (Jul. 8, 2019) (citing AP I, art. 13(1); AP II, art. 11(2); Jean-Marie Henckaerts & Louise Doswald-Beck, Customary International Humanitarian Law, Volume I: Rules, International Committee of the Red Cross (ICRC) Rule 28 (2005)). Note that further analysis of this case may be particularly relevant when considering Russian attacks against hospitals and health care facilitates.

¹⁶⁹ Ntaganda, ICC TC VI Judgment, ¶ 1146 (Jul. 8, 2019) (citing AP II, art. 11). While AP II applies in noninternational armed conflicts ("NIACs"), AP I, art. 13(1) includes the same requirement.

¹⁷⁰ Id. at 1147.

¹⁷¹ *Id*.

¹⁷² See Prosecutor v. Ntaganda, ICC-01/04-02/06, ICC PTC II Decision, ¶ 130 (Jun. 9, 2014).

example, intent can be demonstrated through direct instructions to destroy the object¹⁷³ or statements by the perpetrator indicating knowledge of the object's purpose.¹⁷⁴

4. Disproportionate Attacks Causing Incidental Death or Injury to Civilians or Damage to Civilian Objects

Article 8(2)(b)(iv) of the Rome Statute criminalizes disproportionate attacks which cause incidental civilian death or harm. This crime is comprised of the following elements:

- 1) "The perpetrator launched an attack";
- 2) "The attack was such that it would cause incidental death or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment and that such death, injury or damage would be of such an extent as to be clearly excessive in relation to the concrete and direct overall military advantage anticipated";
- 3) "The perpetrator knew that the attack would cause incidental death or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment and that such death, injury or damage would be of such an extent as to be clearly excessive in relation to the concrete and direct overall military advantage anticipated";
- 4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." ¹⁷⁶

Most elements of this war crime are identical or similar to those of the war crimes discussed in the previous two subsections. The key distinction is that this war crime does not proscribe attacks directed against unlawful targets. Rather, it governs "incidental damage" caused in attacks on potentially lawful targets.

This war crime is based on the IHL principle of proportionality. Namely, AP I prohibits attacks "which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated." However, proportionality, as outlined in Rome Statute, sets a higher bar than its AP I analogue. Notably, the Rome Statute includes the terms "*clearly* excessive" and "*overall* military advantage" (emphases added). 178

The ICC has not addressed the question of proportionality and the concept is largely undeveloped in the law.¹⁷⁹ However, the jurisprudence from the *ad hoc* tribunals provides some

174 N. at 131

¹⁷³ Id. at 131.

¹⁷⁴ Ntaganda, ICC TC VI Judgment, ¶ 1147 (Jul. 8, 2019).

¹⁷⁵ Rome Statute, art. 8(2)(b)(iv).

¹⁷⁶ Elements, art. 8(2)(b)(iv).

¹⁷⁷ AP I, art. 51(5)(b).

¹⁷⁸ Ambos, Rome Statute Commentary, at 425.

¹⁷⁹ Rogier Bartels, Dealing with Proportionality in Armed Conflict in Retrospect: The Application of the Principle in International Criminal Tribunals, 46(2) ISR. L. REV. 271, 293 (2013).

guidance. For example, in *Galić*, the ICTY Trial Chamber examined "whether a reasonably well-informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack." ¹⁸⁰

With respect to determining military advantage, the Elements provide that "[t]he expression 'concrete and direct overall military advantage' refers to a military advantage that is foreseeable by the perpetrator at the relevant time" and that "[s]uch advantage may or may not be temporally or geographically related to the object of the attack." ¹⁸¹

A pertinent example is found in *Gotovina*, where the ICTY Trial Chamber analyzed the proportionality of an attack primarily targeting a political and military leader of the Serbian army, Milan Martic. In perpetrating the attack, opposing forces fired twelve 10-millimeter shells at Martic's apartment. Given Martic's leadership position in the military, the Trial Chamber concluded that by "disrupting [the military commander's] ability to move, communicate, and command," the attack "offered a definite military advantage, such that his residence constituted a military target." Nevertheless, the court deemed the risk to civilians and civilian objects excessive relative to such military advantage. The Trial Chamber based this finding on several considerations, including the apartment's location in an otherwise civilian apartment building within a predominantly civilian residential area; the timing of the attack between 7:30 a.m. and 8:00 a.m. and again in the evening when "civilians could have reasonably been expected to be present"; and the fact that the number and type of shells used "created a significant risk of a high number of civilian casualties and injuries, as well as of damage to civilian objects." In sum, even a significant anticipated military advantage may not outweigh the risk to civilians and civilian objects.

5. Intentionally Using Starvation of Civilians as a Method of Warfare

Article 8(2)(b)(xxv) of the Rome Statute criminalizes intentionally using starvation as a method of warfare by depriving civilians of objects indispensable to their survival ("OIS"), including wilfully impeding relief supplies as provided under the Geneva Conventions. The elements of this crime are as follows:

- 1) "The perpetrator deprived civilians of objects indispensable to their survival";
- 2) "The perpetrator intended to starve civilians as a method of warfare";
- 3) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 4) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." 186

¹⁸⁵ Rome Statute, art. 8(2)(b)(xxv).

¹⁸⁰ Galić, ICTY TC Judgment and Opinion, ¶ 58 (Dec. 5, 2003).

¹⁸¹ Elements, n. 36.

¹⁸² Prosecutor v. Gotovina, IT-06-90-T, ICTY TC I Judgment, ¶ 1899 (Apr. 15, 2011).

¹⁸³ *Id.* at ¶ 1910.

¹⁸⁴ *Id*.

¹⁸⁶ Elements, art. 8(2)(b)(xxv).

The war crime of starvation has not yet been prosecuted by an international tribunal, resulting in an absence of direct case law to guide interpretation of its elements. ¹⁸⁷ Therefore, the following analysis draws primarily from the text of the Rome Statute, the Elements, relevant IHL principles, and case law on related war crimes to elucidate broader legal standards applicable to starvation, while ensuring alignment with international law principles. ¹⁸⁸ As discussed earlier in Section IV(b), the third and fourth elements apply generally to war crimes under the Rome Statute and will not be examined further in this subsection. However, the first two elements merit closer analysis.

The first element—deprivation of OIS—constitutes the *actus reus* of the crime of starvation and is established by showing that the perpetrator engaged in the conduct of depriving civilians of an OIS. The term "deprived" can be interpreted in light of Article 54 of AP I, which prohibits starvation as a method of warfare and serves as the basis for the crime of starvation. Article 54(2) of AP I provides examples of OIS under IHL, including "foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works." As the International Committee of the Red Cross's ("ICRC") Commentary to AP I explains, these examples are non-exhaustive¹⁸⁹ and ought to be interpreted "in the widest sense." The prohibition extends to "all possibilities" of modes of deprivation. ¹⁹¹ Further, the definition of OIS is largely context-specific, and depends on the "variety of needs of populations in all geographical areas." For instance, shelter and clothing likely constitute OIS, particularly when their deprivation occurs in the context of cold winter temperatures. Deprivation could also occur through omission by refusing to supply civilians with OIS in contravention of Article 8(2)(b)(xxv)'s proscription of "impeding relief supplies." ¹⁹³

With respect to the requisite *mens rea* for the war crime of starvation, the second element requires an intention "to starve civilians as a method of warfare." Although the term "starvation" is

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Commentary 288 (Cambridge Univ. Press 2003).

¹⁸⁷ Laura Graham, *Pathways to Accountability for Starvation Crimes in Yemen*, 53 CASE W. RES. J. INT'L L. 401, 403 (2021); Global Rights Compliance, *The Crime of Starvation and Methods of Prosecution and Accountability* (2019), https://perma.cc/325T-JLC4.

¹⁸⁸ Rome Statute, art. 21(1); Elements, art. 8, Introduction.

¹⁸⁹ International Committee of the Red Cross, Protocol Additional to the Genera Conventions of 12 August 1949, and relating the Protection of Victims of International Armed Conflicts (AP I) ¶¶ 2102–3 (1977) [hereinafter ICRC AP I Commentary].

190 Id. at ¶ 2101; Geoff Corn & Emanuela-Chiara Gillard, The War Crime of Starvation – The Irony of Grasping at Low Hanging Fruit, LIEBER INST. (2024), https://perma.cc/995T-4888. Under AP I, art. 54(2), "[i]t is prohibited to attack, destroy, remove or render useless" OIS. Because the word "attack" typically refers to actions against the adversary, the ICRC's Commentary to AP I states that Article 54(2)'s inclusion of other terms alongside "attack" suggests that the principle extends to "all possibilities" of modes of deprivation. Id. (citing ICRC AP I Commentary, at ¶ 2101).

191 ICRC AP I Commentary, at ¶ 2102. This broad and context-sensitive definition of OIS is consistent with the views of delegations during the negotiations of the Elements, where it was agreed that the deprivation of not only food and drink, but also objects such as medicine and blankets could fall within the scope of the crime of starvation depending on the circumstances. K. Dörmann et al., Elements of War Crimes Under the Rome Statute of the International Criminal Court: Sources and

¹⁹² ICRC AP I Commentary, at ¶ 2103; Ambos, Rome Statute Commentary, at 586–7; Dörmann et al., Elements of War Crimes, at 388; Global Rights Compliance, "The Hope Left Us": Russia's Siege, Starvation, and Capture of Mariupol City 52 (2024), https://perma.cc/4PS8-7T4N; D. Akande & E. Gillard, Conflict-induced Food Insecurity and the War Crime of Starvation of Civilians as a Method of Warfare: The Underlying Rules of International Humanitarian Law, 17 J. INT. CRIM. JUSTICE 753, 758–9 (2019); Anna Mykytenko & Maksym Vishchyk, "All Our Hope Is in the Famine": Why an Investigation into Starvation Crimes in Ukraine Is Urgently Needed, OPINIOJURIS (2022), https://perma.cc/8QQS-TP9A.

not explicitly defined in Article 54 of AP I, ¹⁹⁴ it has been interpreted to mean "the harm and suffering arising from the deprivation of essentials" ¹⁹⁵ or "deprivation of nourishment." ¹⁹⁶ Indeed, the drafters of Article 8(2)(b)(xxv) agreed that, in addition to death by hunger, starvation also encompasses a more general deprivation or insufficient supply of "some essential commodity or something necessary to live." ¹⁹⁷ In short, "starvation" is understood to imply a high degree of deprivation such that survival is threatened, but death need not result. "Starving" could therefore be understood to refer to not only "killing by hunger," but also to the deprivation of "some essential commodity or something necessary to live, including causing to die of cold." ¹⁹⁸

In accordance with the default *mens rea* under Article 30 of the Rome Statute, which requires that "the material elements are committed with intent and knowledge," the mental element for the war crime of starvation requires that the perpetrator intended to engage in the conduct—the deprivation of OIS—whilst either intending or knowing that starvation would result from the conduct in the ordinary course of events. Notably, direct intent to starve need not be the sole or primary intent of a perpetrator's conduct. Intent to starve, for example, may be reasonably

¹⁹⁴ Tom Dannenbaum, Criminalizing Starvation in an Age of Mass Deprivation in War: Intent, Method, Form, and Consequence, 55 VAND. J. TRANSNAT'L L. 681, 726 (2021).

¹⁹⁵ Global Rights Compliance, The Crime of Starvation, at 6.

¹⁹⁶ Ambos, Rome Statute Commentary, at 587; Dörmann et al., *Elements of War Crimes*, at 388. For example, the 26th ICRC International Conference stressed that "water is a vital resource for victims of armed conflict and the civilian population and is indispensable to their survival." Int'l Rev. of the Red Cross Res. 2F(a–b), at 66 (1995), available at https://perma.cc/SA6Z-RPQA. This broader understanding of starvation also accords with the generally broad construction of the concept of OIS which is central to the actus reus of the crime. Particularly, Article 8(2)(b)(xxv) and the Elements both specify that the prohibition of starvation extends to the deprivation of OIS, and Article 8(2)(b)(xxv) extends the prohibition to "wilfully impeding relief supplies." Ambos, Rome Statute Commentary, at 586–7; Global Rights Compliance, *The Crime of Starvation*, at 6.

¹⁹⁷ See Rome Statute, art. 8(2)(b)(xxv); Elements, art. 8(2)(b)(xxv).

¹⁹⁸ Ambos, Rome Statute Commentary, at 587.

¹⁹⁹ In relation to conduct, the perpetrator must have intended to engage in the conduct and, in relation to a consequence, the perpetrator must have either meant to cause the result or been aware that it would occur "in the ordinary course of events." Rome Statute, art. 30.

²⁰⁰ Ambos, Rome Statute Commentary, at 594–5; Akande & Gillard, Conflict-induced Food Insecurity, at 761–5; Dannenbaum, Criminalizing Starvation, at 716–23; Graham, Pathways to Accountability, at 421; Wayne Jordash et al., A Comprehensive Review of Existing IHL and ICL as it Relates to Starvation, in ACCOUNTABILITY FOR MASS STARVATION 117 (Oxford Univ. Press 2022); Wayne Jordash et al., Strategies for Prosecuting Mass Starvation, 17 J. INT. CRIM. J. 849, 859–60 (2019); Global Rights Compliance, The Crime of Starvation, at 12; Mykytenko & Vishchyk, "All Our Hope Is in the Famine." While some scholars argue that Article 30 applies directly to the crime of starvation, the majority of commentators agree that the word "intentionally" in Article 8(2)(b)(xxv) rather supplies a specific intent which restates the standard in Article 30 and ought to be interpreted in light of Article 30. This interpretation is consistent with the view of the ICC Appeals Chamber in Bemba which held that the word "intentionally" in Article 70 of the Rome Statute "does not depart from the standard set out in article 30 of the Statute, but simply clarifies that the same standard applies to offences listed therein." Bemba, ICC-01/05-01/13-2275-Red, ICC AC Judgment, ¶ 677 (Mar. 8, 2018). This understanding also accords with reports of the Preparatory Committee for the drafting of the Rome Statute, which emphasized the importance of maintaining consistency of mental states across all crimes by adhering to the default standard unless there is good reason to depart from it. Ambos, Rome Statute Commentary, at 594–5.

²⁰¹ Jordash et al., *Strategies for Prosecuting Mass Starvation*, at 860. Article 54 of AP I reinforces this conclusion, stating that starvation is prohibited "whether in order to starve out civilians ... or for any other motive." Such language would be redundant if starvation strictly required an exclusive intent to starve. Similarly, Article 54's third paragraph acknowledges that attacking an OIS might still be prohibited where starvation "may be expected," rather than the primary intent. Akande & Gillard, *Conflict-induced Food Insecurity*, at 763; Tom Dannenbaum, *Legal Frameworks for Assessing the Use of Starvation in Ukraine*, JUST SECURITY (2022), https://perma.cc/9L9C-P4HQ.

inferred from circumstantial evidence, including the general context, nature, manner, timing, scale, and duration of the deprivation of OIS.²⁰²

Finally, the perpetrator must have intended specifically to "starve civilians as a method of warfare. . ." (emphasis added). The term "method of warfare" is not defined in IHL but has generally been interpreted to mean "the way in which weapons are used,"203 "a method of fighting,"204 and "any specific, tactical or strategic, ways of conducting hostilities . . . that are intended to overwhelm and weaken the adversary."205 In the context of the crime of starvation, using starvation as a "method of warfare" therefore requires that the act of deprivation of an OIS is linked to the conduct of hostilities and that starvation is used as a specific tactic of conducting hostilities. 206 Yet, it also includes cases where starvation occurs without military gain, as a narrower definition would produce counterintuitive results whereby the crime of starvation would exclude situations where the sole intention was to starve civilians in the course of hostilities.²⁰⁷

V. Application of Law to Facts: Attacks on Critical Infrastructure

This section analyzes nine Russian aerial attacks between September 2022 and March 2023 that targeted critical energy infrastructure across multiple regions of Ukraine. (All facts and citations relevant to the attacks are contained in Appendix I.) It establishes that Russian attacks on Ukraine's energy infrastructure amount to the crimes against humanity of extermination and other inhumane acts pursuant to Articles 7(1)(b) and 7(1)(k) of the Rome Statute, as well as the war crimes of intentionally directing attacks against civilian objects under Article 8(2)(b)(ii), intentionally launching

that area." Ambos, Rome Statute Commentary, at 595.

²⁰² Jordash et al., Strategies for Prosecuting Mass Starvation, at 867–8 (citing Galić, ICTY AC Judgment, ¶ 104 (Nov. 30, 2006); Prosecutor v. Milošević, IT- 98-29/1-T, ICTY TC Judgment, ¶ 881 (Dec. 12, 2007); Prosecutor v. Mladić, IT-09-92-T, ICTY TC Judgment, ¶ 3514, 3515, 3519, 3524 (Nov. 22, 2017); Prosecutor v. Karadžić, IT-95-5/18-T, ICTY TC Judgment, ¶ 5825 (Mar. 24, 2016); Prosecutor v. Jelisić, IT-95-10-A, ICTY AC, ¶ 47 (Jul. 5, 2001); Akayesu, ICTR TC I Judgment, ¶¶ 523, 730 (Sept. 2, 1998). Beyond the ambit of Article 30, the word "intentionally" has been interpreted in a context-specific manner across the Rome Statute and, in the case of starvation, can be read to include a knowledge standard of oblique intent. In the context of the crime of starvation, the text of Article 8(2)(b)(xxv) provides that "wilfully impeding relief supplies" constitutes one mode of starvation. "Wilfully" is a lower mental standard than both direct and oblique intent, indicating that an enhanced mens rea limited to direct intention does not apply generally to the crime of starvation. Moreover, the omission of the phrase containing "wilful" from the Elements may indicate that states did not wish to depart from the default Article 30 standard. See Dannenbaum, Criminalizing Starvation, at 719-26.

²⁰³ ICRC AP I Commentary, at ¶¶ 1402, 1957; Ambos, Rome Statute Commentary, at 595.

²⁰⁴ Akande & Gillard, Conflict-induced Food Insecurity, at 765.

²⁰⁵ ICRC AP I Commentary, at ¶ 2090; Jordash et al., Strategies for Prosecuting Mass Starvation, at 861.

²⁰⁶ Some commentators query whether the inclusion of the term "method" adds a purposive element regarding the consequences of the depriving act. However, the majority of commentators note that this would run contrary to the meaning of the term "method of warfare" as normally construed in IHL, where such "methods" are already assumed to be intended to weaken the adversary. See Jordash et al., Strategies for Prosecuting Mass, at 861–2; Dannenbaum, Criminalizing Starvation, at 734-8; Jordash et al., Comprehensive Review of Existing IHL and ICL, at 117-9; Akande & Gillard, Conflictinduced Food Insecurity, at 765; Global Rights Compliance, The Crime of Starvation, at 13. This interpretation is also supported by a proposal made by the U.S. for the elements of the crime of starvation, that the perpetrator's act was "intended as method of warfare with the specific purpose of denying such objects to the targeted civilian population." Draft elements of crimes: proposal / submitted by the United States of America, U.N. Doc. PCNICC/1999/DP.4/Add.2, at ¶ 18 (Feb. 4, 1999). For example, "starvation as a method of warfare" would cover incidents where the perpetrator uses starvation of civilians to gain a military advantage, including to pressure the adversary to "accept some [] aim of the attacker" or "move out of a certain area in order to facilitate the control over

²⁰⁷ Ambos, Rome Statute Commentary, at 595–6.

a disproportionate attack under Article 8(2)(b)(iv), and intentionally using starvation as a method of warfare under Article 8(2)(b)(xxv).

As a threshold matter, power infrastructure is often described as "dual-use" because it serves both civilian and military functions. However, international law does not explicitly recognize a distinct category for dual-use objects. Rather, it mandates a categorical distinction between military objects, which are lawful targets under IHL, and civilian objects, which are protected from direct attack. ²⁰⁹

For an object to qualify as a military objective under IHL, Article 52(2) of AP I stipulates that it must make an "effective contribution to military action," and its "total or partial destruction, capture or neutralization" must offer a "definite military advantage." Any object failing to satisfy both criteria is classified as civilian and is therefore an unlawful target. The classification must be based on an object's "nature, location, use, or purpose" at the time of targeting. Mere potential for military utility is insufficient to render an object a military objective. The classification must be satisfy utility is insufficient to render an object a military objective.

Russia has repeatedly justified its strikes on Ukraine's critical infrastructure by claiming that energy facilities support military operations.²¹⁴ However, modern energy grids are highly interconnected and their targeting has far-reaching, indiscriminate effects on civilians.²¹⁵ For instance, as will be discussed at length in this section, the damage to and destruction of energy infrastructure in Ukraine has resulted in substantial disruptions to heating systems, water treatment plants, hospitals, and other essential services dependent on electricity, leading to extensive civilian suffering. Given these considerations, the classification of any specific Ukrainian power infrastructure as either a military or civilian object is highly fact-dependent.²¹⁶

This section will begin by establishing that Russia's attacks on Ukrainian energy infrastructure satisfy the elements of crimes against humanity pursuant to Article 7 of the Rome Statute, because these strikes constitute a "widespread or systematic attack directed against any civilian population, with knowledge of the attack." Next, it will demonstrate that the energy infrastructure strikes documented in this Report likely amount to the crimes against humanity of extermination and other inhumane acts.

The section then shifts its focus to war crimes. It presents evidence showing that much—if not all—of the energy infrastructure targeted by Russia was civilian in nature. In such cases, Russian strikes constitute deliberate attacks against civilian objects in violation of Article 8(2)(b)(ii) of the

²¹⁴ Michael N. Schmitt, *Ukraine Symposium – Further Thoughts on Russia's Campaign Against Ukraine's Power Infrastructure*, LIEBER INST. (Nov. 25, 2022), https://perma.cc/3MGM-TXEY.

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²⁰⁸ International Committee of the Red Cross (ICRC), *The Law of Armed Conflict: Conduct of operations – Part A* (2022), https://perma.cc/XT48-YAKZ. *See also* Eirini Giorgou & Abby Zeith, *When the lights go out: the protection of energy infrastructure in armed conflict*, HUMANITARIAN L. & POL'Y (2023), https://perma.cc/Q8R5-6H3F.

²⁰⁹ ICRC, The Law of Armed Conflict; Almudena Azcárate Ortega, Not a Rose by Any Other Name: Dual-Use and Dual-Purpose Space Systems, LAWFARE (Jun. 5, 2023), https://perma.cc/2W5Z-KGNE.
²¹⁰ AP I, art. 52(2).

²¹¹ AP I, art. 52(1).

²¹² Ortega, Not a Rose by Any Other Name.

²¹³ Id

²¹⁵ Giorgou & Zeith, When the lights go out.

²¹⁶ See Ortega, Not a Rose by Any Other Name.

²¹⁷ Rome Statute, art. 7(1).

Rome Statute. Even in cases where evidence might suggest that targeted infrastructure served a military function, the disproportionate harm inflicted on civilians likely violates the IHL principle of proportionality and such attacks would therefore constitute the war crime of excessive incidental death, injury, or destruction under Article 8(2)(b)(iv). Finally, the section concludes with analysis indicating that Russia's attacks on Ukraine's energy infrastructure likely violate Article 8(2)(b)(xxv), amounting to the war crime of intentionally using starvation as a method of warfare.

a. Attacks on Critical Infrastructure as Crimes Against Humanity

Russian attacks on critical energy infrastructure amount to the crimes against humanity of extermination and other inhumane acts.

i. Contextual Elements

As detailed above in Section IV(a)(i), to amount to a crime against humanity, Russian conduct must satisfy both the contextual elements and the elements for at least one of the proscribed acts enumerated in Article 7. This subsection first establishes that Russian attacks on Ukraine's critical energy infrastructure satisfy each of the five contextual elements, and then demonstrates that such attacks amount to the underlying acts of extermination and other inhumane acts. The contextual elements for crimes against humanity require that Russia's conduct: (1) forms part of a widespread or systematic attack; (2) forms part of an attack directed against a civilian population; (3) is committed pursuant to a State or organizational policy; (4) possesses an identifiable nexus between the individual act and the attack; and (5) the perpetrator acted with knowledge that the act formed part of such attack.²¹⁸

1. Russian attacks on Ukraine's critical energy infrastructure constitute a widespread and systematic attack directed against the civilian population in Ukraine

Russia's relentless missile and drone strikes on energy infrastructure across Ukraine since the 2022 full-scale invasion constitute an "attack" pursuant to Article 7(2)(a), as they represent a clear "course of conduct." Moreover, these strikes form part of "a widespread and systematic attack directed against [the] civilian population." While this element imposes a disjunctive test, as explained in Section IV(a)(i), Russia's attacks on critical infrastructure in Ukraine satisfy both the widespread and systematic prongs.

The systematic nature of Russia's attacks is exhibited by their shared features, including the consistent use of aerial drone and missile strikes, the pattern of striking energy infrastructure primarily during the coldest months of the year, and the "continual repetition of the same modus operandi" to demoralize and debilitate the Ukrainian population. ²²¹ Such stark patterns across attacks conducted over three years in different areas of Ukraine underscore "the improbability of

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²¹⁸ Rome Statute, art. 7.

²¹⁹ Elements, art. 7, ¶ 3; see Katanga, ICC TC II Judgment, ¶ 80 (Mar. 7, 2014); Gbagbo, ICC PTC I Decision, ¶ 223 (Jun. 12, 2024).

²²⁰ Rome Statute, art. 7(1).

²²¹ Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014); see Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019) (using same factors).

their random occurrence" and reinforce the conclusion of systematicity. ²²² Additionally, these attacks are both geographically widespread and temporally sustained. They have occurred across most regions of Ukraine and throughout the duration of the armed conflict, therefore demonstrating the "large scale nature of the attack" and reinforcing their widespread nature. ²²³

The first Russian strikes that specifically targeted energy infrastructure took place on September 11, 2022, hitting two thermal power plants and two substations. These strikes caused power outages affecting over a million residents across Poltava, Dnipropetrovsk, Kharkiv, Sumy, and Donetsk oblasts. Soon after the attacks, Putin characterized them as "warning shots" and threatened to escalate assaults on civilian infrastructure. Russia continued to inflict extensive damage on Ukraine's energy infrastructure between October and December 2022, with 92 targeted strikes on energy infrastructure recorded by the Office of the Prosecutor of Ukraine in the months of October and November alone. These attacks disrupted power in approximately 10.7 million households across Ukraine, impacting nearly half of Ukraine's total population.

The UN OHCHR documented Russia's escalation of attacks on critical energy infrastructure beginning in October 2022. ²³⁰ Its reporting notes that Russian forces launched at least 13 waves of missile and drone attacks against energy targets across 19 of Ukraine's 24 regions between October 2022 and February 2023. ²³¹ Similarly, according to Ukrenergo, a state-owned electricity transmissions operator in Ukraine, between October 2022 and March 2023, Russian forces launched approximately 1,200 attacks on Ukraine's energy infrastructure, repeatedly striking most substations and inflicting extensive damage on all large thermal and hydroelectric power plants. ²³² Further, a UN Development Program assessment conducted with the help of Ukrainian authorities revealed that available generation capacity fell by 51% from early 2022 to April 2023 due to Russia's destruction

²²² See Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); Gbagbo, ICC PTC I Decision, ¶ 223 (Jun. 12, 2024); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

²²³ See Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014); Kenya, ICC PTC II Decision, ¶ 95 (Mar. 31, 2010); Bemba, ICC PTC II Decision, ¶ 83 (Jun. 15, 2009); Gbagbo, ICC PTC I Decision, ¶ 222 (Jun. 12, 2014); Ntaganda, ICC TC VI Judgment, ¶ 691 (Jul. 8, 2019).

²²⁴ Int'l Energy Charger, Ukrainian energy sector evaluation and damage assessment - II (as of September 24, 2022) (2022), https://perma.cc/KV7M-8HZD.

²²⁵ Oblast (Ukr.: область) is a unit in the administrative structure of Ukraine. In this Report, terms "oblast" and "region" are used interchangeably.

²²⁶ Katherine Lawlor et al., Russian Offensive Campaign Assessment, September 16, INST. FOR THE STUDY OF THE WAR (Sept. 16, 2022), https://perma.cc/3WGG-2DBM.

²²⁷ Ariel Cohen, Russia is Threatening Europe By Attacking Ukrainian Energy, FORBES (Oct. 11, 2022), https://perma.cc/NR42-RKP3. Ukraine: Russian Attacks on Fuerry Grid Threaten Civilians HRW (Dec. 6)

https://perma.cc/NR42-RKP3; Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022), https://perma.cc/M3B6-US7E; Ukraine Energy Damage Assessment, WORLD BANK & UNDP 6 (2023), https://perma.cc/CW77-UXWX.

²²⁸ HRW, Russian Attack on Energy Grid.

²²⁹ Id.

²³⁰ UN Hum. Rights Off. of the High Commissioner, *Attacks on Ukraine's Energy Infrastructure: Harm to the Civilian Population: UN Human Rights Monitoring Mission in Ukraine* (UN HRMMU) 2 (2024), https://perma.cc/3BWD-XZYG; Int'l Energy Charter, *Ukrainian energy sector evaluation and damage assessment - IV (as of November 24, 2022)* (2022), https://perma.cc/GC9S-4RD9 (In October 2022, Russian forces launched frequent assaults on Ukraine's energy network, ultimately damaging around 40% of its infrastructure. These attacks caused frequent power outages, along with disruptions to heating and water supplies. To manage the situation, the state-owned electricity operator Ukrenergo implemented rolling power restriction schedules, which remain in effect to varying degrees).

²³¹ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2.

²³² Anna Kundirenko, Russia is no longer aiming for a total blackout in Ukraine. Why can't it or won't it?, BBC NEWS (Feb. 15, 2024), https://perma.cc/SAQ3-GMKG.

of power facilities.²³³ As such, the UN warned that Ukrainians would face daily power cuts ranging from 4 to 18 hours throughout the subsequent winter.²³⁴

Russia's 2024 strikes severely damaged three times more thermal power plant units than in the previous winter. According to the head of Ukrenergo, Ukraine lost nine gigawatts of power generation capacity in the spring of 2024 due to Russian attacks—a loss equivalent to the total electricity used by the entirety of the Netherlands in summer. Ukraine By June 2024, Ukraine's production capacity was reduced to "half of the country's peak consumption during the 2023." As of September 2024, 74% of Ukraine's thermal power generation units and 20 hydroelectric generation units had been rendered inoperative. By the service of the country's peak consumption units and 20 hydroelectric generation units had been rendered inoperative.

The UN Independent International Commission of Inquiry on Ukraine ("UN COI") confirmed the large-scale nature of these attacks, explicitly characterizing them as "widespread and systematic." The UN Human Rights Monitoring Mission to Ukraine ("UN HRMMU") similarly concluded that Russia has "deliberately, repeatedly and systematically" attacked Ukrainian energy infrastructure "through a series of large-scale, coordinated strikes" throughout the three years of its full-scale invasion. 240

The persistence of Russia's attacks on critical energy infrastructure into 2023 and 2024, particularly during Ukraine's coldest winter months, further reinforces their widespread and systematic nature. Russia maintained a steady rate of over seven damaging attacks on critical infrastructure per week during the height of winter 2023, with a total of 223 incidents recorded across 23 of Ukraine's oblasts between October 2022 and April 2023. According to the UN HRMMU, this pattern continued into 2024, with at least nine waves of aerial attacks on critical infrastructure between March and August: 42

²³⁹ U.N. Human Rights Council, 56th Sess., U.N. Doc. A/HRC/52/CRP.4 (Aug. 29, 2023), https://perma.cc/X93V-

²³³ Congressional Research Service (CRS), Attacks on Ukraine's Electric Grid: Insights for U.S. Infrastructure Security and Resilience (2024), https://perma.cc/6NVM-XXN6 (citing UNDP, Towards a Green Transition of the Energy Sector in Ukraine: Update on the Energy Damage Assessment 6 (2023), https://perma.cc/Z5K8-LXBR). Ukraine's installed generation capacity in 2021, prior to Russia's full-scale invasion, was 59 gigawatts (GW). Data from Ukrenergo, Ukraine's state grid operator, showed peak daily generation at 21.3 GW on January 27, 2022, consistent with prior years' figures, indicating sufficient capacity to meet demand. Id. See also UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2.

²³⁴ Kundirenko, Russia is no longer aiming for a total blackout in Ukraine.

²³⁵ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 3.

²³⁶ Oleg Derevyanko, *Ukrenergo is preparing for the most difficult winter since the Great War*, LVIV NEWS (Oct. 30, 2024), https://perma.cc/LKJ2-DPAX.

²³⁷ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 5.

²³⁸ *Id.* at 4.

²⁴⁰ UN Hum. Rights Off. of the High Commissioner, Fact sheet (2025), https://perma.cc/ZR8X-6HQJ.

²⁴¹ United Nations, Escalating Attacks on Ukraine's Civilian, Energy Infrastructure Making Humanitarian Aid Delivery Even More Dangerous, Relief Chief Tells Security Council (May 14, 2024), https://perma.cc/W6R8-EZH9; see also International Partnership for Human Rights (IPHR), New Report Links Western-Made Components to the Weapons Used in Russia's Suspected Ukraine War Crimes 20–2 (Feb. 28, 2023), https://perma.cc/54QA-UUTK; Ukraine's Foreign Minister Speaks on Five Russian Defeats and Advises Them to 'Choke on Missiles', Eur. Pravda (Mar. 1, 2023), https://perma.cc/TG9Q-LBXH.
²⁴² UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2 ("Between 22 March and 31 August 2024, the Russian Federation armed forces launched nine waves of long range and large-scale coordinated attacks on Ukraine's electric power system, damaging or destroying numerous power generation, transmission, and distribution facilities. The strikes had reverberating effects causing harm to the civilian population and the country's electricity supply, water distribution, sewage and sanitation systems, heating and hot water, public health, education, and the economy").

[E]ach wave involved numerous high-precision, high-yield cruise and ballistic missiles, loitering munitions, and reconnaissance drones and targeted multiple electricity facilities across the country in a well-coordinated and synchronized manner. The munitions were launched simultaneously from multiple locations utilizing land, aerial, and sea-based delivery platforms, requiring high-level planning and coordination of several branches of the Russian armed forces.²⁴³

The nine attacks analyzed in this Report illustrate the widespread and systematic nature of Russia's campaign against Ukraine's critical energy infrastructure. The attacks were both geographically and temporally widespread, covering multiple regions of Ukraine including Kharkiv, Vinnytsia, Odesa, Kyiv, Khmelnytskyi, Zhytomyr, Sumy, and Novomoskovsk, between 2022 and 2023. Based on data available to the Authors, these examples were selected to demonstrate the pervasive Russian targeting of energy infrastructure and to illustrate how such acts likely amount to both crimes against humanity and war crimes. This list is not exhaustive. Numerous other attacks on energy infrastructure of comparable or even greater severity have been documented since Russia's full-scale invasion, further contributing to the broader pattern of attacks analyzed in this section. The attacks discussed here are:²⁴⁴

- Case No. 5: Attack on energy infrastructure in Kharkiv (September 11, 2022).
- Case No. 6: Mass attack on civilian infrastructure in Kyiv (October 10, 2022).²⁴⁵
- Case No. 7: Attack on energy infrastructure in Ladyzhyn, Vinnytsia Oblast (October 11, 2022).
- Case No. 8: Mass attack on civilian infrastructure in Kyiv, Kyiv Oblast (October 17, 2022).
- Case No. 9: Attack on energy infrastructure in Odesa Oblast (December 10, 2022).
- Case No. 10: Attack on energy infrastructure in Kharkiv (December 28–29, 2022).
- Case No. 12: Attack on energy infrastructure in Shepetivika, Khmelnytskyi Oblast (February 10, 2023).
- Case No. 13: Large-scale attacks on civilian objects and energy infrastructure in Kyiv, Zhytomyr, Sumy, Odesa (March 8–9, 2023).
- Case No. 14: Attack on energy infrastructure and civilian houses in Novomoskovsk (March 18, 2023).

Russia's repetitive targeting of energy infrastructure using precise weapons during cold winter months when the civilian population is particularly vulnerable strongly suggests that the attacks were systematically directed against the civilian population. The timing and precision of these

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²⁴³ *Id.* at 3.

²⁴⁴ See Appendix I (Case Nos. 5, 6, 7, 8, 9, 10, 12, 13, 14).

²⁴⁵ PAX, Risks and impacts from attacks on energy infrastructure in Ukraine 8 (2023), https://perma.cc/PB96-FLUR (On October 10, 2022, Russian forces carried out a large missile attack, firing 80 projectiles at Ukraine's energy infrastructure); President of the Russian Federation, Meeting with permanent members of the Security Council, (Oct.10, 2022), https://perma.cc/X63K-Z9T3 (The strikes caused extensive damage in Kyiv and 11 other regions, disrupting about 30% of the country's energy systems and leaving millions without heating, electricity, or water for varying periods. In response, Ukraine suspended energy exports indefinitely. Later, President Putin confirmed the operation, stating that air, land, and sea-launched precision weapons had been used to target Ukraine's energy grid, military assets, and communication systems under orders from Russia's Defense Ministry and General).

attacks deprived Ukraine's civilian population of basic necessities, including electricity, heat, water, and access to health care, as detailed further in Section V(a)(ii)(2).²⁴⁶

Russian attacks on critical energy infrastructure were committed pursuant to the State policy to wage "total war" on Ukraine

The foregoing Russian attacks were executed pursuant to Russia's State policy of "total war," which envisions the demoralization of Ukraine's civilians and the destruction of civilian life as a key component of victory. The goal of this State policy is for Ukraine to be "reorganized, re-established and returned to its natural state as part of the Russian world." As Putin has asserted, the "territorial integrity" of Russia will be pursued "by all the systems available to us [the military]." In practice, this total war strategy is carried out through relentless bombardment of civilians, civilian infrastructure, and all necessary underpinnings of civilian life. Through these efforts, Russia seeks to collectively punish and demoralize Ukrainians such that they either pressure their government to surrender, or are killed or dispersed in sufficient numbers so as to no longer comprise a distinct national group. As Putin characterized the policy, Russians are "fighting shoulder to shoulder for the liberation of their native land from Nazi filth."

This State policy is not only reasonably inferred from the nature of Russia's attacks, but also explicitly revealed by public statements from high-level Russian officials endorsing a total war against Ukraine. For example, Putin justified Russian strikes on energy infrastructure as a "consequence" of Ukraine's "unwillingness . . . to settle the problem, to start negotiations, [and] its refusal to seek common grounds." Russian parliamentary members openly called for Ukrainian civilians to "rot and freeze." Deputy Chairman of the Security Council of the Russian Federation and former Russian President and Prime Minister Dmitry Medvedev's declaration that there "was, is, and will be no Ukraine" and his commitment to ensuring the "complete overthrow of the Nazi Kyiv regime" reveals Russia's policy to dismantle Ukrainian statehood and identity. His dehumanizing

²⁴⁶ See HRW, Russian Attack on Energy Grid ("By repeatedly targeting critical energy infrastructure knowing this will deprive civilians of access to water, heat, and health services, Russia appears to be seeking unlawfully to create terror among civilians and make life unsustainable for them," said Yulia Gorbunova, senior Ukraine researcher at Human Rights Watch. "With the coldest winter temperatures yet to come, conditions will become more life-threatening while Russia seems intent on making life untenable for as many Ukrainian civilians as possible").

²⁴⁷ Clara Apt, Russia's Eliminationist Rhetoric Against Ukraine: A Collection, JUST SECURITY (Aug. 26, 2024), https://perma.cc/F5R4-8W75.

²⁴⁸ President of Russia, Address by the President of the Russian Federation (Sept. 21, 2022), https://perma.cc/KKG6-ZU6E.

²⁴⁹ President of Russia, Congratulations to leaders and citizens of foreign countries on the occasion of the 77th anniversary of Victory in the Great Patriotic War (May 8, 2022), https://perma.cc/696T-HVXU.

²⁵⁰ See, e.g., FIDH et al., Communication submitted under Article 15 of the Rome Statute of the International Criminal Court, Situation in Ukraine: Hate Speech as the Crime Against Humanity of Persecution (2024), https://perma.cc/X662-2CCX. According to the FIDH communication, Ukraine and its armed forces are consistently labeled as the "Kyivan Nazis" or the "Kyivan neo-Nazi regime" operating "under Washington's direction." Acts of Ukrainian resistance are framed as "terrorist acts," and Ukrainians are demonized and dehumanized portraying them as embodiments of pure evil. Id. at ¶ 103. The messaging also includes ideological themes such as "Unity," "Strengthening of Russia," and "The New World Order." See generally id.

²⁵¹ AFP, Civilians Suffering as a 'Consequence' of Kyiv's Refusal to Negotiate – Kremlin, MOSCOW TIMES (Nov. 17, 2022), https://perma.cc/5DLC-LS5P.

²⁵² Francis Scarr (@francis_scarr), TWITTER (Nov. 26, 2022), https://archive.ph/dhvTB.; Francis Scarr (@francis_scarr), TWITTER (Nov. 28, 2022), https://archive.ph/6IOK5.

²⁵³ FIDH et al., Situation in Ukraine: Hate Speech, at ¶ 267.

rhetoric—"I hate them. They are bastards and geeks. And as long as I'm alive, I will do everything to make them disappear"²⁵⁴—illustrates how Russia's widespread and systematic attack on Ukraine's civilian population seeks to demoralize the population, erode Ukrainian identity, and potentially even eliminate the group.

Legislative measures taken by Russia since the start of the full-scale invasion, including amendments to the Code of Administrative Offenses that punish expressions of "Nazism," provide further evidence of the State policy. ²⁵⁵ Since March 2022, courts in occupied Crimea have weaponized such amendments to convict Ukrainians for acts like singing Ukrainian songs or displaying Ukrainian symbols, equating such actions with Nazi sympathies. ²⁵⁶ This aggressive suppression of Ukrainian cultural and national identity reinforces that under Russia's "total war" policy, any expression of Ukrainian solidarity is a threat to be eradicated.

Prominent Russian media figures have also played a pivotal role in propagating a narrative that frames Ukraine and its people as a Nazi threat to Russia. For instance, Dmitry Kiselyov, a well-known Russian journalist and television anchor, asserted that "denazification can only be coercive and forceful" and that "Russia is taking on this work." Kiselyov's rhetoric underscores the aggressive posture adopted by Russian State media to position military action as a necessary means to cleanse Ukraine of purported Nazism. Such language not only dehumanizes Ukrainians but sets a foundation for justifying widespread and systematic attacks on critical infrastructure under the guise of purging "Nazis." Margarita Simonyan, the editor-in-chief of Russian State media outlet Russia Today, has compared the effects of attacks on critical infrastructure to the "ten plagues of Egypt," which resulted in "Egyptian darkness." Again, this language illustrates Russia's approach of portraying the civilian population of Ukraine as deserving of punishment. Similar statements by Russian economist Mikhail Khazin, who advocated for the "partial elimination and partial squeezing out" of Ukrainians, underscore the underlying motive to demoralize and depopulate segments of the Ukrainian population.

Beyond such rhetoric, Russia's widespread and systematic destruction of critical infrastructure, rendering various regions of Ukraine unlivable, reflects the State policy of forcing civilians to flee for survival.²⁶⁰ Evidence from the winter of 2022–2023 shows a direct correlation between Russian strikes on Ukraine's power grid and increased migration, as waves of refugees fled to neighboring countries in response to widespread blackouts.²⁶¹ Reports also demonstrate how

²⁵⁴ Apt, Russia's Eliminationist Rhetoric.

²⁵⁵ See FIDH et al., Situation in Ukraine: Hate Speech, at ¶¶ 78, 112, 146.

 $^{^{256}}$ Id. at ¶ 78.

²⁵⁷ *Id.*

²⁵⁸ I.d

²⁵⁹ Stanislav Melamed, "They need to be partially eliminated" – Mikhail Khazin speaks about Ukraine and Ukrainians, YOUTUBE (Dec. 29, 2016), https://perma.cc/5C5D-E4AQ.

²⁶⁰ Zelenskyy explicitly warned about the danger of this tactic for the Ukrainian people. See Schmitt, Ukraine Symposium – Further Thoughts.

²⁶¹ Andrii Savchuk & Olha Aivazovska, Russian Bombardment of Ukraine's Power Grid May Force Millions to Flee, OPORA (Apr. 24, 2024), https://perma.cc/KY6F-549Y. In addition to the military advantages afforded by decimating Ukraine's power systems, Russia is using these attacks to de-populate Ukraine. Data derived by the Civil Network OPORA indicates that there may links between waves of migration from Ukraine and Russia's attacks on energy infrastructure. The number of people fleeing Ukraine, as well as displacing themselves internally, grew exponentially after the Russian military started to target the country's energy infrastructure in October 2022. For example, the number of people leaving

attacks exacerbated the refugee crisis in Ukraine, with a documented 17% increase in departures from Ukraine in November 2022 and a 39% increase in December 2022. 262 Russia's strategy not only depopulates key regions of Ukraine but also aligns with its broader policy of "denazification and demilitarization." As the UN HRMMU explained, Russia's attacks were launched "to intimidate and create panic among the population by depriving civilians of critical services" and, consequently, to displace Ukrainians. 264

The international community has clearly identified Russia's State policy of waging total war. For example, the UN COI concluded that "[t]he intensity, geographical scope, and type of installations targeted lead the Commission to conclude that the objective of the large scale attacks was not just to damage or destroy individual energy installations, which could serve a military purpose, but also to disrupt and destabilize the entire energy system in Ukraine" such that "[t]he scale of the disruption is of a nature to inflict significant harm to the civilian population." Similarly, the U.S. Ambassador to the UN recognized Putin's strategy of "weaponizing winter to inflict immense suffering on Ukrainian people" and "freeze the country into submission." The CEO of DTEK, Ukraine's largest private energy company, also noted that "Russia is deliberately trying to terrorize Ukrainians into surrender."

Taken together, the geographically widespread distribution of Russian attacks on energy infrastructure, the adoption of legislation to criminalize and eradicate expressions of Ukrainian culture and identity, and statements from high-level Russian officials and Russian State media, support the conclusion that these attacks were part of a State policy designed to wage total war on Ukraine for the purpose of demoralizing the civilian population and depopulating Ukraine's territory through the destruction of the civilian energy grid.

3. There is an identifiable nexus between each individual strike on Ukraine's energy infrastructure and the overall attack

As further elaborated in Section IV(a)(i)(4), a showing that Russian officials' acts formed "part of" the widespread or systematic attack against Ukraine's civilian population, particularly through the incapacitation and destruction of energy infrastructure, is sufficient to establish the requisite nexus between a perpetrator's individual acts and the broader attack. While this Report does not identify individual perpetrators behind each attack—in part due to the highly complex linkage analysis required—Russian officials and the Russian Armed Forces are responsible for executing the aerial attacks targeting Ukraine's critical energy infrastructure.

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Ukraine increased by over 60% on Nov. 15 and Nov. 23 in 2022 after Russian attacks on Ukraine's energy infrastructure led to large-scale blackouts. *Id.*

²⁶² PHR & TH, Health Care in the Dark, at 11.

²⁶³ Denyz Azarov et al., *Understanding Russia's Actions in Ukraine as the Crime of Genocide*, 21(2) J. INT'L CRIM. JUSTICE 233, 245 (2023).

²⁶⁴ PHR & TH, Health Care in the Dark, at 26 (quoting UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2).

 $^{^{265}}$ U.N. Human Rights Council, 56th Sess., U.N. Doc. A/HRC/52/CRP.4 (Aug. 29, 2023), at \P 271.

²⁶⁶ Schmitt, Ukraine Symposium – Further Thoughts.

²⁶⁷ DTEK, UN Human Rights report says Russian attacks on Ukraine's energy system breached principles of international law (Sept. 20, 2024), https://perma.cc/9TX2-J5DQ.

²⁶⁸ Katanga, ICC TC II Judgment, ¶ 1124 (Mar. 7, 2014).

Although additional investigations will be necessary to identify individual perpetrators, the preceding subsections demonstrate that Russia's actions amount to a widespread and systematic attack. The shared characteristics across strikes described above, coupled with their occurrence across various regions in Ukraine, firmly undermines any suggestion that these aerial strikes were "[i]solated acts that clearly differ in their nature, aims and consequences from other acts that form part of an attack." Rather, these drone and missile strikes from "part of" the widespread and systematic attack against Ukraine's civilian population.

4. Russian officials possessed the requisite intent and knowledge that their conduct constituted part of a widespread or systematic attack against Ukraine's civilian population

Russian officials were aware that the sustained attacks on critical infrastructure formed part of a widespread and systematic attack against Ukraine's civilian population.

First, Russian political officials and military personnel have repeatedly noted the extent of civilian harm resulting from the military offensive. Putin has acknowledged the "tragedy for the Ukrainian people" that "everything is heading towards" a fight "to the last Ukrainian." This statement demonstrates Putin's understanding, as early as summer 2022, that Russia's tactics involved an offensive against the civilian population. Military personnel also have knowledge of the attack. The military provides soldiers with required "educational" materials, including Putin's essay on the "Unity of Russians and Ukrainians," which argues for Russia's absorption of Ukraine. This messaging aims to align soldiers with Russia's State policy, described in Section V(a)(i)(2), and potentially encourages perpetration of atrocities against Ukrainian civilians.

Russian soldiers' own statements demonstrate their knowledge that they are attacking civilians. For example, in one audio intercept of a Russian soldier's call home, the soldier relays to his brother that the situation in Ukraine is "simply genocide." In another conversation, a Ukrainian civilian recalls being told by a Russian soldier at a checkpoint that "we will exterminate everyone there [in Ukraine], go to Russia." According to the head of a UNICEF-supported hotline for victims, Russian soldiers have reportedly threatened to rape "every Nazi wh-re." While these expressions may not be representative of the Russian military as a whole, they evidence the military's knowledge of Russia's State policy and recognize the attack on Ukraine's civilian population.

Furthermore, the requisite knowledge can be inferred from global media coverage highlighting the scale and devastating impact of Russia's aerial attacks. Notably, Russian State media

²⁶⁹ *Id*.

²⁷⁰ Mark Trevelyan, *Putin says Russia just starting in Ukraine, peace talks will get harder*, REUTERS (Jul. 7, 2022), https://perma.cc/8JSJ-L8QS.

²⁷¹ Shoigu ordered the military to study Putin's article on Ukraine, RBC (Jul. 15, 2021), https://perma.cc/D53Q-B85D; President of Russia, Article by Vladamir Putin "On the Historical Unity of Russians and Ukrainians" (Jul. 12, 2021), https://perma.cc/6QNH-373K.

²⁷² Id.; see also Erika Kinetz, Intercepted calls from the front lines in Ukraine show a growing number of Russia soldiers want out, AP NEWS (Nov. 26, 2023), https://perma.cc/W7QT-LB25.

²⁷³ Erika Kinetz, Intercepted calls from the front lines in Ukraine show a growing number of Russia soldiers want out, AP NEWS (Nov. 26, 2023), https://perma.cc/W7QT-LB25.

²⁷⁴ Sabrina Tavernise, *The Battle for Azovstal: A Soldier's Story*, N.Y. TIMES (May 18, 2022). ²⁷⁵ *Id.*

outlets, including Russia Today,²⁷⁶ Moscow Times,²⁷⁷ and TASS Russian News Agency,²⁷⁸ have provided and continue to provide extensive coverage of Russian missile and drone strikes on energy infrastructure in Ukraine, as well as the resulting consequences for civilians. For example, on September 12, 2022, the day after the attack outlined in **Case No. 5**,²⁷⁹ TASS reported widespread power outages in Kharkiv as well as in the Zaporizhzhia, Dnipropetrovsk, and Sumy regions of Ukraine.²⁸⁰ Similarly, following the attack detailed in **Case No. 9**,²⁸¹ TASS noted that "thousands of consumers" had been left without electricity following air strikes against energy facilities and that emergency blackouts had been reported "for a fifth day running." On December 28, 2022, the day of the attack in **Case No. 10**,²⁸² TASS reported that 300,000 Kyiv residents were left without electricity and, consequently, without heat or water.²⁸³ The thorough coverage by Russian State media of the humanitarian impact of Russia's strikes on Ukraine's critical infrastructure

power); National operator reports emergency blackouts planned throughout Ukraine, TASS (Dec. 5, 2022),

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²⁷⁶ Devastating Russian attacks on Ukrainian infrastructure: What we know so far, RUSSIA TODAY (Mar. 22, 2024), https://perma.cc/4GHN-RAMK (On March 22, 2024, for example, Russia Today reported on the aftermath of a massive series of Russian strikes on energy structure, highlighting the resulting disruption of electricity, heat, and water supplies. The article also cited statements from Ukrenergo regarding the substantial damage to energy systems, and the Ukrainian Prosecutor General's findings that a total of 150 facilities across Ukraine had been damaged following the assault); Moscow details massive strikes against Ukrainian Infrastructure, RUSSIA TODAY (Mar. 22, 2024), https://perma.cc/6ARP-4YYB; Ukraine declares energy emergency, RUSSIA TODAY (Dec. 16, 2022), https://perma.cc/J3QH-XFWC.

²⁷⁷ Russian Missile and Drone Attacks Hit Energy Site Across Ukraine, Killing 4, MOSCOW TIMES (Aug. 26, 2024), https://perma.cc/6YHB-3HW5; Russian Energy Siters Targeted in Mass Overnight Drone Attack, MOSCOW TIMES (Sept. 1, 2024), https://perma.cc/2PNS-849E; Kremlin Calls Report About Talks to Halt Energy Plant Strikes Fake, MOSCOW TIMES (Oct. 30, 2024), https://perma.cc/ACR7-DQAV; AFP, Russian Strikes Cut Power for Nearly Half a Million Homes in Ukraine, MOSCOW TIMES (May 6, 2024), https://perma.cc/27TH-CU7M.

²⁷⁸ Between October and December 2022, for example, TASS Russian News Agency reported on several Russian attacks against Ukraine's critical infrastructure, highlighting the detrimental effects of prolonged blackouts and emergency power cuts on civilians. See, e.g., In Brief: What we know about massive attack on Ukraine's energy infrastructure, TASS (Aug. 26, 2024), https://perma.cc/BKY3-3LQD; Russian forces hit Ukrainian energy facilities crucial for defense industry, TASS (Oct. 12, 2024), https://perma.cc/E6NZ-PNFV; Strikes on Ukrainian energy facilities are part of demilitarization - Putin, TASS (Apr. 11, 2024), https://perma.cc/M6ZA-B3H7; Russia delivers 29 strikes at Ukrainian military, energy sites over week, TASS (Oct. 4, 2024), https://perma.cc/L4MT-HFGZ; Russia delivers massive strike at key energy sites of Ukrainian military-industrial sector, TASS (Aug. 26, 2024), https://perma.cc/S7FX-DHWP; Russian forces strike Ukrainian energy strikes, military airfields over past day, TASS (Oct. 21, 2024), https://perma.cc/6GRQ-YH6L; Mayor says 80% of Kiev residents left without water, TASS (Oct. 31, 2022), https://perma.cc/NWD6-J73M (On October 31, it was reported that 80% of Kiev residents had been left without water after an energy facility had been damaged); Seven Ukrainian regions experiencing rolling blackouts on November 1, TASS (Nov. 1, 2022), https://perma.cc/9HVD-FURZ (On 1 November, it was noted that Ukraine's electricity transmission system operator, Ukrenergo, had been compelled to implement rolling power outages across the country because of the widespread damage that had been caused to the Ukrainian power infrastructure); Ukrainian army facing dilemmas with weapons supplies due to blackouts, says LPR officer, TASS (Nov. 24, 2022), https://perma.cc/3LMW-KAA5; Energy operator reports damage to all Ukrainian power plants except three nuclear sites, TASS (Nov. 22, 2022), https://perma.cc/NR5F-3HHA (On November 22 and 24, it was reported that half of Ukraine's regions had lost

https://perma.cc/AL9H-5YBW (On December 5, TASS reported on "emergency power cuts" in all Ukrainian regions following blackouts in several cities and regions. It was further noted that this development occurred during "plummeting temperatures" and that efforts were being made to maintain the functioning of hospitals, water utilities, and boiler houses).

²⁷⁹ See Appendix I (Case No. 5).

²⁸⁰ Zelensky reports power outages in five Ukrainian regions, TASS (Sept. 11, 2022), https://perma.cc/37WH-AM3B.

²⁸¹ See Appendix I (Case No. 9).

²⁸² See Appendix I (Case No. 9).

²⁸³ Kiev says 300,000 of its residents remain without power, TASS (Dec. 28, 2022), https://perma.cc/LS3G-77NR.

demonstrates that Russian officials possessed ample knowledge that their actions were part of a widespread or systematic attack against Ukraine's civilian population.

In addition to robust reporting of such attacks by Russian media, Ukraine's President Volodymyr Zelenskyy has been outspoken about the resulting devastation, including through nightly addresses. ²⁸⁴ As early as October 2022, Zelenskyy stated that approximately 30% of Ukraine's power stations had been destroyed by Russian air strikes, resulting in "massive blackouts" throughout the country. 285 Consistent public outcry from Ukrainian leadership brought significant global attention to the scale of destruction, making it implausible that Russian officials and military personnel were unaware of the impact of their actions. More recently, in June 2024, the Moscow Times reported on Zelenskyy's statements that Russian attacks on Ukraine's energy infrastructure had destroyed roughly half of the country's electricity capacity since the prior winter. 286 The persistence of Zelenskyy's reports, coupled with the public and diplomatic responses they elicited, further illustrate that Russian officials possessed the requisite mens rea for crimes against humanity.

Statements and expressive conduct by Russian officials reinforce this awareness. For instance, Russian forces rejected an offer from Ukraine's Minister of Energy to demilitarize civilian nuclear targets.²⁸⁷ Russian officials' engagement with and rejection of this offer demonstrates their awareness of the broader context of attacks on critical infrastructure, as well as of the detrimental impact of these attacks on the civilian population. Putin's Press Secretary Dmitry Peskov dismissed claims of early stage talks between Russian and Ukrainian officials to scale back attacks on critical infrastructure as "fake news," expressly denying their validity. 288 In rebuffing claims about negotiations, Peskov indicated that Russian officials were aware of the larger campaign against critical infrastructure. The Russian Ministry of Defense also made several statements directly related to the attacks in this Report, indicating contemporaneous knowledge that Russia had targeted critical infrastructure. For instance, on October 10, 2022, the day of the attack detailed in Case No. 6,²⁸⁹ Russia's Ministry of Defense reported on Telegram that "Russian Armed Forces launched a massive high-precision long-range attack" at energy systems in Ukraine, indicating that "the goal of the attack has been reached" and "all the assigned targets have been neutralised." Following the

²⁸⁴ See, e.g., Šejla Ahmatoivić, Winter is coming,' Zelenskyy warns as Putin threatens Ukraine's power grid, POLITICO (Oct. 17, 2024), https://perma.cc/VV4G-MRKV; Wilhelmine Preussen, Zelenskyy: Russia has destroyed 30 percent of Ukraine's power stations, POLITICO (Oct. 18, 2022), https://perma.cc/YVE5-CHHT; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Sept. 12, 2022), https://perma.cc/F465-7PLW; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Oct. 10, 2022), https://perma.cc/2AK6-5P3A; Zelenskiy Official (@V_Zelenskiy_official), Telegram (Oct. 11, 2022), https://perma.cc/F877-C92L; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Oct. 17, 2022), https://perma.cc/LW4U-H53R; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Dec. 10, 2022), https://perma.cc/3XY3-ANVW; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Dec. 29, 2022), https://perma.cc/T2WP-MBQY; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Feb. 10, 2023), https://perma.cc/2K92-R747; Zelenskiy Official (@V_Zelenskiy_official), Telegram (Mar. 9, 2023),

https://perma.cc/5CYM-TJN5; Zelenskiy Official (@V_Zelenskiy_official), TELEGRAM (Mar. 9, 2023),

https://perma.cc/3DVE-DYZU; Associated Press, Russia launches 'massive' attack on Ukraine energy, killing at least seven, NPR (Nov. 17, 2024), https://perma.cc/5MSG-9FFD.

²⁸⁵ Preussen, Zelenskyy: Russia has destroyed 30 percent of Ukraine's power stations.

²⁸⁶ AFP, Zelensky Says Russia Destroyed Half of Ukraine's Energy Capacity, MOSCOW TIMES (Jun. 11, 2024), https://perma.cc/RNM7-XR26.

²⁸⁷ Ariel Cohen, Russia is Threatening Europe By Attacking Ukrainian Energy.

²⁸⁸ Vusala Abbasova, Russia Dismisses Claims of Truce Talks on Energy Infrastructure with Ukraine as Fake News', CASPIAN NEWS (Oct. 31, 2024), https://perma.cc/465F-4N3P.

²⁸⁹ See Appendix I (Case No. 6).

²⁹⁰ MoD Russia (@mod_russia_en), TELEGRAM (Oct. 11, 2022), https://perma.cc/GCC4-C2XX.

attacks outlined in **Case Nos. 7**, **8**, **12**, and **13**, ²⁹¹ the Ministry of Defense published substantially similar posts, titled "Russian Defence Ministry report on the progress of the special military operation in Ukraine," reporting on continued attacks on energy infrastructure in Ukraine. ²⁹²

As the conflict has extended into its second and third years, any initial ambiguity surrounding the scale, nature, and civilian impact of attacks on critical infrastructure—or any plausible Russian ignorance of such attacks—has been entirely eliminated. Detailed documentation and reporting on such attacks, coupled with Russian military personnel remaining on active duty for extended periods and operating in various regions of Ukraine, means that Russian leadership and military forces were aware of the nature of their campaign. Troops engaged in multiple areas throughout the course of the war would have repeatedly witnessed similar attacks, across different regions, being carried out by different units. ²⁹³ This pattern only reinforces awareness amongst Russian forces that attacks on critical infrastructure were not isolated incidents, but rather part of an ongoing widespread and systematic attack against civilian population over the last three years.

ii. Extermination

As elaborated further in Section IV(a)(ii)(2), to constitute the crime against humanity of extermination, a perpetrator's conduct must satisfy the following elements:

- 1) "The perpetrator killed one or more persons, including by inflicting conditions of life calculated to bring about the destruction of part of a population";
- 2) "The conduct constituted, or took place as part of, a mass killing of members of a civilian population";
- 3) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 4) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population."

1. The killings resulting from Russian attacks on critical energy infrastructure were part of a mass killing of civilians

To qualify as extermination, a perpetrator's acts—which here would presumably encompass the planning or execution of missile and drone strikes on energy infrastructure—must constitute part of "a mass killing of members of a civilian population." Reports by multiple credible human rights organizations estimate that between 12,000 and 30,000 Ukrainian civilians have been killed as a result of the war. According to the UN HRMMU, civilian casualties rose by 30% from 2023 to

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²⁹¹ See Appendix I (Case Nos. 7, 8, 12, 13).

²⁹² *Id.*; MoD Russia (@mod_russia_en), TELEGRAM (Oct. 17, 2022), https://perma.cc/B4LX-H9ZH; MoD Russia (@mod_russia_en), TELEGRAM (Feb. 11, 2023), https://perma.cc/2UVM-LNCY; MoD Russia (@mod_russia_en), TELEGRAM (Mar. 9, 2023), https://perma.cc/V7Y7-6JPT.

²⁹³ Deep State Map, https://perma.cc/3UY8-FPN4 (this map shows the movements of troops, demonstrating that they were engaged in multiple areas throughout the course of the armed conflict).
²⁹⁴ Rome Statute, art. 7(1)(b).

²⁹⁵ UN Hum. Rights Off. of the High Commissioner, 3 Years since the full-scale invasion of Ukraine: 24 February 2022-2025, Key facts and findings about the impact on human rights 1 (2025), https://perma.cc/MH5Y-8HA6; Center for Preventive Action, War in Ukraine, COUNCIL ON FOREIGN RELATIONS (Apr. 24, 2024), https://perma.cc/36M7-38PJ; Report 2022/23: The State of the World's Human Rights: Ukraine 2022, AMNESTY INTERNATIONAL (2023), https://perma.cc/ZYT6-8WG5; Oxfam International, Ukraine: 42 civilian casualties every day in two years of war.

2024 as hostilities intensified and Russia increased its use of aerial bombs, short-range drones, long-range missiles, and loitering munitions.²⁹⁶ Russian forces' responsibility for thousands of civilian deaths in Ukraine²⁹⁷ satisfies the contextual element for extermination.²⁹⁸

2. Russian attacks killed one or more persons, including by inflicting conditions of life calculated to bring about the destruction of part of the Ukrainian civilian population

As further described in Section IV(a)(ii)(2), the crime against humanity of extermination encompasses indirect killings, namely "the inflict[ion of] conditions of life calculated to bring about the destruction of part of a population." In Ukraine, energy infrastructure is critical to civilian survival, as it powers essential services like heating, clean water access, health care, and information systems. The UN HRMMU has outlined how Russia's attacks have reverberating effects that harm the civilian population by impacting the country's electricity supply, water distribution, sewage and sanitation systems, heating and hot water, public health, education, and the economy. The interdependence of these systems and their widespread disruption due to Russian strikes on critical energy infrastructure gives rise to conditions of life calculated to destroy a part of the civilian population, including through indirect killings.

a. Lack of heat in cold winter conditions

Russia's relentless attacks on Ukraine's critical infrastructure during the harsh winter months clearly meet the extermination standard. The attacks on critical energy infrastructure detailed in this Report are all concentrated between the months of September and March. The timing of these attacks—during a season when the average temperature is approximately 3°C with lows at approximately –20°C in some regions inflicted life-threatening conditions on the civilian

²⁹⁶ United Nations, Civilian Harm and Human Rights Abuses Persist in Ukraine as War Enters Fourth Year (Feb. 21, 2025), https://perma.cc/KR7A-6VUN.

²⁹⁷ See Section III; OHCHR, Treatment of Prisoners of War, at 2–3 (According to several estimates, in the first two years following the invasion Russian air strikes caused over 30,000 civilian casualties, displaced approximately 3.7 million people, and left 14.6 million people in need of humanitarian assistance in Ukraine.10 In the summer of 2024 alone, at least 589 civilians were killed and 2,685 injured); OHCHR, Two-Year Update, at 3; Physicians for Human Rights (PHR), 1,336 Attacks on Ukraine's Health System Since Russia's Full-Scale Invasion Demand Accountability: PHR (Feb. 20 2024), https://perma.cc/RQ7L-FVLA (From February 2022 through the end of 2023, Physicians for Human Rights reported at least 1522 attacks on Ukraine's health care systems, resulting in 198 health workers being killed).

²⁹⁸ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 145 (May 21, 1999) ("The term 'mass' which may be understood to mean 'large scale,' does not command a numerical imperative but may be determined on a case-by-case basis using a common sense approach.").

²⁹⁹ Elements, art. 7(1)(b)(1).

³⁰⁰ "Electricity is the backbone of modern life in Ukraine. From heating homes and ensuring clean water to powering online education, running businesses, and functioning health services, the destruction of electricity infrastructure affects almost every aspect of daily life", said HRMMU Head Danielle Bell. "The harm to civilians from these attacks was imminently foreseeable, with millions of civilians affected." United Nations, *Attacks on Ukraine's Electricity Infrastructure Threaten Key Aspects of Life As Winter Approaches – UN Human Rights Monitors Say* (Sept. 19, 2024), https://perma.cc/4MV3-R4|3.

³⁰¹ See generally UN HRMMU, Attacks on Ukraine's Energy Infrastructure.

³⁰² World Health Organization (WHO), *Ukraine: 2023-2024 Winter Risk Assessment* 1 (2023), https://perma.cc/4X2R-GCI4.

³⁰³ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022), https://perma.cc/DLZ3-VMFS.

population. Specific temperatures at the times and locations of the attacks on critical infrastructure included in this Report were as follows:³⁰⁴

- Case No. 4: Attack on energy infrastructure in Kharkiv (September 11, 2022) Although the reported temperature in Kharkiv on the date of the attack is not readily available, the average temperature in Kharkiv in the month of September is a high of 16°C and a low of 7°C. 305
- Case No. 6: Mass attack on civilian infrastructure in Kyiv (October 10, 2022) Weather reports indicate a high of 12°C and a low of 7°C in Kyiv on this day. 306
- Case No. 7: Attack on energy infrastructure (thermal power plant) in Ladyzhyn, Vinnytsia Oblast (October 11, 2022) Although the reported temperature in Ladyzhyn on the date of the attack is not readily available, the average temperature in the month of October is a high of 9°C and a low of 0°C.³⁰⁷
- Case No. 8: Mass attack on civilian infrastructure in Kyiv, Kyiv Oblast (October 17, 2022) Weather reports indicate a high of 17°C and a low of 4°C in Kyiv on this day. 308
- Case No. 9: Attack on energy infrastructure in Odesa Oblast (December 10, 2022) Although the reported temperature in Odesa Oblast on the date of the attack is not readily available, the average temperature in Odesa in the month of December is a high of 2°C and a low of 3°C.³⁰⁹
- Case No. 10: Attack on energy infrastructure in Kharkiv (December 28–29, 2022) Weather reports indicate a high of 3°C and a low of 0°C in Kharkiv on this day. 310
- Case No. 12: Attack on energy infrastructure in Shepetivika, Khmelnytskyi Oblast (February 10, 2023) Weather reports indicate a high of 0°C and a low of –6°C in Shepetivika on this day.³¹¹
- Case No. 13: Large-scale attacks on civilian objects and energy infrastructure in Kyiv, Zhytomyr, Sumy, Odesa (March 8–9, 2023) Weather reports indicate that, on this day, the temperatures in each affected region was as follows: in Kyiv, there was a high of 14°C and a low of -1°C³¹²; in Zhytomyr, there was a high of 9°C and a low of 2°C³¹³; in Sumy, there was a high of 10°C and a low of –5°C.³¹⁴ Finally, although the reported temperature in Odesa on the date of the attack is not readily available, the average temperature in Odesa in the month of March is a high of 17°C and a low of 5°C.³¹⁵
- Case No. 14: Attack on energy infrastructure and civilian houses in Novomoskovsk (March 18, 2023)
 Weather reports indicate a high of 5°C and a low of 3°C in Novomoskovsk on this day. 316

³⁰⁴ See Appendix I (Case Nos. 4, 6, 7, 8, 9, 10, 12, 13, 14).

³⁰⁵ September Weather in Kharkiv, WEATHER SPARK, https://perma.cc/ZPZ8-AT2B.

³⁰⁶ Past Weather in Kyiv, Ukraine – October 2022, TIME & DATE, https://perma.cc/JW77-E43B.

³⁰⁷ March Weather in Vinnytsia, WEATHER SPARK, https://perma.cc/QZ9X-75TA.

³⁰⁸ Past Weather in Kyiv, Ukraine – October 2022, TIME & DATE, https://perma.cc/CGK8-D3H8.

³⁰⁹ December Weather in Odesa, WEATHER SPARK, https://perma.cc/5P2M-8QVE.

³¹⁰ Past Weather in Kyiv, Ukraine- March 2023, TIME & DATE, https://perma.cc/4AFJ-3QBV.

³¹¹ Past Weather in Shepetivka, Ukraine – February 2023, TIME & DATE, https://perma.cc/J7EX-CYYZ.

³¹² Past Weather in Kyiv, Ukraine – March 2023, TIME & DATE, https://perma.cc/EP22-Y2C.

³¹³ Past Weather in Zhytomyr, Ukraine – March 2023, TIME & DATE, https://perma.cc/N388-3GTB.

³¹⁴ Past Weather in Sumy, Ukraine – March 2023, TIME & DATE, https://perma.cc/QPZ6-WE2B.

³¹⁵ Odesa Oblast, ACCUWEATHER, https://perma.cc/J99U-DBKY.

³¹⁶ Past Weather in Novomoskovske, Ukraine – March 2023, TIME & DATE, https://perma.cc/5PW7-BRNN.

Ukraine relies heavily on centralized district heating from thermal power plants and combined heat and power plants, which have been severely disrupted by Russian attacks. Ukraine's electricity needs increase between 20–25% in the winter, and the destruction of these plants has made it impossible to meet the demand. 318

According to the World Health Organization's ("WHO") Europe Director, lack of heating at such extreme temperatures can be fatal, heightening the devastating impact of these strikes on the civilian population.³¹⁹ The cold, combined with the destruction of energy infrastructure, poses substantial risk of hypothermia, frostbite, and increased rates of cardiovascular and respiratory diseases,³²⁰ with especially profound effects on vulnerable groups like the elderly, children, and those with chronic illnesses.³²¹

The WHO representative in Ukraine noted that the risk to civilian life cannot be mitigated by other heat sources: "As people resort to alternative sources of heating for their homes such as coal and wood and using diesel fueled generators or electric heaters, we see the risk of carbon monoxide poisoning will increase as well as other risks." Despite Ukraine's efforts to protect civilians, for example by preparing back-up power systems and establishing "Points of Invincibility" to provide essential services like heat, electricity, and water, Russia's relentless strikes on energy infrastructure created life-threatening conditions. Zelenskyy warned that these attacks might drive civilians to flee for their survival. 224

In these circumstances—a well-documented risk of low temperatures, coupled with the lack of heating—Russia's attacks on Ukraine's energy infrastructure are tantamount to the act of withholding basic life-sustaining necessities, which *ad hoc* tribunal jurisprudence has identified as "the creation of deadly living conditions." ³²⁵

³¹⁷ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 7.

³¹⁸ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 6.

³¹⁹ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022); Hans Henri P. Kluge, Statement-Winter in Ukraine: people's health cannot be held hostage, WORLD HEALTH ORGANIZATION (Nov. 21, 2022), https://perma.cc/5UZ3-4BVJ ("The World Health Organization's Europe director, in a public statement, expressed grave concern that millions of Ukrainians are without power as winter temperatures drop. . . . Noting that 'cold weather can kill,' he added that the winter ahead 'will be about survival.""). See also Winter in Ukraine: over 25% of internally displaced people interviewed lack access to sufficient heating, more than 60% houses damaged, IRC initial analysis shows, RESCUE, https://perma.cc/R2RG-8BGT (last visited Feb. 17, 2025) ("An IRC assessment (conducted December 20, 2022) found that 25% of respondents reported not having access to sufficient heating – this becomes life-threatening in below-freezing temperatures").

³²⁰ UN HRMMU, *Attacks on Ukraine's Energy Infrastructure*, at 8; *see also* WHO, *Ukraine: 2023-2024 Winter Risk Assessment*, at 9–11. It is estimated that approximately 20% of Ukraine's population is 60 years old or older. Notably, elderly people are more vulnerable and thus more likely to experience preexisting chronic illnesses, reduced mobility, or limited temperature regulation, raising their risk levels. Elderly people with conditions such as Alzheimer's disease are also at a greater risk, given that "they may be less aware of the need to modify their behavior to stay warm." *Id.* at 2–3. Other groups that are particular at risk include children under five years of age, people with chronic illnesses, internally displaced individuals, and those with lower social or economic statues. *Id.* at 3.

³²¹ WHO, Ukraine: 2023-2024 Winter Risk Assessment, at 2-3.

³²² Lisa Schlein, WHO: Russian Attacks on Ukraine Infrastructure Target Critical Health Care, VOA (Dec. 20, 2022), https://perma.cc/ZM87-G7F7.

³²³ Schmitt, *Ukraine Symposium – Attacking Power Infrastructure*.

³²⁴ Id

³²⁵ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146 (May 21, 1999).

b. Disruption of water distribution systems

Accessible, potable water is a basic necessity for survival. Water utilities rely on electricity for water distribution, and the majority of Ukraine's municipal water systems lack back-up energy resources to employ during blackouts. Accordingly, Russian attacks on Ukraine's energy infrastructure have severely affected Ukraine's water distribution systems. During prolonged power outages, water utilities generally prioritize providing limited water supply to essential services, such as food production, leaving civilian consumers with highly restricted, scheduled water access. As one Kharkiv resident explained in a conversation with Amnesty International after an attack that resulted in a blackout:

There is electricity now in my apartment, but not all the time. And the streets are very dark, we still do not have any lighting outside. I did not have any power for the first two days after the attack. On the third day, it was back around midnight. I knew it would not be for long, so I had a few hours to do the washing, cook food, heat enough water to put in thermos, and to charge power banks. The damage to the energy infrastructure is so severe, that air raid alerts are not working properly. Police uses loudspeakers to announce that there is danger of an air raid. 328

The UN HRMMU found that "attacks on energy infrastructure put over 10[%] of the population (3.7 million people) at risk of consuming contaminated drinking water. Risks increase for infants and young children, older persons, immune-compromised individuals, and those with important comorbidities." These issues disproportionately impact civilians living in high-rise buildings that lack independent generators, where housing is deemed inadequate absent access to safe water supply. Moreover, without a steady flow of water, above-ground pipes can freeze and burst, further jeopardizing Ukrainian civilians' access to water.

Attacks that disrupt electricity and water supplies have not only resulted in widespread suffering, but also civilian deaths. A tragic example occurred in March 2022 during the Russian bombardment of Mariupol, when a 6-year-old-girl died of dehydration after Russian forces severed the city's access to water and power supply. 332 Importantly, evidence of even a single killing resulting

³²⁶ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 6.

³²⁷ *Id.*

³²⁸ Weeks of horror and darkness for Ukrainian civilians as Russia attacks critical energy infrastructure, AMNESTY INTERNATIONAL (Apr. 12, 2024), https://perma.cc/9QSZ-NYUG.

³²⁹ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8.

³³⁰ Id. at 6.

³³¹ Id.

³³² Russian troops are destroying hospitals all over Ukraine and attacking medical professionals; a little girl died from dehydration; what is happening in Ukraine's health care during the war, UKRAINIAN HEALTHCARE CTR., https://perma.cc/D6GN-KAJ4 (last visited Feb. 17, 2025); Ukraine says child died alone from dehydration in besieged Mariupol, REUTERS (Mar. 8, 2022), https://perma.cc/D328-C9DF.

from "the creation of deadly living conditions" suffices to satisfy the first element of extermination, provided that all other required elements are also fulfilled. 334

c. Deleterious effects on the health care system

Beyond the immediate suffering caused by freezing temperatures and restricted access to clean water supply, Russia's aerial attacks have had severe, reverberating effects on Ukraine's health care system, with deadly consequences. *Ad hoc* tribunal jurisprudence establishes that obstructing access to adequate health care constitutes "the creation of deadly living conditions." This standard is clearly met by the profound disruptions that Russian attacks on power infrastructure have inflicted on Ukraine's health care system. As the WHO Europe Director explained, "continued attacks on health and energy infrastructure mean hundreds of hospitals and health-care facilities are no longer fully operational—lacking fuel, water, and electricity to meet basic needs." Among 71 recorded attacks disrupting hospital utilities in Ukraine, 42% resulted from attacks on critical energy infrastructure.

Russia's destruction of critical energy infrastructure has severely diminished Ukrainians' access to essential health care services, leaving hospitals and other medical facilities unable to meet the population's needs. Russia's attacks have disrupted the delivery of electricity, food, water, medicines, and medical supplies, directly impacting the accessibility and quality of health care services in Ukraine. Power outages have forced hospitals to postpone life-saving surgeries or perform them in near-darkness, heightening the risks associated with such procedures. As the Deputy Minister of Health, Mariia Karchevych, explained, "If there is a long-term blackout, planned hospitalizations and planned operations will be suspended in order not to overload the facilities. Only urgent operations will be accepted." In March 2024, Kharkiv Hospital was compelled to reschedule planned surgeries, only admitting urgent patients following a blackout. Facing similar constraints during a prolonged blackout in November 2022, the head of the 2nd Hospital of Poltava, Maksym Dudchenko, confirmed that doctors in Poltava Oblast performed 398 surgeries in

³³³ Stakić, ICTY AC Judgment, ¶ 260 (Mar. 22, 2006); see also Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146 (May 21, 1999) ("mass killing of others or ... creation of conditions of life that lead to mass killing of others"); Krstić, ICTY TC Judgment, ¶ 503 (Apr. 19, 2004) ("there must be evidence that a particular population was targeted and that its members were killed or otherwise subjected to conditions of life calculated to bring about the destruction of a numerically significant part of the population").

³³⁴ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146-7 (May 21, 1999).

³³⁵ Kayishema & Ruzindana, ICTR TC Judgment, ¶ 146 (May 21, 1999).

³³⁶ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022); Kluge, Statement – Winter in Ukraine. See also UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8 ("The disruption to electricity and interconnected infrastructure systems affects public health in numerous foreseeable ways, including the effective functioning of hospitals and clinics, and negative health consequences due to lack of heat, water, and telecommunications"); Grim milestone on World Humanitarian Day: WHO records 1940 attacks on health care in Ukraine since start of full-scale war, WORLD HEALTH ORGANIZATION (Aug. 19, 2024), https://perma.cc/AY6E-BJU8 ("We are witnessing a blatant disregard for the fundamental principles of humanitarian law. The widespread attacks on Ukraine's infrastructure have made access to electricity, water and heating an urgent priority. This war is affecting every person across Ukraine – including health-care professionals and providers – in diverse and profound ways," noted Dr Emanuele Bruni, World Health Emergencies lead at the Country Office).

³³⁷ Uliana Poltavets & Christian De Vos, Russia's Attacks on Ukraine's Energy Infrastructure Imperil Healthcare Access, JUST SECURITY (Jun. 6, 2024), https://perma.cc/BY24-5XR5.

³³⁸ See Poltavets & De Vos, Russia's Attacks on Ukraine's Energy Infrastructure; Alexander Parkhomenko, Russia's War in Ukraine and Cardiovascular Health Care, 147(10) CIRCULATION 779 (2023), https://perma.cc/Q5U9-RFSJ.

³³⁹ Ukraine will stop planned hospitalizations in the event of a prolonged power outage – Ministry of Health, SLOVOIDILO (Dec. 3, 2022), https://perma.cc/PJ2Z-MQVY.

the midst of the power outage: "Everything must be done as quickly as possible, because at any moment the equipment can fail, at any moment the electricity can be cut off. And then we can complete the open operation with flashlights, and here we have risks." Power disruptions have also compromised the storage and delivery of vaccines and essential medications, notably those requiring close temperature control. WHO's 2024 assessments on the disruptive effects of energy infrastructure attacks on health care in Ukraine found that "over 80% of households report[ed] problems obtaining needed medicines, with 6% unable to access essential medications.

Although many Ukrainian hospitals are equipped with back-up generators and independent water supplies, relying on these options is neither sustainable nor fully effective in mitigating the harm caused by Russia's attacks on energy infrastructure. In some cases, hospitals simply lacked the capacity to treat patients, leaving roughly 8% of the population without access to primary health care facilities.³⁴³ The WHO reported that hundreds of hospitals and health care facilities across Ukraine have suffered power outages and water shortages, despite some having back-up generators.³⁴⁴ Running on generator power is not a long-term solution, as generators consume a significant amount of fuel—up to 700 liters of fuel per day.345 Delays in activating these systems and voltage interruptions during power transitions can also damage sensitive medical equipment, further jeopardizing health care delivery.³⁴⁶ In fact, the U.S. Department of Homeland Security found that hospitals experience "a 67-99 percent degradation to their core operations after 5 minutes without alternate or backup sources for electric power."347 Recognizing these limitations, as of June 2024, Ukraine's Ministry of Health provided all 643 operational health care facilities with back-up generators and was exploring alternative energy solutions, such as solar panels.³⁴⁸ Nevertheless, these measures, while helpful, are insufficient to fully alleviate the devastating impacts and life-threatening consequences of Russia's attacks on the health care system.

A comprehensive survey of Ukrainian health care workers conducted by PHR and Truth Hounds provided critical insights into the severe health consequences of attacks on energy infrastructure.³⁴⁹ The survey gathered information online, between July and September 2023, from individuals over 18 years of age who were employed in Ukrainian health care facilities since the beginning of Russia's full-scale invasion.³⁵⁰ The findings reveal a massive disruption in medical care due to power outages caused by Russia's air strikes on energy infrastructure. Of the 2,261 health care

³⁴⁰ Arina Kot & Tatyana Ivakh, "We worked under the lights": how they operated in Poltava during a power outage, SUSPILNE MEDIA (Nov. 25, 2022), https://perma.cc/P46B-AXBP.

³⁴¹ Poltavets & De Vos, Russia's Attacks on Ukraine's Energy Infrastructure.

³⁴² Stefan Anderson, *Ukraine's Health System Braces for Toughest Winter as Russia Targets Critical Infrastructure*, HEALTH POL'Y WATCH (Sept. 13, 2024), https://perma.cc/5C89-2RGY.

³⁴⁴ Kluge, Statement – Winter in Ukraine.

³⁴⁵ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8.

³⁴⁶ Granholm et. al., Critical Energy Infrastructure and Health: How Loss of Power May Kill, 38(2) PREHOSPITAL & DISASTER MED. 279, 279–80 (2023), https://perma.cc/Q43B-B54E; Energizing health: accelerating electricity access in health-care facilities, WORLD HEALTH ORGANIZATION XXVI (2023), https://perma.cc/J5RQ-YZMF; Tara Sell et al., A Framework for Healthcare Resilience During Widespread Electrical Power Loss, 1(1) J. CRITICAL INFRASTRUCTURE POL'Y (2020), https://perma.cc/7VEL-4ED9.

³⁴⁷ U.S. Department of Homeland Security National Protection and Programs Directorate, *Sector Resilience Report: Hospitals* 1 (2014).

³⁴⁸ Ministry of Health of Ukraine, *Ukrainian hospitals are preparing for the heating season to increase their resilience during possible enemy attacks in winter - Viktor Lyashko* (Jun. 28, 2024), https://perma.cc/4C8G-5CYT.

³⁴⁹ See generally PHR & TH, Health Care in the Dark.

³⁵⁰ *Id.* at 6-8.

workers who completed the survey, 92.3% reported experiencing power outages in their facilities, with 66% noting that these interruptions directly impacted medical procedures.³⁵¹ Specific consequences included delays in elective surgeries (8.4%), interruptions during surgery (1.7%), and failures in life support systems (1.8%).³⁵² Additionally, 13.8% of respondents reported medication spoilage due to storage issues, and 3.6% noted problems preserving biological samples such as blood or embryos.³⁵³

The survey also documented serious health consequences resulting from power outages. Respondents reported 36 cases of permanent health complications and attributed 20 patient deaths directly to power outages. FHR and Truth Hounds identified organ damage due to inadequate oxygenation—typically due to a failure of mechanical breathing devices amidst blackouts—as the most common cause of permanent harm to patients. Other reported harms included delayed surgeries and medical procedures, failures of life-saving equipment, and disruptions in dialysis treatment. These findings align with global research from non-conflict settings, which shows that even isolated power outages can increase morbidity and mortality in health care facilities.

Case No. 6³⁵⁸ illustrates the detrimental effects of Russian strikes on critical infrastructure on Ukraine's health care system. This attack severely damaged 29 critical infrastructure facilities, resulting in widespread power outages across eight regions. Missile strikes not only killed a doctor, but also triggered power outages lasting from 13 hours to several days. These outages disrupted hospital operations, delayed surgeries, restricted water access, and rendered diagnostic and treatment equipment inoperable. In an interview with Truth Hounds on September 10, 2024, Dr. Lesia Lysytsia described the chaos hospitals experienced following these blackouts:

The hematology department must ensure that the refrigerators work, the surgeon must ensure that the operation does not end with blood flowing from the patient, and the anesthesiologist must ensure that the patient breathes. . . . The anesthesiologist begins to 'breathe' the patient with a 'manual resuscitator', the nurse responsible for the medicine begins to look for where to find batteries for refrigerators. If these are blood products, then there is a system that keeps the desired temperature for a certain time. If the doctor understands that the electricity will not appear in the near future, he begins to find out where to transport the drugs so that they do not spoil. 362

³⁵¹ *Id.* at 4.

³⁵² *Id.*

³⁵³ *Id.*

³⁵⁴ *Id*.

³⁵⁵ *Id.* at 23.

³⁵⁶ *Id.* at 20, n. 258 ("Two cases of organ damage due to lack of dialysis were reported by health care providers at the same facility, four cases of organ damage from delayed surgeries were reported by four providers across two facilities, and two cases of organ damage from other life-saving equipment failures were reported by providers at the same facility").

³⁵⁷ Joan A. Casey et al., *Power outages and community heath: a narrative review*, CURRENT ENV'T HEALTH REP. (2020). ³⁵⁸ See Appendix I (Case No. 6).

³⁵⁹ Missy Ryan, Kyiv Doctor Killed in Airstrike, WASHINGTON POST (Mar. 26, 2023), https://perma.cc/59QG-M3DA. 360 PHR & TH, Health Care in the Dark, at 13.

³⁶¹ *Id*.

³⁶² *Id*.

The elderly face heightened risks, given that they are more likely to depend on electronic medical devices for survival. Fersonal accounts of Ukrainian civilians illustrate the severe, and often life-threatening, consequences of power outages. Human Rights Watch interviewed a Kyiv resident whose mother, a 75-year-old lung cancer patient, relied on an oxygen concentrator to breathe. Her daughter explained: "We have a stationary oxygen concentrator at home that becomes useless when there is no power. Without that, her oxygen levels drop to 70 percent within minutes. If there is no electricity for over two hours, we are trapped and all I can do is watch my mother struggling to breathe." Sustained oxygen deficiency could result in severe organ damage, or even death. Sec

Similarly, Olena Isayenko, a Kyiv resident who suffers from respiratory failure, relies on an electric-powered ventilator for constant oxygen, leaving her struggling for air when power is interrupted as a result of Russian strikes on Ukraine's energy grid. ³⁶⁷ She told CNN: "When there is no power, this machine makes a long beep and it reminds me of when I was in intensive care, surrounded by many machines. It sounds like a flatline." Her backup, portable oxygen machine only has a battery life of approximately two hours, taking over an hour to recharge, further highlighting her vulnerability during blackouts. ³⁶⁹

Lyudmyla Kaminska's grandson, Sevastian, has cystic fibrosis and relies on a nebulizer up to eight times a day to prevent mucus from blocking his lungs, an experience akin to "suffocating underwater." During blackouts, his battery-powered inhaler operates for only three minutes at a time, offering limited relief. Financial constraints exacerbate the crisis, as rising generator prices render them inaccessible for many families, particularly those living in high-rise apartments where generators cannot easily be used. Page 1872

The strain on hospitals and electricity-dependent life-save equipment, combined with widespread deprivation of basic resources like heating and clean water, inevitably impose a devastating toll on civilians. The interdependence between energy infrastructure and health care services critical for civilians' survival make it highly foreseeable that Russia's attacks on energy infrastructure would result in civilian deaths.

d. Impaired access to essential information

Russian attacks on Ukraine's energy infrastructure have severely impeded civilians' access to essential information for survival amidst the war, creating life-threatening conditions. According to Cloudfare, a U.S. cybersecurity company, energy disruptions directly impact internet connectivity

³⁶⁶ *Id*.

³⁶³ Adam X Andresen et al., *Understanding the Social Impacts of Power Outages in North America: A Systematic Review*, 18 ENVIRONMENTAL RESEARCH LETTERS 1, 9–10 (2023).

³⁶⁴ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022).

³⁶⁵ *Id.*

³⁶⁷ Gul Tuysuz et al., Blackouts Pose Potentially Deadly Risk to Ukrainians Who Need Power for Lifesaving Medical Devices, CNN (Dec. 27, 2022), https://perma.cc/SH4F-FR8Z.

³⁶⁸ *Id.*

³⁶⁹ *Id.*

³⁷⁰ *Id*.

³⁷¹ *Id*.

³⁷² *Id*.

and impair ordinary Ukrainians' access to information.³⁷³ The consequences of limited access to information extend far beyond mere inconvenience—it poses direct risks to civilian survival.

The internet is a critical mechanism for the Ukrainian government to disseminate essential information to the population, such as evacuation routes, relief availability, and warnings about urgent threats.³⁷⁴ During prolonged blackouts, Ukrainian residents have faced significant challenges in accessing this critical information.³⁷⁵ Kyivstar, the largest mobile provider in Ukraine, has reported performance issues due to the surge in calls and messages during blackouts.³⁷⁶ Elderly residents isolated by communication outages have been unable to learn about available humanitarian aid, leading to tragic outcomes. In one reported case, a 90-year-old woman died after a power outage cut off updates about relief supplies, rendering her unable to get the humanitarian assistance needed to survive.³⁷⁷

Power outages caused by Russia's aerial attacks also impair the functioning of air raid sirens, which alert populations to incoming threats. In Kharkiv, for example, Russia's airstrikes disabled the air raid alarm system for days, forcing city employees to manually warn residents of impending danger by traveling through neighborhoods.³⁷⁸ The Lviv police resorted to using manual loudspeakers to inform civilians about Russian attacks, but such efforts cannot match the effectiveness of city-wide automated alerts, especially when combined with disruptions to mobile internet and app-based warning systems.³⁷⁹

The collapse of communication networks caused by Russia's aerial attacks not only leaves civilians unprotected but also hampers humanitarian aid efforts. Information and communication technologies are essential for coordinating relief, with tools like satellite images and mobile data collection enhancing response efficiency. When civilians lose access to these technologies, they are unable to locate resources, connect with family, or understand how to respond in emergencies. The compounding effects of disrupted communication and media access have prevented civilians from accessing essential resources and effectively responding to emergency situations during wartime, posing a serious threat to their survival.

e. Reverberating effects of Russia's attacks on critical infrastructure

The reverberating effects of Russia's attacks on Ukraine's critical energy infrastructure have created deadly conditions of life and caused foreseeable civilian harm. Prolonged blackouts, impaired access to information, and the disruption of water and heating supply and health care services, especially when paired with extreme winter temperatures, have created conditions of life under

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³⁷³ Elias Groll, Russian Attacks on Ukrainian Infrastructure Cause Internet Outages, Cutting Off a Valuable Wartime Tool, CYBERSCOOP (2023), https://perma.cc/DH35-NXPS.

³⁷⁴ Id.; Elias Groll, Russian Attacks on Ukrainian Infrastructure Cause Internet Outages, Cutting Off a Valuable Wartime Tool, CYBERSCOOP (2023); Global Rights Compliance, "The Hope Left Us," at 35.

³⁷⁵ Daniel P. Scarnecchia et al., A Rights-Based Approach to Information in Humanitarian Assistance, PLOS CURRENTS (Sept. 20, 2017), https://perma.cc/6V9B-Q8WH.

³⁷⁶ Ukrainian Cities Are Suffering Internet Blackouts, THE ECONOMIST (Feb. 26, 2022), https://perma.cc/8WF9-C4MJ.

³⁷⁷ Global Rights Compliance, "The Hope Left Us," at 35.

³⁷⁸ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 5.

³⁷⁹ During Yesterday's Air Raid, Some Lviv Residents Did Not Hear the Signal, LVIV RADIO 100.8 FM (Jul. 5, 2024), https://perma.cc/X65Z-VTJ8.

³⁸⁰ Scarnecchia et al., A Rights-Based Approach to Information in Humanitarian Assistance.

which civilian deaths are not only possible, but likely and foreseeable. The selected cases of Russia's attacks on critical infrastructure analyzed in this Report illustrate the severe impact on Ukrainian civilians. Each of the nine attacks occurred during the cold winter months and resulted in prolonged blackouts that imposed life-threatening conditions.

The cases below represent particularly strong examples of attacks amounting to the crime against humanity of extermination, given available information indicating the severity and length of resulting power outages:³⁸¹

- Case No. 5: Attack on energy infrastructure in Kharkiv (September 11, 2022) Russia's missile strike on the Kharkiv TEC-5 power plant disrupted water supply and caused widespread power outages across the Kharkiv, Dnipro, Sumy, and Poltava regions of Ukraine.
- Case No. 6: Mass attack on civilian infrastructure in Kyw (October 10, 2022) This attack damaged 29 critical infrastructure facilities, including power plants and substations, and caused extensive power outages across eight regions of Ukraine.
- Case No. 7: Attack on energy infrastructure (thermal power plant) in Ladyzhyn, Vinnytsia Oblast (October 11, 2022) This "double tap" attack on the Ladyzhyn Thermal Power Plant left over 18,000 residents without heat, causing the local authorities to declare an "emergency situation." Although efforts to restore power to affected areas began immediately, subsequent shelling of Ladyzhyn, including reported attacks on November 24, delayed full heat restoration until December 1. This strike was part of a larger campaign of Russian attacks on Ukraine's energy infrastructure, creating life-threatening conditions for millions of civilians left without consistent heat and electricity during the coldest time of the year.
- Case No. 8: Mass attack on civilian infrastructure in Kyiv, Kyiv Oblast (October 17, 2022) This attack, executed at the onset of Ukraine's winter, struck both civilian infrastructure and energy facilities and caused prolonged blackouts in hundreds of settlements across the Kyiv, Dnipropetrovsk, and Sumy regions, prompting Ukrainian authorities to implement energy-saving measures.
- Case No. 9: Attack on energy infrastructure in Odesa Oblast (December 10, 2022) This overnight attack on two critical energy infrastructure facilities triggered a complete energy blackout in Odesa Oblast, affecting approximately 1.5 million residents, leaving some 300,000 people without electricity the following day and creating region-wide power cuts over the next five days.
- Case No. 12: Attack on energy infrastructure in Shepetivika, Khmelnytskyi Oblast (February 10, 2023) The damage from this attack caused a two-day blackout across the region, requiring Ukrainian authorities to implement emergency power cuts over the following days to facilitate the restoration process.
- Case No. 13: Large-scale attacks on civilian objects and energy infrastructure in Kyiv, Zhytomyr, Sumy, Odesa (March 8–9, 2023) This attack severely disrupted energy supply in the Kharkiv, Odesa, and Zhytomyr regions, with reports indicating that roughly 150,000 civilians in Zhytomyr Oblast experienced prolonged outages of electricity and water throughout the day of the attack.

³⁸¹ See Appendix I (Case Nos. 5, 6, 7, 8, 9, 12, 13).

As of September 2024, civilians across Ukraine routinely faced at least six hours without electricity each day.³⁸² In the winter of 2022–2023, power outages lasted for up to 18 straight hours.³⁸³ Ukraine's largest energy company, DTEK, warned that in the winter of 2024–2025, blackouts could extend to 20 hours per day.³⁸⁴ Repairing the damage from Russia's attacks requires "technically complex equipment," which, at times, must be custom-ordered and could take over a year to manufacture and install.³⁸⁵ Moreover, even after Ukraine successfully repairs damaged energy infrastructure, Russia frequently re-targets the same facilities, prolonging outages and exacerbating the humanitarian impact. For instance, in **Case No. 7**,³⁸⁶ Russian forces launched two strikes targeting the Ladyzhyn Thermal Power Plant. Ukraine's efforts to restore power were severely hampered by continuous attacks on Ladyzhyn. Such deliberate and repeated targeting makes clear that the attacks were intentional, and the resulting civilian suffering was not only a foreseeable but also an intended consequence of Russia's strategy.

Accordingly, Russia's attacks on Ukraine's energy infrastructure "inflict[ed] conditions of life calculated to bring about the destruction of part of a population" and, consequently, resulted in the indirect killings of one or more persons. Even "a single killing" can satisfy this objective element for extermination, provided that other legal elements are met. The deaths included in this section—deaths caused by the inability to access heat, clean water, essential medical services, or information necessary to locate humanitarian assistance—represent only a small fraction of the civilian deaths attributable to a lack of heat, water, and essential services in Ukraine.

Although tracing civilian casualties stemming from the cascading effects of infrastructure attacks may present investigative challenges, the cumulative impact of the factors outlined in this section give rise to a strong inference that civilian deaths have occurred as a result of critical infrastructure strikes, whether they manifest immediately or over time. Given ongoing investigations, international and Ukrainian prosecuting authorities are likely already aware of—or will be likely to discover—additional killings that meet the objective element of extermination. The civilian population will feel the pernicious effects of these attacks for years. According to the UN HRMMU, while the full extent of deaths resulting from Russian strikes on energy infrastructure remains difficult to quantify, the long-term consequences will far exceed the immediate harms currently documented. Accordingly, Russia's attacks against Ukraine's critical infrastructure are widespread and systematic, and impose life-threatening conditions on the Ukrainian population.

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³⁸² Anderson, Ukraine's Health System Braces for Toughest Winter as Russia Targets Critical Infrastructure.

³⁸³ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022),

https://www.hrw.org/news/2022/12/06/ukraine-russian-attacks-energy-grid-threaten-civilians. See also Int'l Partnership for Human Rights, New Report Links Western-Made Components to the Weapons Used in Russia's Suspected Ukraine War Crimes - IPHR 12–15, 17–22 (2023).

³⁸⁴ Anderson, Ukraine's Health System Braces for Toughest Winter as Russia Targets Critical Infrastructure.

³⁸⁵ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 5.

³⁸⁶ See Appendix I (Case No. 7).

³⁸⁷ Elements, art. 7(1)(b)(1).

³⁸⁸ Cf. Elements, art. 7(1)(b); see also Kayishema & Ruzindana, ICTR TC II Judgment, ¶¶ 146–7.

³⁸⁹ Dora Vanda Velenczei, A Progressive Programme of Starvation: The Gaza Strip Blockade as the Crime against Humanity of Extermination, 2022 ELTE LAW JOURNAL 85, 96 (2022) ("The duration of time between the imposition of conditions [that threaten the survival of civilian populations] and death is irrelevant to establish extermination").

³⁹⁰ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 1.

3. Russian officials possessed the requisite intent and knowledge of infliction of deadly conditions

Article 7(1)(b) of the Elements specifies that the accused must have "[known] that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against the civilian population." Additionally, Article 30 of the Rome Statute requires that the material elements of the crime be committed "with intent and knowledge." As already established in Section V(a)(i)(5), which analyzed the contextual elements of crimes against humanity, Russian attacks on critical infrastructure satisfy the first component of the *mens rea* requirement for the crime of extermination—Russian officials acted with knowledge that attacks on critical infrastructure formed part of a widespread and systematic attack directed against Ukraine's civilian population. This section will therefore focus on whether such attacks meet the "with intent and knowledge" standard imposed by Article 30.

As demonstrated in Section V(a)(ii)(2), it is highly foreseeable that Russian attacks on energy infrastructure would result in civilian deaths. The pattern of repeatedly striking critical energy infrastructure with precise weapons during the coldest months of the year, when access to heating, water, health care, and humanitarian aid is essential for survival, strongly suggests that such strikes were executed not only with an intent to debilitate Ukraine's infrastructure but also to inflict deadly conditions of life on the civilian population. Any contention that Russian officials did not intend or know that death would result from destroying energy infrastructure is simply implausible.

Further, statements by Russian officials reveal that they intended, or at the very least knew, that "death would occur in the ordinary course of events." For example, when Putin's Press Secretary publicly asserted that Ukrainian leadership had the means to stop the attacks, he indicated that Russia was not only cognizant of the attacks' effects on civilians but intended such impact. He explicitly stated that Ukraine could end "all kinds of suffering of the local population" by acceding to Russian demands.³⁹⁴ Additionally, on October 19, 2022, Andrey Gurulyov, a member of the Russian State Duma, openly discussed creating conditions that would make it "impossible to survive" in Ukraine, indicating a clear intent to inflict lethal consequences on Ukraine's civilians: "You can't cook food, no place to store food, there is no way to transport the food . . . How does one live in a country where nothing works?"³⁹⁵ On November 19, 2022, Deputy Speaker of the State Duma, Boris Chernyshov, baldly asserted that Russia's strikes were intended to kill Ukrainians: "These retaliatory strikes—and they are retaliatory—it's an expression of our hatred, our holy hatred. They'll be sitting without gas, without light, and without everything else. If the Kyiv regime chose the path of war criminals, they have to freeze and rot over there."396 Deputy Chairman of the Russian Security Council, Dmitry Medvedev, also stated that Russia's goal was to completely dismantle the Ukrainian state, such that "not even ashes of it remain." These statements demonstrate not only an awareness of the harm inflicted on civilians, but also an intent to inflict death on civilians until Ukraine capitulates.

³⁹¹ Elements, art. 7(1)(b).

³⁹² Rome Statute, art. 30.

³⁹³ Rome Statute, art. 30(2)(b).

³⁹⁴ Global Rights Compliance, "The Hope Left Us," at 57.

³⁹⁵ Apt, Russia's Eliminationist Rhetoric.

³⁹⁶ Id.

³⁹⁷ *Id.*

Statements from the Russian Ministry of Defense provide additional evidence of intent and knowledge. As early as March 4, 2022, the Ministry issued remarks concerning the "humanitarian catastrophe" in Kyiv and other besieged cities, demonstrating that Russian military leadership was aware of the escalating deprivation and suffering. Despite this awareness, Russian aerial attacks targeting energy infrastructure persisted. On December 8, 2022, Putin himself admitted that the strikes were deliberately aimed at Ukraine's energy infrastructure and that Russia would not stop such attacks. Continuing to perpetrate such attacks in the face of an escalating humanitarian catastrophe is evidence that Russian leadership both knew of the resulting harm and intended to inflict life-threatening conditions.

In sum, Russian officials' statements, along with the extensive media reporting on critical infrastructure attacks, provide compelling evidence that Russian leadership engaged in a systematic campaign aimed at targeting Ukraine's critical infrastructure with intent and knowledge of the lifethreatening consequences such attacks impose on civilians, thus satisfying Article 30's *mens rea* requirement. As such, Russian attacks on critical infrastructure likely amount to the crime against humanity of extermination.

iii. Other Inhumane Acts

Article 7(1)(k) of the Rome Statute establishes the crime against humanity of other inhumane acts to capture acts of similar character to those enumerated elsewhere in Article 7 that inflict "great suffering, or serious injury to body or to mental health or physical health" on victims. ⁴⁰⁰ To amount to the crime of other inhumane acts, Russia's attacks on Ukraine's critical energy infrastructure must fulfill each of the following five elements:

- 1) "The perpetrator inflicted great suffering, or serious injury to body or to mental or physical health, by means of an inhumane act";
- 2) "Such act was of a character similar to any other act referred to in article 7, paragraph 1 of the Statute";
- 3) "The perpetrator was aware of the factual circumstances that established the character of the act";
- 4) "The conduct was committed as part of a widespread or systematic attack directed against the civilian population"; and
- 5) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." ⁴⁰¹

The nature and gravity of Russia's missile and drone strikes on energy infrastructure support the conclusion that they were "of character similar to any other act referred to in article 7, paragraph 1 of the statute." First, the enumerated acts in Article 7 generally "protect diverse interests and values, including the right to life, health, liberty and human dignity." Russian attacks on energy infrastructure threaten each of these interests and values. Second, although the crime against humanity of extermination requires resulting deaths, it also addresses mass deprivation. It requires

³⁹⁸ Mykytenko & Vishchyk, "All Our Hope Is in the Famine."

³⁹⁹ Ukraine: Russia's Attacks against Energy Infrastructure Violate International Humanitarian Law, FIDH (Dec. 23, 2022), https://perma.cc/Q6P5-F33D.

⁴⁰⁰ Rome Statute, art. 7(1)(k).

⁴⁰¹ Elements, art. 7(1)(k).

⁴⁰² Elements, art. 7(1)(k).

⁴⁰³ Tom Dannenbaum & REVISTA 17, Starvation and International Crime 147 (2023).

that the perpetrator "inflict . . . conditions of life . . . calculated to bring about the destruction of part of a population," ⁴⁰⁴ a standard which is clearly met by Russia's relentless missile and drone strikes. Finally, depriving civilians of heat, food, water, and health care infringes upon their rights to physical and mental health, both of which are "intrinsically linked to the right to life," ⁴⁰⁵ closely reflecting a key element of the crime against humanity of persecution—namely, the deprivation of fundamental rights. These parallels between core aspects of the proscribed acts in Article 7 demonstrate that Russia's aerial strikes on Ukraine's power infrastructure are "of character similar to" such acts, satisfying the second element of the crime against humanity of other inhumane acts.

In *Galić*, the ICTY found that "a campaign of sniping and shelling" perpetrated by the accused amounted to inhumane acts under Article 5 of the ICTY Statute, which closely resembles Article 7(1)(k) of the Rome Statute. ⁴⁰⁶ The Trial Chamber based its findings on the "pervasive and continuous nature of the attacks" and the "physical and psychological suffering inflicted on the victims." Russia's attacks on energy infrastructure have been equally pervasive and continuous, and similarly resulted in substantial physical and psychological civilian suffering. Accordingly, it is reasonable to conclude that Russia's strikes were of comparable "nature and gravity" to other enumerated acts in Article 7(1) of the Rome Statute.

Further, Russian attacks on energy infrastructure have inflicted great suffering, or serious injury to body or to mental or physical health, by means of an inhumane act. ⁴⁰⁸ In *Gbagbo*, the ICC assessed "the modalities in which the alleged criminal acts were performed, including the kinds of weaponry used, and . . . the available information on the types of injuries suffered by the victims of the crimes charged" to determine whether acts perpetuated by pro-Gbagbo forces amounted to the crime against humanity of other inhumane acts. ⁴⁰⁹ Using this metric, Russia's widespread and systematic strikes on Ukraine's energy infrastructure have inflicted, and continue to inflict, "physical and mental suffering" on Ukrainian civilians, ⁴¹⁰ subjecting them to a substantial risk of death or injury and psychological distress. ⁴¹¹

In addition to physical suffering, the mental health impact of Russia's aerial attacks on civilians is immense, causing psychological suffering of similar "nature and gravity" to other crimes against humanity. According to the UN HRMMU, prolonged power outages augment "psychological distress including panic, anxiety, fear, and a sense of isolation," especially amongst individuals who struggle with preexisting mental health conditions like depression or anxiety. ⁴¹² In December 2022, the WHO estimated that up to 10 million Ukrainians were at risk of developing mental health issues due to the ongoing war, with 3.9 million individuals already documented as exhibiting moderate to severe symptoms. ⁴¹³ More recently, in April 2024, Ukraine's Ministry of

408 Rome Statute, art. 7(1)(k).

⁴⁰⁴ *Id.*; Rome Statute, art. 7(2)(b).

⁴⁰⁵ U.N. General Assembly, Report of the Independent International Commission of Inquiry on the Occupied Palestinian Territory, including East Jerusalem, and Israel, ¶ 90, U.N. Doc. A/79/232 (Sept. 11, 2024).

⁴⁰⁶ Galić, ICTY TC I Judgment and Opinion, ¶ 763 (Dec. 5, 2003).

 $^{^{407}}$ *Id.* at ¶ 764.

⁴⁰⁹ Gbagbo, ICC PTC I Decision, ¶ 198 (Jun. 12, 2014); see also Prosecutor v. Blé Goudé, ICC-02/11-02/11, ICC PTC Decision, ¶ 120 (Dec. 11, 2014).

⁴¹⁰ Rome Statute, art. 7(1)(k).

⁴¹¹ Russian Federation's War Having 'Appalling Impact' on Ukraine's Children, Under-Secretary-General Tells Security Council, UN MEETINGS COVERAGE AND PRESS RELEASES (Jan. 10, 2024), https://perma.cc/CH8Q-52E6.

⁴¹² UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8.

⁴¹³ Lisa Schlein, WHO: Russian Attacks on Ukraine Infrastructure Target Critical Health Care, VOA (Dec. 20, 2022), https://perma.cc/DF23-BM2K.

Health reported that approximately 15 million people, representing roughly half of Ukraine's entire civilian population, need psychological support. Three to four million of these individuals likely require medication to address their mental health distress. These findings align closely with research indicating that people affected by power outages often experience "worry, anxiety, stress, and reduced wellbeing" as a result of "disrupted heating, food, water, supplies, and health care." The WHO has noted that the mental health impacts of the war manifest with greater severity in children. Over 1.5 million children have been identified as needing urgent psychological support to manage anxiety and trauma.

Strikes on energy infrastructure have forced countless Ukrainians to endure extended blackouts, severely disrupting their daily lives. This ongoing trauma, combined with infrastructure damage and economic decline, place long-term mental health at risk. Despite efforts of humanitarian organizations to provide psychological support, extensive damage to critical infrastructure has made access to mental health services increasingly difficult, particularly for internally displaced civilians. While the demand for mental health services has risen dramatically, the war has strained Ukraine's health care system at large, substantially eroding its capacity to meet such demand. Russia's attacks on critical infrastructure not only inflict direct physical suffering, but also contribute to a ongoing mental health crisis that further harms civilians, underscoring the inhumane nature of these acts.

Russian assaults on energy infrastructure have also inflicted mental suffering on Ukrainian health care workers, who endure the emotional strain of daily exposure to traumatic events and loss of life. Professionals working under such conditions frequently experience depression and post-traumatic stress disorder. According to a physician from the Sumy region, these conditions contribute to "emotional burnout and psychological pressure." Another doctor from Zaporizhzhia similarly noted that "[d]ue to the lack of stable power supply, frequent shelling and air raids in Zaporizhzhia, the staff is clearly experiencing emotional burnout, excessive stress, and sharp reactions to loud noises," which hinders the ability of health care workers to perform their duties effectively. 424

⁴¹⁴ Agnieszka Pikulicka-Wilczewska, *As Russia's War Rages, Ukraine's Mental Health Crisis Spirals*, AL JAZEERA (Apr. 11, 2024), https://perma.cc/RM34-WDLP.

⁴¹⁵ *Id.*

⁴¹⁶ Joan A. Casey et al., *Power Outages and Community Health: A Narrative Review*, 7 CURRENT ENVIRONMENTAL HEALTH REPORTS 371, 377–8 (2020); see also Andresen et al., *Understanding the Social Impacts of Power Outages in North America: A Systematic Review*.

⁴¹⁷ *Id.*; *The Impact of War in Ukraine on the Environment and Health*, LOMA LINDA UNIV. INST. FOR HEALTH POL'Y & LEADERSHIP (Jul. 15, 2024), https://perma.cc/KS9B-2UTH.

⁴¹⁸ The Impact of War in Ukraine on the Environment and Health, LOMA LINDA UNIV. INST. FOR HEALTH POL'Y & LEADERSHIP (Jul. 15, 2024),

⁴¹⁹ Treating the Psychological Wounds of War in Ukraine, DOCTORS WITHOUT BORDERS (Aug. 4, 2023), https://perma.cc/NB2B-5YNG.

⁴²⁰ Violetta Seleznova et al., *The Battle for Mental Well-Being in Ukraine: Mental Health Crisis and Economic Aspects of Mental Health Services in Wartime*, 17 INT°L J. MENTAL HEALTH SYSTEMS 1, 2 (2023).

⁴²² Vamanjore Aboobaker Naushad et al., *A Systematic Review of the Impact of Disaster on the Mental Health of Medical Responders*, 34 PREHOSPITAL & DISASTER MED. 632, 641 (2019).

⁴²³ PHR & TH, Health Care in the Dark, at 25.

⁴²⁴ *Id*.

Finally, it is reasonable to infer that Russian perpetrators were aware of "the factual circumstances that established the character of [these acts]" 425 and knowingly engaged in conduct constituting a widespread and systemic attack on Ukraine's civilian population. Knowledge of the suffering caused by aerial attacks may be reasonably inferred from the repetitive use of highly destructive weapons to strike infrastructure indispensable to the survival of civilians, Russian officials' statements acknowledging and applauding the dire living conditions created by these attacks, and the extensive media coverage of the impact of these attacks on Ukrainian civilians, as outlined in further detail in Section V(a)(ii)(3) in the context of extermination.

The crime against humanity of other inhumane acts in Article 7(1)(k) was deliberately designed to be a residual and non-exhaustive category. As captured by the ICTY in *Blaškie*—in reference to the other inhumane acts provision of Article 5 of the ICTY Statute—the existence of a residual category is necessary because "however much care were taken in establishing all the various forms of infliction, one would never be able to catch up with the imagination of future torturers who wished to satisfy their bestial instincts; and the more specific and complete a list tries to be, the more restrictive it becomes." The use of innovative or different forms of warfare—including the use of drones and missiles to target critical energy infrastructure—is a clear example of an emerging form of "infliction" that demands careful scrutiny under international law.

b. Attacks on Critical Infrastructure as War Crimes

This section demonstrates that Russian attacks on Ukraine's critical energy infrastructure amount to the war crimes of: (1) intentionally directing an attack against civilian objects; 428 (2) intentionally launching a disproportionate attack; 429 and (3) intentionally using starvation of civilians as a method of warfare. 430

Certain common elements among these crimes—including that "[t]he conduct took place in the context of and was associated with an international armed conflict" and "[t]he perpetrator was aware of factual circumstances that established the existence of an armed conflict" are clearly satisfied. The attacks took place in Ukraine during the ongoing armed conflict between Russia and Ukraine. The alleged perpetrators are Russian military and civilian officials, and the victims are predominantly Ukrainian nationals. Finally, UAV and missile attacks launched by the Russian military are "associated with" the armed conflict and aim to "serve the ultimate goal of [Russia's] military campaign." Stated differently, the attacks took place within the geographic, temporal, material, and personal scope of the Russia-Ukraine international armed conflict.

Having established the common elements shared by these three war crimes, the following section examines the remaining elements that differentiate the enumerated war crimes under international law.

⁴³⁰ *Id.* at art. 8(2)(b)(xxv).

⁴²⁵ Elements, art. 7(1)(k).

⁴²⁶ Prosecutor v. Ongwen, ICC-02/04-01/15, ICC TC IX Judgment, ¶ 2745 (Feb. 4, 2021).

⁴²⁷ Blaškić, ICTY TC Judgment, ¶ 237 (Mar. 3, 2000).

⁴²⁸ Rome Statute, art. 8(2)(b)(ii).

⁴²⁹ *Id.* at art. 8(2)(b)(iv).

⁴³¹ Elements, arts. 8(2)(b)(i)–(ii), (iv).

⁴³² Bemba, ICC TC III Judgment, ¶ 143 (Mar. 21, 2016).

i. Intentionally Directing an Attack Against Civilian Objects

As noted in <u>Section IV(b)(ii)(2)</u>, the war crime of directing an attack against civilian objects requires that a perpetrator's conduct satisfy the following elements:

- (1) "The perpetrator directed an attack";
- (2) "The object of the attack was civilian objects, that is, objects which are not military objectives";
- (3) "The perpetrator intended such civilian objects to be the object of the attack;"
- (4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- (5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." 433

Russian officials directed the attacks examined in this Report, and thus the analysis turns to whether the objects of these attacks constitute legitimate military objectives. As noted above, under Article 52(2) of AP I, an object is considered a military objective only if it makes "effective contribution to military action," and its "total or partial destruction, capture or neutralization" offers a "definite military advantage." Any object which is not a military objective is characterized as a civilian object. 435

To the extent that the Ukrainian military relies on energy infrastructure, Russia might assert that its attacks focus exclusively on objects that make an effective contribution to Ukraine's military action. The relationship between military objectives and energy infrastructure is generally related to "tactical or operational level activities" supporting military operations during conflict. For instance, targeting a power plant that supplies electricity to a military barrack or command and control center might directly impact military operations.

However, it is implausible that the Ukrainian military relies on every component of energy infrastructure targeted by Russian attacks. Any military advantage derived from Russia's attacks is, at best, "potential or indeterminate" rather than the "definite" military advantage required by Article 52(2). 437 Thus, it is highly unlikely that all of Russia's strikes on energy infrastructure, including those documented in this Report, constitute legitimate military objectives. 438 These attacks, therefore, violate the prohibition against targeting civilian objects under Article 52(2) of AP I and amount to the war crime of intentionally directing attacks at civilian objects.

⁴³⁶ Giorgou & Zeith, When the lights go out.

⁴³³ Elements, art. 8(2)(b)(ii).

⁴³⁴ AP I, art. 52(2).

⁴³⁵ *Id.* at art. 52(1).

⁴³⁷ Schmitt, *Ukraine Symposium – Further Thoughts*; ICRC AP I Commentary, at ¶ 2028.

⁴³⁸ Id.

⁴³⁰ Schmitt, Ukraine Symposium – Attacking Power Infrastructure under International Humanitarian Law, Lieber Inst. (Oct. 20,

^{2022),} https://perma.cc/JPK2-KBNQ; Rome Statue, art. 8(2)(b)(ii).

1. The frequency and widespread nature of Russia's attacks on Ukraine's energy infrastructure underscore Russia's failure to assess whether each targeted object qualifies as a legitimate military object, as required by Article 51 of AP I

The sheer magnitude and geographic reach of Russia's attacks on Ukraine's energy infrastructure point to a strategy of treating Ukraine's entire energy grid as a single military objective rather than assessing each target on a case-by-case basis. This approach contravenes Article 51(4)(a) of AP I, which stipulates that attacks "which are not directed at a specific military objective" constitute indiscriminate attacks. Such attacks also violate Article 51's prohibition on targeting civilian objects because they "strike military objectives and civilians or civilian objects without distinction." 441

Given the frequency and widespread nature of Russia's attacks on Ukraine's energy infrastructure, it is implausible that Russia adequately determined that each object it attacked constituted a legitimate military objective prior to executing each strike. For example, during the first week of Russia's campaign against Ukraine's energy infrastructure, aerial attack struck 405 locations across multiple regions of Ukraine, including 45 power stations, representing roughly 30% of all power stations in Ukraine. In the first large-scale Russian attack on critical infrastructure, which occurred on October 10, 2022, Russian forces launched over 100 missiles and drones on Ukraine's critical civilian infrastructure, including energy facilities. According to UN HRMMU estimates, between October 2022 and February 2023, Russia conducted at least 13 waves of aerial attacks across 19 of Ukraine's regions. Therefore, Russia's large-scale attacks against the Ukrainian energy grid amount to the war crime of intentionally directing attacks against civilian objects.

The specific attacks analyzed in this Report illustrate the broad reach of Russia's aerial strikes on energy infrastructure and provide further evidence that Russia's actions violated Article 8(2)(b)(ii) of the Rome Statute. For example, **Case No. 12**⁴⁴⁷ describes a large-scale Russian attack on February 10, 2023, in which 20 Shahed-136/131 UAVs and 71 Kh-101, X-555, and Kalibr missiles targeted a critical infrastructure facility in Shepetivka, Khmelnytska Oblast. This strike was part of a larger series of Russian attacks on critical infrastructure that day, which hit thermal and hydro power plants in six different regions. On that same day, Russian forces used S-300 missiles to strike critical infrastructure in Zaporizhzhia, and four Russian Shahed 136/131 UAVs were reportedly intercepted by Ukrainian air defense forces while attempting to strike targets in Dnipropetrovsk Oblast. The breadth of these attacks strongly indicates that Russian forces failed to, or did not attempt to, distinguish between infrastructure serving civilian versus military functions. Rather, such mass coordinated attacks across multiple regions of Ukraine, including urban centers like Zaporizhzhia,

⁴⁴⁰ AP I, art. 51(4)(a).

⁴⁴¹ *Id.* at art. 51(4).

⁴⁴² Schmitt, Ukraine Symposium – Further Thoughts.

⁴⁴³ Ian Williams & CSIS, Putin's Missile War: Russia's Strike Campaign in Ukraine 11 (2023), https://perma.cc/U4FP-JZAP; UN HRMMU, Report on the Human Rights Situation in Ukraine, 1 August 2022-31 January 2023 ¶¶ 39–40 (2023), https://perma.cc/YJN7-9DXM.
444 Id.

⁴⁴⁵ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2.

⁴⁴⁶ Elements, art. 8(2)(b)(ii).

⁴⁴⁷ See Appendix I (Case No. 12).

demonstrate a calculated effort by Russian forces to cripple Ukraine's energy supply on a national level, rather than focused efforts to target energy infrastructure serving a legitimate military purpose.

Case No. 7⁴⁴⁸ further exemplifies this pattern. Between October 10–20, 2022, Russian aerial attacks severely damaged dozens of energy facilities in 16 of Ukraine's regions, including major cities such as Kyiv, Lviv, Khmelnytsky, and Kharkiv, leaving millions of civilians without power. On October 11, Russian forces launched an offensive against a thermal power plant in Ladyzhyn, Vinnytsia Oblast, as part of this broader assault. The sheer number of facilities attacked makes it implausible that these strikes were carefully aimed only at energy systems supporting military functions.

Similarly, as detailed in **Case No. 13**,⁴⁴⁹ on the night of March 8–9, 2023, Russian forces launched attacks across Kyiv, Zhytomyr, Sumy, and Odesa oblasts, damaging both civilian objects and energy infrastructure. Using eight Shahed-136/131 UAVs and 81 missiles, these strikes impacted Kyiv and at least ten other regions of Ukraine.

The facts of **Case Nos. 5** and **8**,⁴⁵⁰ along with statements by both Ukrainian and Russian officials related to the attacks, undermine any claims that Russia engaged in genuine distinction between civilian and military objects when striking critical infrastructure. In **Case No. 5**,⁴⁵¹ on September 11, 2022, Russian forces launched a devastating attack on Kharkiv's TEC-5 powerplant with Kh-101 missiles, inflicting widespread power outages across the Kharkiv, Dnipropetrovsk, Sumy, and Poltava regions. No evidence indicates that the TEC-5 plant served any military purpose. Zelenskyy's denunciation of this strike as part of "deliberate and cynical missile strikes on critical civilian infrastructure . . . [n]ot military facilities" underscores the lack of military necessity and Russia's failure to make any meaningful distinction in targeting. 452

In **Case No. 8**,⁴⁵³ on October 17, 2022, Russian forces launched approximately 28 Shahed-136 drones against Kyiv, leading to significant destruction of both civilian and energy infrastructure, with five direct drone strikes recorded within the city. Prior to this attack, Putin had stated that there would be "no need for more massive strikes" on Ukraine, implying the absence of a military objective. Additionally, the drone fragment found in Kyiv following the attack, marked "for Belgorod," suggests a retaliatory motive rather than any strategic military aim.

The above cases illustrate Russia's deliberate strategy to destroy Ukraine's entire electric grid without distinguishing between its civilian and potentially military-serving components. The scale of Russian attacks on Ukrainian energy infrastructure present compelling evidence that Russian military commanders did not and could not have plausibly engaged in a genuine distinction analysis for each

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⁴⁴⁸ See Appendix I (Case No. 7).

⁴⁴⁹ See Appendix I (Case No. 13).

⁴⁵⁰ See Appendix I (Case Nos. 5, 8).

⁴⁵¹ See Appendix I (Case No. 5).

⁴⁵² Lorenzo Tondo & Isobel Koshiw, Russian Strikes Knock Out Power and Water in Ukraine's Kharkiv Region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/5WZ9-LNQ2.

⁴⁵³ See Appendix I (Case No. 8).

attack—particularly given their magnitude, frequency, and wide geographic scope. ⁴⁵⁴ Accordingly, Russia's actions violate Article 52(2) of AP I. ⁴⁵⁵

2. Ukraine's energy infrastructure is likely afforded the protections of objects indispensable to the survival of the civilian population pursuant to Article 54 of AP I

Critical energy infrastructure is likely protected under Article 54(2) of AP I as an OIS of the civilian population. ⁴⁵⁶ Importantly, even if an OIS constitutes a legitimate military objective, it cannot be targeted. ⁴⁵⁷ Exceptions to the special protections afforded by Article 54 can only be made if the infrastructure is used: (1) "solely" to sustain the adversary's armed forces, ⁴⁵⁸ or (2) in "direct support of military action" provided the depriving act may not be expected to "leave the civilian population with such inadequate food or water as to cause its starvation or force its movement." Further, OIS should never be made an object of reprisals per Article 54(4) of API. ⁴⁶⁰ Finally, any attack on such infrastructure must adhere to the principle of proportionality, ensuring that the anticipated military advantage does not outweigh the harm to civilian life. ⁴⁶¹

Energy infrastructure likely qualifies as an OIS both derivatively and directly. 462 Article 54(2) provides a list of OIS, including "foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works." 463 While Article 54(2) does not explicitly mention energy infrastructure, the use of the phrase "such as" to introduce the examples of OIS indicates that the list is non-exhaustive. 464 In addition, critical energy infrastructure is derivatively indispensable as it is necessary to maintain enumerated examples of OIS, such as drinking water installations and irrigation works. 465 Several cases included in this Report describe attacks against energy infrastructure that have disrupted water supply, thereby "rendering useless" an OIS within the meaning of Article 54. For example, in **Case No. 5**, 466 Russian attacks against the TEC-5 power plant in Kharkiv, the country's second largest heat and power plant, left

⁴⁵⁴ See, e.g., Schmitt, Ukraine Symposium – Attacking Power Infrastructure; Gregory P. Noone & Sindija Beta, Are Russian Attacks on Ukraine's Electrical Grid a War Crime?, CTR. FOR CIVIL LIBERTIES (Aug. 10, 2023), https://perma.cc/2WUG-LASU.

⁴⁵⁵ Schmitt, *Ukraine Symposium – Attacking Power Infrastructure*; Schmitt, *Ukraine Symposium – Further Thoughts*; Ben Tobias, *Is Attacking Ukraine's Power Grid a War Crime?*, BBC NEWS (Dec. 1, 2022), https://perma.cc/4C33-75PQ.

⁴⁵⁶ AP I, art. 54(2); Giorgou & Zeith, When the lights go out.

⁴⁵⁷ ICRC, International Humanitarian Law Database: Customary IHL Rule 54, https://perma.cc/LYK4-RQWT; AP I, art. 56; Giorgou & Zeith, *When the lights go out.*

⁴⁵⁸ AP I, art. 54(3)(a).

⁴⁵⁹ AP I, art. 54(3)(b).

⁴⁶⁰ AP I, art. 54(4).

⁴⁶¹ See AP I, art. 51(5)(b).

⁴⁶² Dannenbaum, Criminalizing Starvation, at 735–7.

⁴⁶³ AP I, art. 54(2).

⁴⁶⁴ ICRC AP I Commentary, at ¶ 2103; Akande & Gillard, Conflict-Induced Food Insecurity, at 759–60; Ambos, Rome Statute Commentary, at 587–8; Dannenbaum, Criminalizing Starvation, at 735–7 (2021); Dörmann et al., Elements of War Crimes, at 388; Mykytenko & Vishchyk, "All Our Hope Is in the Famine"; Giorgou & Zeith, When the lights go out; Global Rights Compliance, "The Hope Left Us," at 52; Global Rights Compliance, The Crime of Starvation, at 6.

⁴⁶⁵ Dannenbaum, Criminalizing Starvation, at 735–6; Henry Schue & David Wippman, Limiting Attacks on Dual-Use Facilities Performing Indispensable Civilian Functions, 35 CORNELL INT'L L. J. 559, 573 (2002); Schmitt, Ukraine Symposium – Further Thoughts; Giorgou & Zeith, When the lights go out.

⁴⁶⁶ See Appendix I (Case No. 5).

several communities without water. 467 Similarly, in **Case No. 7**,468 a Russian attack against a thermal power plant in Ladyzhyn, Vinnytsia Oblast, resulted in water shortages for civilians. 469 In **Case No. 9**,470 the loss of electricity resulted in a lack of heating and water supply in Kyiv and other affected cities, and residents were advised to stock up on water. 471 In **Case No. 13**,472 Russia's large-scale attack against energy infrastructure across several regions including Kyiv, Zhytomyr, Sumy, and Odesa left 150,000 civilians without water throughout the day of the attack. 473

Additionally, power infrastructure should also be regarded as an OIS given its essential role in maintaining health care and communication systems. For example, in **Case No. 5**,⁴⁷⁴ in addition to depriving civilians of water supply, hospitals in the Kharkiv region were affected by the power cut.⁴⁷⁵ Notably, the Pre-Trial Chamber of the ICC has recently issued arrest warrants for Israel's Prime Minister, Benjamin Netanyahu, and Minister of Defense, Yoav Gallant, in which it identified both fuel and electricity as OIS in relation to the crime of starvation. The ICC also noted that "cutting off electricity and reducing fuel supply . . . ha[s] a severe impact on the availability of water . . . and the ability of hospitals to provide medical care."

Energy infrastructure also qualifies as an OIS given its critical role in providing heat. The attacks examined in this Report were largely carried out during the coldest months of the year, between September and March, when temperatures were dangerously low without proper heating. This factor alone is likely sufficient to define energy infrastructure as an OIS, given that power is necessary to provide heating, and that lesser objects that help civilians keep warm, like blankets and clothing, have been deemed indispensable for survival in the context of cold weather.⁴⁷⁷

As noted above, between October and November 2022, approximately 10.7 million Ukrainian households were deprived of power supply due to attacks against infrastructure, forcing many regions to impose long-term energy-saving regimes. Between October 2022 and February 2023, Russia launched at least 13 waves of attacks such that, by the end of February 2023, around 12.5 million residents did not have access to power for up to 10 hours per day. As early as

⁴⁶⁷ Tondo & Koshiw, Russian Strikes Knock Out Power and Water in Ukraine's Kharkiv Region ("There is no electricity or water supply in several settlements. Emergency services are working to control fires at the sites that were hit"; "Several cities and communities in the Dnipropetrovsk region are without electricity. The Russians hit energy infrastructure. They cannot accept defeat on the battlefield").

⁴⁶⁸ See Appendix I (Case No. 7).

⁴⁶⁹ Restoration of Heat Supply in Ladyzhyn, Limitation of Electricity Consumption, State of the Region's Medical System – Key Issues of the Meeting of the Head of the Regional Military Administration Serbiy Borzov with the Heads of Structural Units, VINNYTSIA REGIONAL MILITARY ADMIN. (Jan. 23, 2023), https://perma.cc/VG8X-HVX3.

⁴⁷⁰ See Appendix I (Case No. 9).

⁴⁷¹ Kiev Says 300,000 of Its Residents Remain without Power, TASS (Dec. 28, 2022) https://perma.cc/45HQ-QMBB; 'Senseless Barbarism': Russian Missiles Target Ukraine's Cities, AL JAZEERA (Dec. 29, 2022) https://perma.cc/HA9N-23KN. ⁴⁷² See Appendix I (Case No. 13).

⁴⁷³ Zhytomyr.Info, *At night, the enemy hit Zhytomyr with "Shaheds": a city without electricity and water* (Mar. 9 2023), https://perma.cc/4VV6-2TS4.

⁴⁷⁴ See Appendix I (Case No. 5).

⁴⁷⁵ Tondo & Koshiw, Russian Strikes Knock Out Power and Water in Ukraine's Kharkiv Region.

⁴⁷⁶ International Criminal Court, Situation in the State of Palestine: ICC Pre-Trial Chamber I Rejects the State of Israel's Challenges to Jurisdiction and Issues Warrants of Arrest for Benjamin Netanyahu and Yoav Gallant (Nov. 21, 2024), https://perma.cc/JAS9-EZYT.

⁴⁷⁷ ICRC AP I Commentary, at ¶ 2103; Dörmann et al., *Elements of War Crimes*, at 388; Mykytenko & Vishchyk, "All Our Hope Is in the Famine"; Global Rights Compliance, "The Hope Left Us," at 52.

⁴⁷⁸ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022).

⁴⁷⁹ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 2.

⁴⁸⁰ Int'l Energy Charter, Ukrainian Energy Sector Evaluation and Damage Assessment – VII 3 (2023).

October 10, 2022, Russian aerial attacks had damaged more than 40% of Ukraine's energy system. 481 Subsequent attacks in the following days, covered in Case Nos. 7 and 8,482 thus occurred when Ukraine's energy infrastructure was already particularly vulnerable. 483 By December 2022, when Russia launched the attacks in Case Nos. 9 and 10,484 it had crippled Ukraine's ability to generate power. Accordingly, Russia's sustained efforts over a three-month period to repeatedly attack power infrastructure left all Ukrainian civilians increasingly vulnerable to the life-threatening risks associated with the loss of power.

Further, the ICRC commentary to AP I stipulates that dual-use objects that simultaneously classify as OIS enjoy enhanced protection under Article 54(3) and cannot be attacked unless their support for military action is direct and substantial. 485 Furthermore, per Article 52(3) of AP I, absent any concrete "contribution to military action," energy infrastructure is presumptively civilian given its indispensable role in sustaining civilian life, such as by powering homes and hospitals and sustaining essential services like food, water, and health care. 486 The characterization of energy infrastructure as an OIS also solidifies energy infrastructures' civilian character, reinforcing the claim that Russia's aerial attacks amount to the war crime of intentionally targeting civilian objects.

Even if dual-use objects that simultaneously classify as OIS are proven to directly and substantially support military action, such attacks are unlawful if expected to leave the civilian population with such inadequate food or water as to cause its movement. 487 Per Article 54(3), the only other exception to the prohibition against attacks on OIS is if OIS provides sustenance solely for the members of its armed forces. 488 As demonstrated by the cases analyzed in this Report, Russia's aerial attacks on energy infrastructure caused devastating effects civilian lives, proving that the electric grid was not used "solely" (if at all) to sustain Ukraine's armed forces. Given Russian officials' comments about the retaliatory nature of these attacks, and the fact that these attacks forced thousands of Ukrainian civilians to flee the affected areas in order to survive, Russia's aerial attacks violated Article 54 of AP I.

Additionally, as will be examined in detail in the following section, the OIS designation strengthens the conclusion that Russian officials ought to have known the protected civilian character of critical infrastructure, indicating an intent to target civilian objects as required by Article 8(2)(b)(ii) of the Rome Statute.

3. Russian officials possessed the requisite intent to target civilian objects

For an attack to qualify as the war crime of intentionally attacking a civilian object, Article 8(2)(b)(ii) of the Rome Statute sets forth two mens rea requirements: "the perpetrator intended such civilian objects to be the object of the attack," and "the perpetrator was aware of the factual circumstances that established the existence of an armed conflict." 489 As previously noted, the second mens rea requirement is a common element across all five war crimes analyzed in this Section

⁴⁸¹ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022).

⁴⁸² See Appendix I (Case Nos. 7, 8).

⁴⁸⁴ See Appendix I (Case Nos. 9, 10).

⁴⁸⁵ ICRC AP I Commentary, at ¶ 2110.

⁴⁸⁶ AP I, art. 52(3).

⁴⁸⁷ ICRC AP I Commentary, at ¶ 2110.

⁴⁸⁸ AP I, art. 54(3).

⁴⁸⁹ Elements, art. 8(2)(b)(ii).

<u>V(b)</u> and is clearly satisfied. Accordingly, this subsection focuses solely on demonstrating the first *mens rea* requirement.

The pattern of Russian attacks on critical infrastructure, particularly through use of precise weaponry, provides compelling evidence of deliberate targeting and indicates the perpetrators' intent to hit civilian objects. In the nine documented attacks on energy infrastructure analyzed in this Report, seven were carried out using Shahed-136/131 drones, ⁴⁹⁰ and four involved Kh-101 missiles. ⁴⁹¹ With respect to the remaining case, **Case No. 6**, ⁴⁹² the exact weapons used by Russia are unclear based on publicly available information, although Russia launched various missiles on the day of the attack, including Kh-101.

As detailed in Appendix II, both Shahed-136 drones and Kh-101 missiles are high-precision weapons. ⁴⁹³ The Shahed-136 UAV utilizes a combination of GPS and GLONASS, allowing it to strike targets with minimal deviation. Additionally, the Shahed-136 is equipped with a commercial-grade digital communication chip that enables mid-flight updates to the target's location, further enhancing its accuracy. These advanced capabilities make it highly unlikely that any use of the weapon in contravention of international law resulted from technical errors. Rather, the high precision of the Shahed-136 supports the conclusion that these attacks were likely deliberate. Similarly, the Kh-101 is a high-precision air-launched cruise missile that utilizes GLONASS for trajectory correction, achieving a nominal circular probable deviation of approximately seven meters. Its flight path requires extensive pre-flight planning, including simulations of the entire trajectory from the launch site to the target. Given the missile's accuracy and the requirement for careful planning, Russia's repeated targeting of critical infrastructure with the Kh-101 provides compelling evidence that these strikes were deliberate, rather than the incidental consequences of other attacks directed at legitimate military objectives. ⁴⁹⁴ Accordingly, the requisite *mens rea* of "intend[ing] [] civilian objects to be the object of the attack" is satisfied. ⁴⁹⁵

Statements from Russian officials reinforce the conclusion that perpetrators acted with the requisite intent. Russian officials have routinely revealed motivations for assaults on Ukraine's energy infrastructure—the desire to retaliate against and punish Ukrainians—that are inconsistent with the lawful targeting of legitimate military objectives. For instance, in October 2022, Medvedev stated that "the lights will work again"—that energy shortages would end—only if Ukraine "recognize[d] Russia's legitimate demands." Similarly, Chernyshov described the strikes on Ukraine's infrastructure as "strikes of retribution," openly stating 497 that Ukrainians "must both freeze and rot" and would be left "without gas and electricity" as a punishment for not capitulating

⁴⁹³ For supporting information relevant to these weapons, see Appendix II.

⁴⁹⁷ Francis Scarr (@francis_scarr), TWITTER (Nov. 26, 2022), https://perma.cc/M6EA-5BKW.

⁴⁹⁰ See Appendix I (Case Nos. 7, 8, 9, 10, 12, 13, 14).

⁴⁹¹ See Appendix I (Case Nos. 5, 7, 12, 13).

⁴⁹² See Appendix I (Case No. 6).

⁴⁹⁴ Further corroborating this point, the UN Mission's assessment of Russian attacks on critical infrastructure highlighted that the widespread and coordinated nature of the attacks, combined with the precision of the weapons employed and the extensive harm on civilian infrastructure, provided "reasonable grounds to believe that multiple aspects of the military campaign to damage or destroy Ukraine's civilian electricity and heat-producing and transmission infrastructure have violated foundational principles of international humanitarian law." *See Russian Attacks on Ukraine Energy Set to Push 500,000 People out of Country*, UN NEWS (Sept. 19, 2024), https://perma.cc/WK2K-63JE.

⁴⁹⁵ Elements, art. 8(2)(b)(ii).

⁴⁹⁶ Dmitry Medvedev (@medvedev_telegram), TELEGRAM (Oct. 28, 2022), https://perma.cc/7Q83-3K6A; *see also* https://hub.conflictobservatory.org/portal/apps/sites/?#/home/pages/power-1 at 14

to Russia. 498 These statements indicate that Russia's primary goal with these aerial attacks was not to disable legitimate military targets but rather to punish Ukraine and its civilians into submission.

As elaborated in Section V(b)(i)(1), the scale and scope of Russia's attacks on Ukraine's critical energy infrastructure strongly indicate a failure to meaningfully distinguish between military and civilian objects, thus constituting an indiscriminate attack prohibited under Article 51 (4) of AP I. 499 Notably, the ICC has found that indiscriminate attacks can satisfy the requisite mens rea for direct attacks against civilians and civilian objects. 500 For example, in Katanga, Trial Chamber II found that "by shooting indiscriminately at fleeing persons, the [belligerents] showed scant regard for the fate of the civilians among the UPC soldiers in the mêlée and knew that their death would occur in the ordinary course of events. The Chamber finds that they thus intended to cause their death."501 In other words, indiscriminate fire—even in an instance in which legitimately targetable combatants were in the vicinity—can constitute an intentional attack against civilians. Although prior cases have generally focused on instances of shooting while civilians flee an attack, or on perpetrators attacking civilians who are sheltering or hiding from further attacks, 502 the ICC's jurisprudence is instructive. Indiscriminate attacks "may qualify as intentional attacks against the civilian population or individual civilians, especially where the damage caused to civilians is so great that it appears to the Chamber that the perpetrator meant to target civilian objectives." Thus, indiscriminate attacks on Ukraine's energy infrastructure likely meet the threshold of intentionally targeting civilian objects. Hence, Russian attacks on civilian energy infrastructure not only violate the principle of distinction but also amount to the war crime of attacking civilian objects pursuant to Article 8(2)(b)(ii) of the Rome Statute.

ii. Disproportionate Attacks Causing Incidental Death or Injury to Civilians or Damage to Civilian Objects

Even if there are instances where Russian attacks on energy infrastructure do target legitimate military objectives, such attacks still breach the principle of proportionality set forth in Article 51(5)(b) of AP I and constitute the war crime of disproportionate attacks pursuant to Article 8(2)(b)(iv) of the Rome Statute. The war crime of launching disproportionate attacks requires satisfying the following elements:

(1) "The perpetrator launched an attack;"

⁴⁹⁸ United Nations, Escalating Attacks on Ukraine's Civilian, Energy Infrastructure Making Humanitarian Aid Delivery Even More Dangerous, Relief Chief Tells Security Council (May 14, 2024), https://perma.cc/6L7G-VLYH.

⁴⁹⁹ AP I, art. 51(4). Indiscriminate attacks, which "are of a nature to strike military objectives and civilians or civilian objects without distinction," include: (a) "those which are not directed at a specific military objective"; (b) "those which employ a method or means of combat which cannot be directed at a specific military objective"; or (c) "those which employ a method or means of combat the effects of which cannot be limited."

⁵⁰⁰ Katanga, ICC TC II Judgment, ¶ 802 (Mar. 7, 2014); Galić, ICTY TC Judgment and Opinion, ¶ 57 (Dec. 5, 2003); Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006); Martić, ICTY TC Judgment, ¶ 69 (Jun. 12, 2007); Ntaganda, ICC TC VI Judgment, ¶¶ 921–6 (Jul. 8, 2019) ("The crime under Article 8(2)I(i) of the Statute may encompass attacks that are carried out in an indiscriminate manner, that is by targeting an area, as opposed to specific objects, or not targeting specific military objects or persons taking a direct part in hostilities, so long as the perpetrator was aware of the presence of civilians in the relevant area. It may also include attacks that are launched without taking necessary precautions to spare the civilian population or individual civilians. . . . the use of, inter alia, the type of heavy weapons in the possession of the UPC/FPLC against them, without awareness of the situation on the ground, or any information as to the concentration of fighters or the number of civilians, and without the taking of any precautions, was unlawful").

⁵⁰¹ Katanga, ICC TC II Judgment, ¶ 865 (Mar. 7, 2014).

 $^{^{502}}$ Id. at ¶¶ 810–33.

⁵⁰³ *Id.* at ¶ 802.

- (2) "The attack was such that it would cause incidental death or injury to civilians or damage to civilian objects or widespread, long-term, and severe damage to the natural environment and that such death, injury, or damage would be of such an extent as to be clearly excessive in relation to the concrete and direct overall military advantage anticipated;"
- (3) "The perpetrator knew that the attack would cause incidental death or injury to civilians or damage to civilian objects or widespread, long-term, and severe damage to the natural environment and that such death, injury, or damage would be of such an extent as to be clearly excessive in relation to the concrete and direct overall military advantage anticipated;"
- (4) "The conduct took place in the context of and was associated with an international armed conflict;" and
- (5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." 504

As in Section V(b), the first, fourth, and fifth elements are clearly satisfied and will not be analyzed further. Thus, this subsection focuses on establishing the disproportionate nature of Russia's attacks on Ukraine's energy infrastructure pursuant to the second element of Article 8(2)(b)(iv). It also demonstrates that the requisite *mens rea* is satisfied.

As noted earlier, although Russia likely failed to engage in genuine distinction amongst its energy infrastructure targets, it is plausible that some targeted energy infrastructure served both military and civilian functions at the time of attack. In such cases, any collateral damage to civilians must be carefully weighed against the military advantage derived from disrupting its military function. The reverberating effects of attacks on critical infrastructure, including "interruptions of electricity, gas, heating, and water supplies" and "their impact on the health system," must be factored into any proportionality assessment. ⁵⁰⁵ The anticipated harm to Ukrainian civilians, including risks of freezing to death or being deprived of access to adequate health care, must be measured against the concrete and direct military benefits Russia could gain through such attacks. Hypothetical, speculative, or indeterminate military advantage, as well as broader political or economic objectives, cannot justify such attacks. ⁵⁰⁶ As such, purported military advantages based on weakening the civilian economy or demoralizing the Ukrainian population would fall outside the scope of permissible military objectives under international law. ⁵⁰⁷

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⁵⁰⁴ Elements, art. 8(2)(b)(iv).

⁵⁰⁵ Wolfgang Benedek et al. & OSCE, Report on Violations of International Humanitarian and Human Rights Law, War Crimes and Crimes against Humanity Committed in Ukraine Since 24 February 2022 29 (2022), https://perma.cc/Y4XB-DHQT; see also Michael N. Schmitt & Major Michael Schauss, Uncertainty in the Law of Targeting, Towards a Cognitive Framework, 10 HARVARD NAT'L SECURITY J. 148, 173 (2019).

⁵⁰⁶ Katanga ICC TC II Judgment, ¶ 893 (Mar. 7, 2014); ICRC AP I Commentary, at ¶ 2209; ICRC, The Principles of Proportionality in the Rules Governing the Conduct of Hostilities under International Humanitarian Law 18 (2016), https://perma.cc/YJS3-EC8F; Schmitt, Ukraine Symposium — Attacking Power Infrastructure (Noting that while targeting the power supply of a logistics facility to deprive the Ukrainian military of re-supply efforts during the duration of an outage may offer a concrete military advantage, an attack seeking to terrorize civilians to undermine their support for the war would not); ICRC AP I Commentary, ¶ 2024; Yoram Dinstein, Legitimate Military Objectives under the Current Jus in Bello, 31 ISR. Y.B. HUM. RTS. 1, 5 (2001); Henry Shue & David Wippman, Limiting Attacks on Dual-Use Facilities Performing Indispensable Civilian Functions, 35 CORNELL INT'L L.J. 7. 559, 561 (2002).

⁵⁰⁷ Katanga ICC TC II Judgment, ¶ 893 (Mar. 7, 2014); ICRC AP I Commentary, at ¶ 2209; ICRC, *The Principles of Proportionality in the Rules Governing the Conduct of Hostilities under International Humanitarian Law* 18 (2016).

The devastating civilian impacts of Russia's attacks on energy infrastructure are clearly excessive in relation to any conceivable military advantage, underscoring their disproportionate nature. The limited military benefits Russia could derive from these attacks primarily involve the temporary disruption of Ukraine's military activities reliant on impacted energy infrastructure. However, given the widespread nature and high frequency of Russian attacks, it is improbable that each attack yielded a tangible military advantage. Even if an attack on energy infrastructure marginally hinders Ukraine's production of war materials, the overall combat capabilities of Ukraine's armed forces remain relatively unaffected for several key reasons.

First, the military consumes only a small fraction of the nation's electricity and is prioritized in energy distribution during conflicts. Accordingly, any residual power from the national grid is typically allocated towards sustaining Ukraine's military. As a result Ukraine's civilian population—which receives lower priority than the military for energy access—is likely to be disproportionately impacted by the incapacitation or destruction of energy infrastructure. Fig. 10 ICRC commentators have emphasized that the strategic and operational military benefits of targeting energy infrastructure is dubious and likely to be outweighed by the severe repercussions endured by the civilian population:

The long-term strategic and operational military advantages [of attacks on energy infrastructure] remain questionable and, in any event, are likely outweighed by the serious reverberating effects of such attacks on the civilian population. . . . This is especially the case when militaries are generally priority users during armed conflict and, as such, are likely to be allocated any residual electricity capacity for their operations when pieces of energy infrastructure are subject to attack. 510

Additionally, even in the event of a total collapse of Ukraine's electrical grid, the military would only experience short-term disruption as it is generally equipped with generators to address power failures. ⁵¹¹ Ground units largely operate with self-sufficient power, and vulnerable military installations, such as air bases and military headquarters, are prioritized for energy distribution and supported by backup generators. ⁵¹² The Ukrainian government ⁵¹³ and army representatives, ⁵¹⁴ as well as national ⁵¹⁵ and international military experts, ⁵¹⁶ have noted that the Ukrainian Armed Forces are energy-autonomous and that Russian aerial attacks do not affect either Ukraine's military capacity or

511 Bogdan Miroshnichenko, Blackouts at Defense Plants: Are Weapons Manufacturers Ready for Blackouts?, EKONOMICHNA PRAVDA (May 28, 2024), https://perma.cc/5ZP8-MEBR.

⁵⁰⁸ Schmitt, Ukraine Symposium – Attacking Power Infrastructure.

⁵⁰⁹ Giorgou & Zeith, When the lights go out; The Cabinet of Ministers Has Named the Priority Objects for Energy Supply – Resolutions, INTERFAX UKRAINE (May 27, 2024), https://perma.cc/4ZYQ-KU5E.

⁵¹⁰ Giorgou & Zeith, When the lights go out.

⁵¹² Thomas E. Jr Griffith, *Strategic Attack of National Electrical Systems* 11, 52 (1994) (Thesis presented for completion of graduation requirements, School Of Advanced Airpower Studies, Maxwell Air Force Base), https://perma.cc/96KX-8751

⁵¹³ Operational Update Regarding the Russian Invasion as of 06:00, on October 11, 2022, UKRAINE GOV. PORTAL (Oct. 11, 2022), https://perma.cc/6Q33-CLT4.

⁵¹⁴ Hanna Malyar (@annamaliar), TELEGRAM (Nov. 23, 2022), https://archive.is/8CdQq.

⁵¹⁵ Tetyana Katrychenko, *Strikes on the energy system: those on the frontline know how to act, expert says*, FOCUS (Oct. 24, 2022), https://perma.cc/3XAK-QGAX.

⁵¹⁶ Ian Williams, *Putin's Missile War: Russia's Strike Campaign in Ukraine*, CSIS 3 (Aug. 16, 2023), https://perma.cc/MJ9M-QATQ; Dan Sabbagh, *Kremlin Decision to Target Ukraine's Cities Was Political, Not Tactical*, The Guardian (Oct. 10, 2022), https://perma.cc/ED7C-9CEF; Schmitt, *Ukraine Symposium - Further Thoughts*; Michael Schwirtz et al., *Russia-Ukraine War: Putin Unleashes Barrage of Missiles on Ukrainian Civilian Areas*, N.Y. TIMES (Oct. 10, 2022), https://perma.cc/7AAS-J5GS.

its progress on the battlefield. Therefore, the likelihood of Russia deriving any military gain from these attacks is minimal.

Concrete military gains are even more tenuous. ⁵¹⁷ The UN HRMMU, for example, has noted that the military value of these Russian strikes is speculative at best, stating that "a military campaign to damage or destroy the entire electricity system of a country appears to entail remote, hypothetical, or speculative military gains, rather than the substantial and relatively close advantage required to justify the attacks." ⁵¹⁸ The evidence also suggests that Russia's objectives in targeting Ukraine's infrastructure were not predominantly driven by immediate or tactical military gains but by a broader strategy aimed at degrading civilians' morale by making living conditions intolerable. As mentioned in Section V(a)(i)(2), Russian officials have explicitly stated intentions aligned with this total war strategy, suggesting that Ukrainians enduring a winter without heat could "rot and freeze." ⁵¹⁹ In short, it is unlikely Russia's attacks on Ukraine's energy infrastructure yielded any foreseeable and concrete military advantage.

Even if Russia did gain a concrete and direct military advantage in certain instances, such advantage would be minimal and short-term compared to the prolonged, severe impact on Ukraine's civilian population. When evaluating civilian harm, both direct and indirect effects must be considered in Russia's proportionality analysis. ⁵²⁰ Here, the civilian harm resulting from a loss of essential services like heat, health care, and electricity, was highly foreseeable. ⁵²¹ For example, the loss of heating in winter posed immediate-life threatening risks, while disruptions to water supplies and health care further exacerbated the foreseeable civilian harm. Despite the devastating humanitarian consequences of Russia's aerial attacks on power infrastructure, which were evident as early as October 2022, Russia has continued its campaign of mass attacks. Therefore, even if any of these attacks were aimed at legitimate military targets, Russian forces would have known that the harm to civilians would be disproportionate in relation to the anticipated military advantage.

Further, Article 57 of AP I specifies that perpetrators of an attack shall "take all feasible precautions in the choice of means and methods of attack with view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects." Perpetrators must also "refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated." As such, if there is any doubt as to whether an attack is disproportionate, it must be suspended pursuant to Article 57. As elaborated above, the degree and ever-growing foreseeability of the civilian harm caused by Russia's aerial attacks on Ukraine's critical infrastructure strongly suggest that Russian officials were aware of the disproportionate impact and thereby acted in contravention of IHL.

⁵¹⁷ Id.; PHR & TH, Health Care in the Dark, at 27.

⁵¹⁸ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 11.

⁵¹⁹ Francis Scarr (@francis_scarr), X (Nov. 26, 2022), https://perma.cc/MA3P-FG6G; Francis Scarr (@francis_scarr), X (Nov. 26, 2022), https://perma.cc/MVY9-SAC2.

⁵²⁰ Clark Orr, Reverberating Effects and International Law, CTR. FOR CIVILIANS IN CONFLICT (Sept. 28, 2021), https://perma.cc/J6AZ-7P8H.

⁵²¹ Galić, ICTY TC I Judgment and Opinion, ¶ 58 (Dec. 5, 2003) (Noting that a consequence is foreseeable if "a reasonably well-informed person in the circumstances of the actual perpetrator, making reasonable use of the information available to him or her, could have expected excessive civilian casualties to result from the attack").

⁵²² AP I, art. 57(2)(a)(ii).

⁵²³ *Id.* at art. 57(2)(a)(iii).

IHL's principle of distinction operates under the presumption of the civilian nature of all objects. Specifically, Article 52(3) of AP I stipulates that "in case of doubt whether an object which is normally dedicated to civilian purposes . . . is being used to make an effective contribution to military action, it shall be presumed not to be so used."⁵²⁴ Similarly, Article 57 of AP I emphasizes that "[i]n the conduct of military operations, constant care shall be taken to spare the civilian population, civilians and civilian objects."⁵²⁵ These provisions clearly prioritize civilian protection, thereby underscoring the disproportionate nature of Russia's attacks. Here, the predictable scale of civilian suffering and the absence of any direct military advantage indicate that Russia's attacks breach of core IHL norms that protect civilians and violate Article 8(2)(b)(iv) of the Rome Statute.

The attacks analyzed in this Report demonstrate that Russia's aerial assaults on energy infrastructure caused severe civilian suffering without providing a concrete or direct military advantage for Russia, and are thus disproportionate. This section highlights five exemplary attacks that reinforce this conclusion:⁵²⁶

- Case No. 6: Mass attack on civilian infrastructure in Kyiv (October 10, 2022).
- Case No. 7: Attack on energy infrastructure (thermal power plant) in Ladyzhyn, Vinnytsia Oblast (October 11, 2022).
- Case No. 10: Attack on energy infrastructure in Kharkiv (December 28–29, 2022).
- Case No. 12: Attack on energy infrastructure in Shepetivika, Khmelnytskyi Oblast (February 10, 2023).
- Case No. 13: Large-scale attacks on civilian objects and energy infrastructure in Kyiv, Zhytomyr, Sumy, Odesa (March 8–9, 2023).

The missile and drone strikes detailed in **Case No.** 6⁵²⁷ were likely disproportionate. The attacks, which targeted Kyiv and multiple other cities during morning rush hours, caused significant civilian casualties, leaving at least 23 dead and over 100 injured. Also, 29 out of the 117 objects damaged in this attack were critical infrastructure facilities, resulting in widespread power and water shortages across the country which further exacerbated the resulting civilian suffering. According to the Ukrainian Air Force Command, Russian forces launched 83 missiles including Kh-101, Kh-555, Kalibr, Iskander, S-300 and Tornado MRLS. The deployment of such a large number and wide variety of weapons highlights the indiscriminate and disproportionate nature of these strikes. Additionally, as detailed further in Appendix II, weapons like the Tornado MRLS and S-300 are relatively imprecise and inherently less capable of distinguishing between military and civilian objects. The foreseeability of extensive civilian harm, coupled with the imprecision and scale of the weaponry used, strengthens the conclusion that these attacks were likely disproportionate pursuant to Article 8(2)(b)(iv). Further, the distant location of the strike relative to the frontlines suggests that the anticipated military advantage of Russian strikes was likely minimal, if at all present. Kyiv lies over 450 kilometers away from the nearest frontline, ⁵²⁸ at least 100 kilometers away from the

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⁵²⁴ Id. at art. 52(3).

⁵²⁵ Id. at art. 57(1).

⁵²⁶ See Appendix I (Case Nos. 6, 7, 9, 10, 12, 13).

⁵²⁷ See Appendix I (Case No. 6).

⁵²⁸ Distance from Kyiv to Kherson, DISTANCEFROMTO, https://perma.cc/SCY2-DGQN (last visited Feb. 17, 2025).

Belarusian border, ⁵²⁹ and 200 kilometers away from the Russian border, ⁵³⁰ distances that diminish any direct strategic benefit to Russian forces. Putin's explicit framing of these attacks as retaliation for alleged Ukrainian "terrorist" activities further demonstrates that these attacks were punitive, and therefore did not present a legitimate military advantage. Taken together, the substantial civilian harm, lack of clear military targets, and geographic distance from the frontlines suggest that the incidental harm to civilians outweighs any conceivable military advantage gained, violating Article 8(2)(b)(ix).

In Case No. 7,⁵³¹ the Russian military launched a "double tap" strike, targeting the plant twice—first at approximately 7:30 a.m. and again around 12:00 p.m.—with the second strike hitting emergency workers responding to the initial attack. This tactic, which inflicted injuries on at least six emergency responders, demonstrates that civilian harm was not only foreseeable but intended. Further, the destruction of the power plant, which provided essential services to over 18,000 residents, left the local population without proper heating at the onset of winter, significantly elevating humanitarian risks and creating an "emergency situation."⁵³² The strikes provided no identifiable military advantage, particularly given Ladyzhyn's location approximately 340 kilometers from Kherson, the closest point on the frontline at the time of the attack.⁵³³ Such a significant distance undermines the plausibility of any immediate or concrete military benefit to Russia's attack. Putin described the strikes as "retaliation," which does not qualify as a legitimate military objective under IHL. Therefore, the foreseeable and immediate harm to civilians, including the injury of emergency personnel and the deprivation of essential services to thousands during the winter, was clearly excessive in relation to any anticipated military gain.

In **Case No. 13**,⁵³⁴ Russian forces executed a large-scale assault on Ukrainian civilian infrastructure using a diverse range of weapons, including eight Shahed-136/131 UAVs and 81 missiles, including 28 Kh-101/Kh-555 air-launched cruise missiles and 20 Kalibr sea-based cruise missiles. This coordinated attack, targeting energy facilities, impacted Kyiv and at least ten other regions. The assault led to grave civilian consequences: two individuals in Kyiv were injured by missile fragments, civilian vehicles were damaged, and emergency power outages followed the attack. In Zhytomyr Oblast, for example, approximately 150,000 civilians endured extended blackouts, disrupting both electricity and water supply. Governor of Dnipropetrovsk Serhii Lysak noted that the strikes killed a 34-year-old man and injured others. The extensive harm inflicted on civilians and essential infrastructure far outweighed any direct military advantage, which is not readily discernable given that the targeted locations were predominantly far from active frontlines at the time of the attack.⁵³⁵

⁵²⁹ See Our expert answers to your questions about Ukraine, UKRAINETREK, https://ukrainetrek.com/ask-question/distances (last visited Mar. 7, 2025).

⁵³⁰ The closest distance from the center of Kyiv to the border with Russia in a straight line is about 200 km in the northeast direction to Chernihiv. *Id.*

⁵³¹ See Appendix I (Case No. 7).

⁵³² Olena Roshchina, *Vinnytsia Oblast: TPP Attacks Create Emergency Situation in Ladyzhyn*, UKRAINSKA PRAVDA (Nov. 28, 2022), https://perma.cc/6PMP-XGD7.

⁵³³ Distance from Kherson to Ladyzhyn, DISTANCEFROMTO, https://perma.cc/LV9T-TSEG (last visited Feb. 17, 2025); Deep State Map (Oct. 11, 2022).

⁵³⁴ See Appendix I (Case No. 13).

⁵³⁵ For instance, Zhytomyr, one of the targeted regions, is situated approximately 498 kilometers from Kherson, the nearest frontline area, making it unlikely that attacks had any direct impact on ongoing military operations. Similarly, Kyiv, lies about 450 kilometers from the frontline. Even Sumy, which is located within 30 kilometers of the Russian

The remaining attacks are similarly disproportionate. For example, **Case Nos. 10** and 12^{536} involved Russia's coordinated use of various weapons to target energy infrastructure in geographically dispersed regions of Ukraine. Notably, the air strike detailed in **Case No. 12** hit an energy facility in Shepetivka, Khmelnytska Oblast, located approximately 570 kilometers away from Kherson, the closest occupied city on the frontline at the time of the attack. ⁵³⁷ The large-scale nature of these attacks underscores their disproportionality. In each instance, the anticipated civilian harm was not only foreseeable but likely outweighed any potential military advantage. Additionally, drawing from the logic outlined in Section V(b)(i), the rapid succession of attacks in these cases highlights Russia's failure to adequately conduct proportionality assessments with respect to each attack, as mandated by IHL. ⁵³⁸

Despite the foreseeability of excessive civilian harm in relation to the anticipated concrete and direct military advantage, Russia's attacks on energy infrastructure continued relentlessly through 2022, 2023, and 2024, suggesting Russia routinely disregarded the principle of proportionality and the obvious devastating consequences of its continued attacks for civilians. The UN HRMMU reported that between March and August 2024, "[t]he Russian Federation's attacks on electricity infrastructure continued unabated . . . despite public information about the reverberating effects on the civilian population and interconnected civilian systems." In some instances, "previously damaged locations were struck repeatedly until they became nonoperational." Similarly, the ICC's arrest warrants related to Russian attacks on critical infrastructure stated that "for those installations that may have qualified as military objects at the relevant time, the expected incidental civilian harm and damage would have been clearly excessive to the anticipated military advantage." The UN COI further determined that these actions amounted to "the war crime of excessive incidental death, injury, or damage."

In sum, the evidence strongly suggests that a reasonable military commander would have recognized the excessive civilian harm likely to result from such strikes. Yet Russia continued to launch relentless aerial assaults on critical energy infrastructure despite the widely documented and foreseeable resulting harm to civilian life. These actions lead to the conclusion that Russia perpetrated disproportionate attacks in violation of Article 8(2)(b)(ix) of the Rome Statute.

iii. Intentionally Using Starvation of Civilians as a Method of Warfare

Russia's attacks against critical infrastructure likely amount to the war crime of intentionally using starvation of civilians as a method of warfare. As outlined in <u>Section IV(b)(ii)(5)</u>, this war crime requires that the following elements are satisfied:

⁵⁴⁰ International Criminal Court, Situation in Ukraine: ICC Judges Issue Arrest Warrants against Sergei Kuzhugetovich Shoigu and Valery Vasilyevich Gerasimov (Jun. 25, 2024), https://perma.cc/BLT5-7548; International Criminal Court, Situation in Ukraine: ICC Judges Issue Arrest Warrants against Sergei Ivanovich Kobylash and Viktor Nikolayevich Sokolov (Mar. 5, 2024), https://perma.cc/QS7R-9FKC.

border, is far removed from the frontlines. Finally, although Odesa is the closest to the affected areas to the frontline, it remains approximately 146 kilometers from Kherson by air and over 200 kilometers via driving routes, a significant distance that casts doubt on whether the strikes offered a concrete and military advantage. These distances, coupled with the extensive harm to civilians, highlight the disproportionate nature of the assault. Deep State Map (Mar. 8–9, 2023). ⁵³⁶ See Appendix I (Case No. 10, 12).

⁵³⁷ Distance from Kherson to Shepetivka, DISTANCEFROMTO, https://perma.cc/3PCV-925N (last accessed Feb. 17, 2025). 538 AP I, arts. 57(2)(a)(ii)–(iii), 57(b).

⁵³⁹ UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 11.

⁵⁴¹ U.N. General Assembly, Report of the Independent International Commission of Inquiry on Ukraine, ¶¶ 41–3, U.N. Doc. A/HRC/52/62 (Sept. 25, 2023).

- 1) "The perpetrator deprived civilians of objects indispensable to their survival";
- 2) "The perpetrator intended to starve civilians as a method of warfare";
- 3) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 4) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict."542

Russian attacks deprived Ukrainian civilians of objects indispensable to their survival

In all cases analyzed in this Report, the conduct of Russian forces has taken the form of a military "attack," which has both "destroyed" and "rendered useless" critical energy infrastructure within the meaning of Article 54 of AP I, in many cases causing fires and in all cases destroying all or part of the infrastructure. 543 For example, in Case No. 9,544 a Russian attack against two energy infrastructure facilities caused a fire which took over four hours to extinguish. 545 Similarly, in Case Nos. 12 and 14,⁵⁴⁶ Russian attacks ignited fires that significantly damaged two energy facilities.⁵⁴⁷

As explained in Section IV(b)(ii)(5), there is no requirement to prove that starvation resulted from the deprivation. Further, Section V(b)(i)(2) demonstrates that the critical energy infrastructure targeted by Russian forces qualifies as an OIS, as defined by Article 54 of AP I, both derivatively and directly. Thus, this subsection will not analyze this point further.

Russian officials possessed the requisite intent and knowledge to starve civilians

As outlined in Section IV(b)(ii)(5), the perpetrator must: (1) intend to deprive civilians of OIS and (2) intend or be aware that starvation would result in the ordinary course of events. Crucially, an intent to deprive civilians of OIS can exist alongside other intentions, such as a desire to obtain a military advantage.

a. Russian officials intended to deprive civilians of objects indispensable to survival

Russia's intention to attack critical energy infrastructure is clear from statements made by Russian officials following the attacks under consideration in this Report. In the aftermath of each attack, the Russian Ministry of Defense and Putin stated that Russian forces had launched "massive"

⁵⁴² Elements, art. 8(2)(b)(xxv).

⁵⁴³ See generally U.N. General Assembly Security Council, Letter Dated 16 February 2023 from the President Representative of Ukraine to the United Nations Addressed to the Secretary-General, U.N. Doc. A/77/753-S/2023/114 (Feb. 16, 2023) (detailing the damage caused to power infrastructure between January and February 2023).

⁵⁴⁴ See Appendix I (Case No. 9).

⁵⁴⁵ Our Odesa (@our_odessa), TELEGRAM (Dec. 10, 2022), https://perma.cc/R6ML-QZLR ("It's been about 4-4:30 hours since the fire started, but they still haven't managed to put it out").

⁵⁴⁶ See Appendix I (Case Nos. 12, 14).

⁵⁴⁷ Serhiy Lysak (@dnipropetrovksaODA), TELEGRAM (Mar. 18, 2023) https://perma.cc/V78R-NB6S ("Two [Shaheds] hit a critical infrastructure facility in Novomoskovsk. There is heavy damage there. A fire broke out at a factory due to a drone strike. Rescuers are still extinguishing the fire"); AFP, Ukraine Says Targeted by Overnight Drone Attack, MOSCOW TIMES (Mar. 18, 2023), https://perma.cc/K3XL-HQYY.

and "high-precision" attacks against sensitive Ukrainian energy infrastructure and that all intended targets had been successfully neutralized.⁵⁴⁸ As mentioned in Section V(a)(ii)(3), Putin himself confirmed on December 8, 2022 that the attacks against critical infrastructure were deliberate, stating at an awards ceremony at the Kremlin that "[t]here's a lot of noise about our strikes against the energy infrastructure of the neighboring country. Yes, we are doing this. But who started it?"⁵⁴⁹

Russia's intention to strike civilian infrastructure in these cases can also be inferred by the highly precise nature of the weapons used in the attacks, including Kh-101 missiles, Kalibr missiles, Iskander missiles, and Shahed-136 UAVs. As further analyzed in Section V(b)(i), these weapons are all equipped with high accuracy and sophisticated guidance systems, suggesting that these attacks cannot easily be attributed to technical errors. The volume of attacks, extending over many months, coupled with the use of highly precise weapons, strongly suggests that these attacks were intentional.

In addition to intending to launch specific attacks against critical infrastructure in these cases, Russian forces were aware that such infrastructure constituted an OIS. In fact, the importance of these objects to the civilian population appears to be the very reason why Russian targeted power infrastructure. Section V(b)(i)(2) established that Ukraine's power infrastructure constituted an OIS at the time of these attacks, given its necessity for heating, as well as the functioning of health care services and water installations. The indispensability of power infrastructure substantially increases during the cold winter months, particularly when Ukraine's overall power generation was already depleted following prior attacks.

Russian State media reporting during the relevant period demonstrates that Russian officials were aware of the indispensability of power infrastructure. For example, between October and December 2022, major Russian news platforms TASS⁵⁵⁰ and Sputnik⁵⁵¹ reported about the effects of Russian attacks against Ukraine's power infrastructure on many occasions:

⁵⁴⁸ "Russia hit Ukrainian infrastructure in response - including a reservoir dam and electricity supplies - and Putin said those attacks could get worse. 'Recently, the Russian armed forces have inflicted a couple of sensitive blows. Let's assume they're a warning. If the situation continues to develop like this, then the response will be more serious,' he said." With a Grin, Putin Warns Ukraine: The War Can Get More Serious, REUTERS (Sept. 16, 2022), https://perma.cc/X2N9-PECE. Ministry of Defense of the Russian Federation, TELEGRAM (Oct. 10, 2022),

https://web.archive.org/web/20241010190334/https://t.me/mod_russia_en/4478 (referring to events detailed in Case No. 5); see also Meeting with Permanent Members of the Security Council, THE KREMLIN (Oct. 10, 2022),

https://perma.cc/CP2J-K8XV; Ministry of Defense of the Russian Federation, TELEGRAM (Oct. 11, 2022),

https://web.archive.org/web/20241010190131/https://t.me/mod_russia_en/4491(referring to the events detailed in Case No. 7); Ministry of Defense of the Russian Federation, TELEGRAM (Oct. 17, 2022),

https://web.archive.org/web/20221231135609/https://t.me/mod_russia_en/4573 (referring to the events detailed in Case No. 8). Meeting of Defence Ministry Board, THE KREMLIN (Dec. 21, 2022), https://perma.cc/GG9J-WXF9 (In reference to the events detailed in Case Nos. 9 and 10, Defence Minister Sergei Shoigu at a Meeting of the Defence Ministry Board said: "Russian troops continue to destroy military targets, to deliver massive high-precision strikes on the military control system, defence industry enterprises and related facilities, including energy facilities. They are destroying the foreign weapons supply chain and crushing Ukraine's military potential"); Ministry of Defense of the Russian Federation, TELEGRAM (Feb. 11, 2023),

https://web.archive.org/web/20230616081926/https://t.me/mod_russia_en/6108 (referring to events detailed in Case No. 12); Ministry of Defense of the Russian Federation, TELEGRAM (Mar. 9, 2023), https://t.me/mod_russia_en/6409 (referring to events detailed in Case No. 13).

⁵⁴⁹ Francesca Ebel, *Putin Admits Attacks on Civilian Infrastructure, Asking: Who Started It?*', WASHINGTON POST (Dec. 8, 2022), https://perma.cc/LRW8-UT6F.

⁵⁵⁰ About TASS, TASS, https://perma.cc/2PT8-3NMK (last accessed Feb. 17, 2025).

⁵⁵¹ About Us, SPUTNIK INT'L, https://perma.cc/K2AZ-76RP (last accessed Feb. 17, 2025).

- On October 10, Sputnik reported that Russia had "launched missile strikes on a series of infrastructure targets" after the Ukrainian attack on the Kerch Strait Bridge, 552 targeting infrastructure "across an area stretching more than 1,000 km" and leaving "swathes of the country" without electricity. 553
- On October 11, Sputnik reported that "Russian military began large-scale precision missile strikes on Ukrainian infrastructure . . . in retaliation to Saturday's terror attack against the Crimean Bridge and other acts of terror attributed to Kiev," causing "widespread power outages."554
- On October 31, TASS presented statistics indicating that 80% of Kyiv residents had been left without water after an energy facility had been damaged.⁵⁵⁵
- On November 1, TASS noted that Ukraine's electricity transmission system operator, Ukrenergo, had been compelled to implement rolling power outages across the country because of the widespread damage that had been caused to the Ukrainian power infrastructure. 556
- On November 2, Russian State media reported that more than 100 strikes had been carried out in 20 days against Ukrainian energy facilities by Russian forces, damaging 40% of the country's overall power infrastructure. 557
- On November 22 and 24, multiple news articles reported that half of Ukraine's regions had lost power.⁵⁵⁸
- On December 5, TASS reported on "emergency power cuts" in all Ukrainian regions following blackouts in several cities and regions. It was further noted that this development occurred during "plummeting temperatures" and that efforts were being made to maintain the functioning of hospitals, water utilities, and boiler houses. 559
- On December 10, after the attack in **Case No. 9**⁵⁶⁰ in Odesa Oblast, TASS reported that "thousands of consumers" had been left without electricity following air strikes against energy facilities and that emergency blackouts had been reported "for a fifth day running."561 Sputnik similarly reported that more than 1.5 million residents of Odesa remained without electricity and that the situation regarding access to electricity in Ukraine

⁵⁵² Ilya Tsukanov, Putin: Russian High-Precision Strikes Target Infrastructure in Response to Kiev's Terrorism, Sputnik Int'l (Oct. 10, 2022) https://perma.cc/4NUW-GYH2.

⁵⁵³ Ilya Tsukanov, Russia's Infrastructure Strikes Show Crimean Bridge Was 'Red Line' and Kiev Crossed It: Observers, SPUTNIK INT'L (Oct. 10, 2022), https://perma.cc/AJ86-ZWHQ.

⁵⁵⁴ Ilya Tsukanov, Russian Armed Forces Continue Massive Strikes on Ukraine Energy System & Military Command – MoD, SPUTNIK INT'L (Oct. 11, 2022), https://perma.cc/UUQ6-JDFY.

⁵⁵⁵ Mayor Says 80% of Kiev Residents Left without Water, TASS (Oct. 31, 2022), https://perma.cc/ZN3Q-XBH9.

⁵⁵⁶ Seven Ukrainian Regions Experiencing Rolling Blackouts on November 1, TASS (Nov. 1, 2022), https://perma.cc/2YNK-

⁵⁵⁷ Over 100 Strikes on Ukrainian Power Facilities Carried out in 20 Days — Energy Company, TASS (Nov. 2, 2022), https://perma.cc/JU6P-QYAF.

⁵⁵⁸ Energy Operator Reports Damage to All Ukrainian Power Plants Except Three Nuclear Sites, TASS (Nov. 22, 2022), https://perma.cc/ED8R-R37P; Ukrainian Army Facing Dilemmas with Weapons Supplies Due to Blackouts, Says LPR Officer, TASS (Nov. 24, 2022), https://perma.cc/3DDE-CYN3.

⁵⁵⁹ National Operator Reports Emergency Blackouts Planned throughout Ukraine, TASS (Dec. 5, 2022), https://perma.cc/GM8Y-EGEE.

⁵⁶⁰ See Appendix I (Case No. 9).

⁵⁶¹ Power Facilities Damaged in Ukraine's Odessa Region, Officials Report, TASS (Dec. 10, 2022), https://perma.cc/X3ZC-P2UX.

- was "dire." Further, it was noted that 50% of Ukraine's energy infrastructure had been damaged by November 15, causing "mass blackouts" throughout the country. 562
- On December 16, TASS again reported about "large-scale emergency outages" across
 Ukraine due to the damage caused by Russian forces to its power infrastructure. It was
 noted that almost half of Ukraine's power grid was out of service and that energy-saving
 regimes would remain in place throughout winter. 563
- On December 28, the day of the attack in **Case No. 10**,⁵⁶⁴ TASS reported that 300,000 residents in Kyiv lacked electricity, and that "those districts that lack electrical power also do not have heat or water supplies."⁵⁶⁵

This extensive reporting by Russian State media outlets covering the effects of Russia's attacks against Ukraine's critical infrastructure provides compelling evidence that Russian officials had knowledge that such infrastructure constituted an OIS, and understood that Ukraine's remaining power infrastructure became increasingly indispensable following Russia's continued attacks.

Civilians were clearly deprived of OIS in these cases, despite the potential dual-use nature of power infrastructure. As explained in Section V(b)(i)(1), the sheer volume and frequency of attacks, which caused sweeping power outages across the country, indicate that these attacks were indiscriminate. Russia did not and could not have made any meaningful distinction between civilian and military objectives as mandated under IHL. Russia's intention to deprive civilians of OIS can therefore be inferred from the indiscriminate nature of the attacks.

Moreover, given the interconnected civilian and military function of power infrastructure, depriving combatants of power infrastructure would inevitably be achieved by depriving civilians of the same. The ICC Pre-Trial Chamber made similar observations in its arrest warrants against Sergei Kobylash and Viktor Sokolov. Notably, the ICC concluded that there were "reasonable grounds to believe that the alleged strikes were directed against civilian objects" because "the expected incidental civilian harm and damage would have been clearly excessive to the anticipated military advantage." Furthermore, the Pre-Trial Chamber noted that Russia's assault against Ukraine's energy infrastructure was not a series of isolated incidents but rather "a course of conduct involving the multiple commission of acts against a civilian population, pursuant to a State policy." ⁵⁶⁶ By recognizing Russia's infrastructure strikes as a coordinated attack under an identifiable State policy, the ICC's arrest warrants support the argument that, in the context of the aerial attacks against Ukraine's critical energy infrastructure analyzed in this Report, Russia intended to deprive Ukrainian civilians of OIS.

⁵⁶² Over 1.5 Million Remain Without Power in Odessa Region, SPUTNIK INT'L (Dec. 12, 2022), https://perma.cc/9LW6-W8EC.

⁵⁶³ Russian Official Reports Blackout in Kherson, Says Ukraine Refuses to Deal with Dilemma, TASS (Dec. 16, 2022), https://perma.cc/6AVA-D62W.

⁵⁶⁴ See Appendix I (Case No. 10).

⁵⁶⁵ Kiev Says 300,000 of Its Residents Remain without Power, TASS (Dec. 28, 2022), https://perma.cc/G5JR-9839.

⁵⁶⁶ International Criminal Court, Situation in Ukraine: ICC Judges Issue Arrest Warrants against Sergei Ivanovich Kobylash and Viktor Nikolayevich Sokolov (Mar. 5, 2024).

b. Russian officials intended to starve Ukraine's civilian population through attacks on energy infrastructure critical to civilian survival

Circumstantial evidence strongly suggests that Russian forces intended to starve civilians in the attacks analyzed in this Report. As explained in Section IV(b)(ii)(5), intent to starve need not be the sole or primary intent underlying an attack, and can be inferred from circumstantial evidence, such as: statements on behalf of Russian officials; the context, nature, manner, timing, scale, and duration of the attacks; and the systematic, repetitive, widespread nature of the attacks.⁵⁶⁷ Furthermore, the term "starvation" can refer to the deprivation of food and water, as well as other objects that are essential to survival. Similarly, the verb "starving" can refer to not only "killing by hunger," but also the deprivation of "some essential commodity or something necessary to live, including causing to die of cold."⁵⁶⁸ Here, the nature and circumstances of the attacks, as well as Russian officials' statements about the attacks, demonstrate that these attacks were motivated by a retaliatory intent to create life-threatening conditions for civilians in order to break Ukrainians' resistance to Russia's invasion, rather than to obtain any legitimate military objective.

Statements by Russian officials indicate that attacks against Ukraine's critical energy infrastructure have been used to retaliate against the civilian population, break Ukrainians' resistance to Russia's invasion, and compel their surrender. For example:

- On September 16, 2022, in the wake of the attack in **Case No. 5**, ⁵⁶⁹ Putin described the Russian attacks against critical infrastructure as "warning strikes," stating that the Russian response would be more serious if Ukraine did not cease its resistance. ⁵⁷⁰
- On October 10, 2022, the day of the first massive attack against energy infrastructure, described in **Case No.** 6,⁵⁷¹ Putin stated that the attacks against energy infrastructure were a response to alleged Ukrainian attacks on the Kerch Strait Bridge, stating that "Russia's response will be harsh and commensurate with the threats posed to the Russian Federation."⁵⁷² On the same day, Medvedev stated that "[t]he first episode has been played. There will be others."⁵⁷³ Politician and former deputy head of the Kherson military-civilian administration in Russian-occupied Kherson, Kirill Stremousov, stated that "[t]he warning strike from Russia was quite destructive for the energy system of Ukraine. [] More to come. . . ."⁵⁷⁴
- On October 28, 2022, Medvedev stated regarding Ukrainian power generation that "[t]he path to energy supply stability is different. We must recognize the legitimacy of Russia's demands . . . And then the lights will get better. . . ."⁵⁷⁵

⁵⁷⁰ Victor Kevluk, *Putin threatens to increase attacks on Ukraine's civilian infrastructure*, ATLANTIC COUNCIL (Sept. 27, 2022), https://perma.cc/7GD2-2G7U.

⁵⁶⁷ Jordash et al., Strategies for Prosecuting Mass Starvation, at 867–8.

⁵⁶⁸ Ambos, Rome Statute Commentary, at 587.

⁵⁶⁹ See Appendix I (Case No. 5).

⁵⁷¹ See Appendix I (Case No. 6).

⁵⁷² Kremlin News (@news_kremlin_eng), TELEGRAM (Oct. 10, 2022), https://perma.cc/GV24-ABQP.

⁵⁷³ Dmitry Medvedev (@medvedev_telegram), TELEGRAM (Oct. 10, 2022), https://perma.cc/Z327-ZUU6.

⁵⁷⁴ Kirill Stremousov (@Stremousov_Kirill), TELEGRAM (Oct. 10, 2022), https://perma.cc/E59L-8G8T.

⁵⁷⁵ Dmitry Medvedev (@medvedev_telegram), TELEGRAM (Oct. 28, 2022), https://perma.cc/6ZLQ-LPN3.

- On November 17, 2022, Peskov stated that Ukrainian civilians were suffering from blackouts because of Ukraine's refusal to "start negotiations" and "seek common ground" with Russia.⁵⁷⁶
- On November 19, 2022, Chernyshov stated that "[t]hese retaliatory strikes—and they are retaliatory—it's an expression of our hatred, our holy hatred."577
- On March 10, 2023, the Russian Ministry of Defense described the massive attacks against infrastructure in **Case No. 13**, ⁵⁷⁸ conducted across 11 Ukrainian regions and depriving 150,000 civilians of power supply, as "a massive retaliatory strike." ⁵⁷⁹
- On April 2, 2023, editor-in-chief of the Russian State news channel Russia Today, Margarita Simonyan, stated: "A Grad [rocket launcher] will destroy all the people and animals and the fields with their crops.... Whenever our missiles are flying, whenever we are practicing our strikes of vengeance, Ukraine is immersed in darkness." 580
- On April 10, 2023, Simonyan further stated in an episode of her show "Q.E.D." that "[t]en plagues of Egypt are inflicted on them. . . . The first plague was blood. There, rivers turned into rivers of blood. Then there was another punishment Egyptian darkness, when the Egyptians remained in darkness, in gloom for three days. Does it remind you of anything? When we destroy their infrastructure with strikes of retribution, and they get into darkness. [Shows metro and streets in Kyiv without light]. . . . Now all this is happening in Ukraine. . . . But there's no other way to deal with them."

Furthermore, Russian officials have openly admitted that Russia is attacking critical infrastructure to cause Ukrainians to starve, freeze, and otherwise suffer or flee as Ukraine becomes increasingly unlivable. For example:

- On September 8, 2022, the deputy head of the Russian administration in occupied Kherson, Kirill Stremousov, stated that "[n]o matter how much the Ukrainians, driven by the Maidancrazed Ukrainian Nazis, console themselves, the result of all these strikes is obvious. The result of this whole story will be the self-destruction of the Ukrainian Nazi statehood, hunger and cold in winter." 582
- On October 10, 2022, Russian State Duma member Andrey Gurulyov stated: "If you have no water, no sewer, we're projecting the flood of refugees toward Western borders, Correct? Because it's impossible to survive. There is no heating, no water, no sewer, no lights. You can't cook food, no place to store food, there is no way to transport the food. . . . How does one live in a country where nothing works?" 583
- On October 20, 2022, Stremousov stated: "It has been 10 days since the tactics of the Russian Armed Forces changed. Our missiles are destroying the enemy's critical infrastructure facilities, putting command posts out of action. One could expect that EU officials would start gritting their teeth and inventing new sanctions with even greater anger,

⁵⁷⁶ AFP, Civilians Suffering as a 'Consequence' of Kyiv's Refusal to Negotiate – Kremlin, MOSCOW TIMES (Nov. 17, 2022), https://perma.cc/7CTC-86U2.

⁵⁷⁷ Apt, Russia's Eliminationist Rhetoric.

⁵⁷⁸ See Appendix I (Case No. 13).

⁵⁷⁹ Ministry of Defense (@mod_russia_en), TELEGRAM (Mar. 9, 2023), https://perma.cc/H8DX-UNTQ.

⁵⁸⁰ Apt, Russia's Eliminationist Rhetoric.

⁵⁸¹ Keosayan Daily, Egyptian Darkness in Ukraine, DZEN (Apr. 10, 2023), https://perma.cc/V2KM-BBQC.

⁵⁸² Kirill Stremousov (@stremousov_kirill), TELEGRAM (Sept. 18, 2022), https://perma.cc/CV24-PYM4.

⁵⁸³ Apt, Russia's Eliminationist Rhetoric.

- but this is not happening.... There is hope that the refreshing breeze reminded European politicians of the approaching winter and made them think about their own population."⁵⁸⁴
- On October 22, 2022, Stremousov stated: "In the remaining non-denazified part of Ukraine, a collapse with electricity, water and heating is inevitable. The Nazis from Kyiv suggest that the people of Ukraine quietly endure freezing in their homes. . . . The result of this whole story is the complete capitulation of the Ukrainian Wehrmacht and, I hope, our rescue of the Ukrainians who remained hostage to the fascists." 585
- On November 8, 2022, Russian head of the occupation authority in Crimea, Sergey Aksyonov, stated: "As practice shows, along with the monuments to Catherine, Pushkin, Lenin, the heroes of the Great Patriotic War, heat, light and other benefits of civilization are leaving the territories of the former Ukraine. These territories are returning to the primitive state in which they were before the beginning of "Russification" and "communization." So forward, to the past. Because you can't build a future with Bandera in your head." 586
- On November 19, 2022, Russian State Duma member Boris Chernyshov stated, regarding the attacks against energy infrastructure, that "[t]hey'll be sitting without gas, without light, and without everything else. If the Kyiv regime chose the path of war criminals, they have to freeze and rot over there." 587
- On November 20, 2022, Gurulyov stated: "Well, the goals are clear: to cheer up the tame insects around and show the owner of the insectarium that they are still very capable of running cockroaches for a piece of food." 588
- On July 24, 2023, deputy chairman of the Russian Security Council Dmitriy Medvedev connected Ukrainian deaths and Russia's targeting of energy facilities, stating that "[t]hey will realize that life in a big common state, which they do not love much now, is better than death. . . . And the sooner Ukrainians realize this, the better. . . . And we need to choose unconventional targets for our strikes. Not just storage facilities, energy hubs and oil bases. There are other places where they're not expecting us yet. And where the effect will be very significant." ⁵⁸⁹
- On March 28, 2024, a member of the Russian State Duma, Andry Lugovoy, stated: "I think
 that Kharkiv should be deprived of electricity to the point that it becomes totally unlivable.
 Let those 800 thousand people that are left there get in their cars, walk with their sacks or
 ride in wagons, heading West. And do the same to other cities, including Kyiv."590
- On March 31, 2024, Russian State TV host, Sergey Mardan, stated: "All of Ukraine will be methodically turned into a sanitary zone. . . . It's a terrain that has no electricity. . . where large cities aren't capable of sustaining a normal livelihood, because there is no working water supply, no sewers, no working emergency services or hospitals. These are the places from where people leave en masse. . . . I believe that there is now a total consensus around this idea, that Ukraine has to be dismantled brick by brick, so that nothing at all is left there!" ⁵⁹¹

⁵⁸⁴ Kirill Stremousov (@stremousov_kirill), TELEGRAM (Oct. 20, 2022), https://perma.cc/W5W4-7ZFD.

⁵⁸⁵ Kirill Stremousov (@stremousov_kirill), TELEGRAM (Oct. 22, 2022), https://perma.cc/6L46-RZ3C.

⁵⁸⁶ Kirill Stremousov (@stremousov_kirill), TELEGRAM (Nov. 8, 2022), https://perma.cc/WNW8-GMKA.

⁵⁸⁷ Apt, Russia's Eliminationist Rhetoric.

⁵⁸⁸ *Id*.

⁵⁸⁹ Dmitry Medvedev (@medvedev_telegram), TELEGRAM (Jul. 24, 2023), https://perma.cc/9LPH-F5EJ.

⁵⁹⁰ Apt, Russia's Eliminationist Rhetoric.

⁵⁹¹ *Id.*

• On May 30, 2024, a columnist for Russia Today, Rostislav Ishchenko, wrote: "[W]e are going to leave the scorched [Ukrainian] land. . . . In the near future, we are threatened to see half-dead cities (former million-plus cities or regional centers with populations of 300,000 to 900,000), with destroyed infrastructure, the lack of elementary conditions for the life of the remaining population, hundreds of thousands of unrecovered corpses rotting in the surrounding fields, forest plantings and rural basements, and rodents also fatten on these corpses and move freely between them and the cities." ⁵⁹²

The foregoing examples exemplify the rhetoric of Russian officials and Russian State media, acknowledging that Russia is attacking Ukraine's critical energy infrastructure to punish civilians into surrender by causing widespread civilian suffering. These numerous statements provide strong evidence that a primary intent for such attacks was to starve the civilian population as a means of warfare. By systematically targeting power infrastructure, Russia aimed to freeze and starve civilians, force them to flee, or otherwise inflict suffering from the lack of essential services.

Russia's intent to starve can further be inferred from the context, nature, manner, timing, scale, and duration of the attacks as well as their systematic, repetitive, and widespread nature. The timing and persistence of Russia's attacks on critical infrastructure during Ukraine's cold winter months gives rise to a reasonable inference of intent to starve. Russia predictably deprives civilians of "essential commodit[ies] . . . necessary to live," such as heat and water, at a time when the civilian population is particularly vulnerable due to low temperatures. As clarified in the beginning of this Section IV(b)(ii)(5), such deprivation falls within the broader definition of "starving" civilians, which encompasses not only "killing by hunger" but also "causing to die of cold." The majority of Russia's attacks occurred during Ukraine's winter when energy infrastructure was already compromised following previous similar attacks. Case Nos. 6, 7, and 8⁵⁹⁶ occurred over one week in October 2022, forming part of a wider cluster of attacks. The attacks in December 2022 in Case Nos. 9 and 10⁵⁹⁸ occurred at a point when Ukraine's power-generation capacity was already operating at half capacity.

As mentioned in previous sections, the large scale and geographically widespread disruption caused by these attacks further indicates Russia's intention to cause civilian suffering by depriving Ukrainians of "essential commodities." For instance, in **Case No. 5**,600 Russia's attack against

⁵⁹² Rostislav Ishchenko, *Zelensky's Dead Army Goes into Battle*, UKRAINE RU (May 30, 2024), https://perma.cc/A7ATTBV2.

⁵⁹³ Jordash et. al., *Strategies for Prosecuting Mass Starvation*, at 849, 867–8 (*citing* Galić, ICTY AC Judgment, ¶ 104 (Nov. 30, 2006); Milošević, ICTY TC Judgment, ¶ 881 (Dec. 12, 2007); Mladić, ICTY TC Judgment, ¶ 3514−9, 3524 (Nov. 22, 2017); Karadžić, ICTY TC Judgment, ¶ 5825 (Mar. 25, 2016); Jelisić, ICTY AC Judgment, ¶ 47 (Dec. 14, 1999); Akayesu ICTR TC Judgment, ¶ 523, 730 (Sept. 2, 1998)).

⁵⁹⁴ Ambos, Rome Statute Commentary, at 587.

⁵⁹⁵ Id

⁵⁹⁶ See Appendix I (Case Nos. 6, 7, 8).

⁵⁹⁷ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022) ("From October 10 to October 20, the shelling damaged more than 400 facilities in 16 regions of our country, including dozens of energy facilities"); Peter Beaumont, et. al., Putin warns of further retaliation as Ukraine hit by massive wave of strikes, THE GUARDIAN (Oct. 10, 2022), https://perma.cc/RG7M-36CC.

⁵⁹⁸ See Appendix I (Case Nos. 9, 10).

⁵⁹⁹ HRW, Ukraine: Russian Attacks on Energy Grid Threaten Civilians.

⁶⁰⁰ See Appendix I (Case Nos. 6, 7).

Ukraine's second largest power plant in Kharkiv left 135 towns without power.⁶⁰¹ In **Case Nos. 6** and **7**,⁶⁰² Russia launched 83 missiles,⁶⁰³ damaging 29 critical infrastructure facilities across eight regions on October 11, 2022.⁶⁰⁴ The following day, Russia launched another attack against energy infrastructure across six regions,⁶⁰⁵ with one missile hitting the Ladyzhyn thermal power plant and leaving over 18,000 civilians without heat during the winter months.⁶⁰⁶ The attacks in **Case Nos. 9**, **12**, and **13**⁶⁰⁷ left hundreds of thousands of civilians without electricity for several days in the middle of winter.⁶⁰⁸ These cases illustrate the pattern of Russia targeting energy infrastructure to create conditions of extreme deprivation. Further, as elaborated above, Russian State media reporting and statements by Russian officials widely acknowledged the clear link between deprivation of power generation and impaired heating, health care services, and water supply for civilians. Russian officials had ample notice of the consequences of their attacks, and nonetheless chose to not only continue but also to escalate these attacks throughout the course of the armed conflict, reinforcing their intention to starve Ukrainian civilians.

There is no indication that Russia's attacks would confer any significant military advantage. Even if Russia could gain a military advantage by attacking Ukraine's power grid, in the majority of these attacks any such advantage would be negligible when weighed against the civilian suffering, as outlined in Section V(b)(ii). Therefore, Russian officials' comments about these attacks, as well as their timing, scale, and duration, lead to the conclusion that Russia's primary intent for these attacks was not to gain a military advantage but to deprive Ukrainian civilians of energy-dependent services critical for their survival.

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⁶⁰¹ Lorenzo Tondo et. al., Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/V2JH-SYQC.

⁶⁰² See Appendix (Case Nos. 6, 7).

⁶⁰³ The Remote Control Killers Behind Russia's Cruise Missile Strikes on Ukraine, BELLINGCAT (Oct. 24, 2022) https://perma.cc/Z5Z8-E4LP; Valentyna Romanenko, Ukraine's Air Force Explains How Russia Struck on 10 October and Where From, UKRAINSKA PRAVDA (Oct. 10, 2022), https://perma.cc/SCL3-U2L9.

⁶⁰⁴ Russian Attacks on Kyiv and Cities Across Ukraine Are an Escalation of Aggression and Apparent Violations of Laws of War, AMNESTY INTERNATIONAL (Oct. 10, 2022), https://perma.cc/6TVW-9R6N.

⁶⁰⁵ Air Force of the Armed Forces of Ukraine (@kpszsu), TELEGRAM (Oct. 11, 2022,) https://perma.cc/4AL3-D39F ("20 Cruise Missiles and 13 UAVs-Kamikaze Were Destroyed"); Tetiana Vasylenko, Russia Attacked the Ladyzhynska TPP in Vinnytsia Oblast with Kamikaze Drones: What Is Known, TSN (Oct. 11, 2022), https://perma.cc/4ZE9-3XFV.

⁶⁰⁶ Olena Roshchina, Vinnytsia Oblast: TPP attacks create emergency situation in Ladyzhyn, UKRAINSKA PRAVDA (Nov. 28, 2022), https://perma.cc/34PN-RBQS.

⁶⁰⁷ See Appendix I (Case Nos. 9, 12, 13).

⁶⁰⁸ Oleksandra Ponomarenko, 300,000 people in Odesa remain without electricity, SUSPILNE MEDIA (Dec. 11, 2022), https://archive.ph/6n05A; Odesa is without electricity after the drone attack: all the sockets in the shops are in use, SUSPILNE ODESA (Dec. 11, 2022), https://perma.cc/XW4Z-5VUG; City of Shepetivka (@shepetivka), TELEGRAM (Feb. 11, 2023), https://perma.cc/LT64-TBCW ("Power engineers managed to stabilise the situation with the supply of electricity in the region. It is too early to talk about a full return to stable hourly outages, as network restrictions are still in place"); Vitaly Bunechko (@zhytomyrskaODA), TELEGRAM (Mar. 9, 2023), https://perma.cc/CJC5-QC65 ("Tonight, the enemy attacked Zhytomyr Oblast with kamikaze drones. One of the energy infrastructure facilities was hit. Almost 150,000 subscribers are without power supply").

⁶⁰⁹ Additionally, as explained in Section V(b)(i)(1), the sheer volume and magnitude of the attacks has grown so extreme that the attacks could be described as indiscriminate, the only available conclusion being that Russian forces intended to cause civilian harm rather than gain any military advantage. See Schmitt, Ukraine Symposium – Further Thoughts.

c. Russian officials were aware that starvation would result in the ordinary course of events from their attacks on critical infrastructure

Even disregarding the evidence of direct intent outlined above, Russian officials were undoubtedly aware that starvation would result in the ordinary course of events from the sustained attacks against critical infrastructure. As explained in Section IV(b)(ii)(5), "starvation" includes not only death by hunger, but also the deprivation or insufficient supply of "some essential commodity or something necessary to live" such that civilian livelihoods are threatened, or civilians are compelled to flee. Russian officials and State-controlled media commented widely on how attacks on Ukraine's energy infrastructure would result in life-threatening outcomes for civilians. For example: 610

- Stremousov stated that "the result of all these strikes is obvious. . . . The result will be . . . hunger and cold in winter" and that "a collapse with electricity, water and heating is inevitable."
- Gurulyov stated that it will be "impossible to survive."
- Aksyonov stated that the regions of Ukraine will return to a "primitive state."
- Chernyshov stated that Ukrainians will "freeze and rot."
- Mardan stated that large cities will not be "capable of sustaining a normal livelihood."
- Ishchenko wrote that "in the near future" there will be "half-dead cities . . . with destroyed infrastructure, the lack of elementary conditions for the life of the remaining population."

Many statements also refer to the displacement of the Ukrainian civilian population as a result of the attacks, suggesting that Russian officials knew that attacking power infrastructure would cause civilians to flee due to unlivable conditions created by deprivation of essential services. For example, Gurulyov stated that Russia was "projecting the flood of refugees toward Western borders" and urged that "those 800 thousand people that are left there get in their cars, walk with their sacks or ride in wagons, heading West." Mardan also stated that "[t]hese are the places from where people leave en masse." Given their knowledge regarding the expected life-threatening effects of the attacks against power infrastructure, it is reasonable to conclude that Russian officials were aware that starvation of civilians would result in the ordinary course of events.

As discussed in Sections V(a)(ii)—(iii), in addition to such consequences being generally foreseeable, Russian forces and commanders would have been aware of the devastating impact of previous infrastructure attacks through extensive publicly available information. Such information and reporting are outlined in depth in Sections V(a)(ii)(2) and include life-threatening deprivation of heating, clean water, functioning health care facilities, and communication systems, as well as severe physical and psychological suffering. For example, a December 2022 report published by the UN HRMMU warned that Russian strikes against power infrastructure had put Ukrainian civilians "at

⁶¹⁰ For supporting citations for these quotations, see <u>Section V(b)(iii)(2)(b)</u>.

⁶¹¹ Id.

⁶¹² *Id*.

real risk of extreme hardship this winter" and that they could "spark new flows of displacement." In March 2023, the UN HRMMU reported that the strikes had in fact "put millions of civilians at risk during the colder months" and "created new flows of displacement." 614

Since that time, Russia's attacks have not only continued but also increased in frequency and severity, despite the mounting evidence and foreseeability of civilian harm resulting from the systematic deprivation of OIS. The evidence suggests that such civilian suffering was the intended consequence.

3. Russian officials possessed the requisite intent to use starvation as a method of warfare

Article 8(2)(b)(xxv) of the Rome Statute requires that starvation be used as a "method of warfare." This standard can be understood in two ways. Under a broader interpretation, it is sufficient that the deprivation of an OIS be linked to the conduct of hostilities. Alternatively, under a narrower interpretation, which implies a purposive element, starvation must be deliberately weaponized with an intent to cause starvation. Russia's attacks against Ukraine's power infrastructure clearly meet the broader threshold, as they are carried out as part of its overall invasion of Ukraine. Furthermore, Russian officials' statements and the circumstances surrounding the attacks provide compelling evidence that Russia used starvation as a retaliatory tool to punish civilians for Ukraine's acts in the battlefield and its refusal to surrender, satisfying even the narrower interpretation. In this context, starvation is not only a consequence of hostilities, but has also become a tool Russia uses strategically to weaponize civilian suffering by creating unlivable conditions across Ukraine in order to secure a military advantage.

As established above, the evidence strongly suggests that Russian forces intended to consistently attack Ukrainian energy infrastructure to compel Ukraine to surrender or otherwise agree to Russia's demands—i.e., to "accept some [] aim of the attacker" —and to displace Ukrainian civilians—i.e., "force them to move out of a certain area in order to facilitate [Russia's] control over that area." Therefore, Russian forces intended to use starvation as a method of warfare in violation of Article 8(2)(xxv).

For the foregoing reasons, there is ample evidence to suggest that Russia intended to starve Ukrainian civilians as a method of warfare, by intentionally depriving them of OIS in the form of energy-dependent essential services, and by intending to cause civilian starvation in the form of severe suffering and life-threatening conditions arising from such deprivation. Political leaders and military commanders would have been aware that such suffering would occur in the ordinary course

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⁶¹³ UN HRMMU, Update on the Human Rights Situation in Ukraine 1 August–31 October 2022 2 (2022), https://perma.cc/9YTC-7XE7.

⁶¹⁴ UN HRMMU, Report on the Human Rights Situation in Ukraine 1 August 2022–31 January 2023 11 (2023), https://perma.cc/CB9J-AHWP.

⁶¹⁵ Rome Statute, art. 8(2)(b)(xxv).

⁶¹⁶ See Section IV(b)(ii)(5) (Some commentators query whether the inclusion of the term "method" adds a purposive element regarding the consequences of the depriving act. However, the majority of commentators note that this would run contrary to the meaning of the term "method of warfare" as normally construed in IHL, where such "methods" are already assumed to be intended to weaken the adversary); See Jordash et. al., Strategies for Prosecuting Mass Starvation, at 849, 861–2; Dannenbaum, Criminalizing Starvation, at 734–8; Jordash et. al., A Comprehensive Review of Existing IHL and ICL, at 117–9; Akande & Gillard, Conflict-induced Food Insecurity, at 765; Global Rights Compliance, The Crime of Starvation, at 13. 617 Ambos, Rome Statute Commentary, at 595.

of events, particularly in the wake of widespread reporting by Russian, Ukrainian, and international sources regarding the inevitable effects of such attacks. Therefore, Russia's attacks against critical infrastructure likely amount to the war crime of intentionally using starvation of civilians as a method of warfare

VI. Application of Law to Facts: Attacks on Civilians and Civilian Objects

This section presents 17 Russian aerial attacks conducted between March 2022 and May 2024 that targeted civilians and civilian objects across multiple regions of Ukraine. It establishes that Russian attacks on Ukraine's civilians and civilian objects amount to the crimes against humanity of murder, extermination, and persecution pursuant to Articles 7(1)(a), 7(1)(b), and 7(1)(h) of the Rome Statute, as well as the war crimes of intentionally directing attacks against civilians and civilian objects under Articles 8(2)(b)(i) and (ii), intentionally directing attacks against specially protected objects under Article 8(2)(b)(ix), and intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians clearly excessive in relation to the concrete and direct overall military advantage anticipated under Article 8(2)(b)(iv).

a. Attacks on Civilians and Civilian Objects as Crimes Against Humanity

Russian aerial attacks on civilians and civilian objects amount to the crimes against humanity of murder, extermination, and persecution. The following section reviews the applicable contextual elements before delving into each individual crime in turn.

i. Contextual Elements

The Rome Statute defines crimes against humanity as "any of the following acts when committed as part of a widespread or systematic attack directed against a civilian population, with knowledge of the attack... pursuant to or in furtherance of a State or organization policy to commit such attack." To qualify as a crime against humanity, a prohibited act must fulfill the following contextual elements: (1) form part of a widespread or systematic attack; (2) form part of an attack directed against a civilian population; (3) be committed pursuant to a State or organizational policy; (4) possess an identifiable nexus between the individual act and the attack; and (5) be committed with knowledge that the act formed part of such attack. Russia's aerial attacks on populated areas in Ukraine satisfy these contextual elements.

1. Russian attacks on civilians and civilian objects constitute a widespread and systematic attack directed against the civilian population in Ukraine

Per *Ntaganda*, an "attack" under Article 7 of the Rome Statute denotes "a course of conduct involving the multiple commission of acts," which are widespread and systematic and directed against a civilian population. Since Russia's 2022 full-scale invasion of Ukraine, Russian forces have regularly launched missile and drone strikes directed at populated civilian areas, including both

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⁶¹⁹ Rome Statute, arts. 7(1), 7(2)(a).

⁶²⁰ *Id.* at art. 7.

⁶²¹ Ntaganga, ICC PTC II Decision, ¶ 23 (Jun. 9, 2014).

residential and urban areas. These repeated airstrikes demonstrate "a series or overall flow of events," 622 showing a clear "course of conduct" as defined by Article 7(2)(a).

Unlike a lawfully conducted military operation, or "a few isolated incidents" of attacks against civilians, Russia repeatedly launches airstrikes that target civilians and civilian objects with knowledge of the resultant civilian harm, ranging from mass death and civilian injuries to destruction of objects indispensable to civilian life, such as homes, hospitals, schools, and historical and cultural sites.

As described above in Section V(a)(i)(2) and below in Section VI(a)(i)(2), attacks targeting populated areas illustrate and implement Russia's policy of "total war" on Ukraine, forming a series of acts that constitute an "attack" under Article 7(2)(a). 624 The policy underlying Russia's attacks seeks to demoralize Ukrainian civilians and destroy all facets of civilian life to force the Ukrainian population and government to surrender. Thus, civilians are not an "incidental victim" of Russia's total war but the intended target, indicating that the attack was "directed against [the] civilian population" of Ukraine.

To constitute a crime against humanity, the attack must rise to the level of either widespread or systematic. In a series of ICC cases, that court has defined "widespread" as "large-scale in nature and targeted at a large number of persons," and has understood "systematic" as the "organised nature of the acts of violence and the improbability of their random occurrence." The ICTY emphasized that this analysis must be conducted on a "case by case basis," taking into account a number of elements and effects of the acts, such as, inter alia, "the consequences of the attack upon the targeted population, the number of victims, the nature of the acts, the possible participation of officials or authorities, and any identifiable patterns of crimes." Compelling evidence, presented below, demonstrates that Russian strikes on densely populated urban centers, residential areas, and civilian objects afforded special protections constitute both a widespread and a systematic attack on civilians. Indeed, the UN COI has referred to Russia's indiscriminate attacks on civilian population as "systematic and widespread."

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⁶²³ Elements, art. 7; see also Katanga, ICC TC II Judgment, ¶ 1101(Mar. 7, 2014); Bemba, ICC PTC II Decision, ¶ 81 (Jun. 15, 2009).

⁶²⁴ For a discussion of total war in Ukraine, see Mara Karlin, The Return of Total War: Understanding—and Preparing for—a New Era of Comprehensive Conflict, FOREIGN AFFS. (Oct. 22, 2024), https://perma.cc/T2VV-T92B; Tatiana Ponomareva, Is Russia Waging Total War in Ukraine?, AFTER RUSSIA, https://perma.cc/GRG5-Y5VY (last accessed Feb. 23, 2025).
625 See Kenya, ICC PTC II Decision, ¶ 82 (Mar. 31, 2010).

⁶²⁶ In practice, the ICC and *ad hoc* tribunals have interpreted the "widespread and systematic" element disjunctively. *See* Prosecutor v. Semanza, ICTR-97-20-T, Judgment, ¶ 328 (May 15, 2003). *See also* Akayesu, ICTR TC Judgment, ¶ 579, n. 144 (Sept. 2, 1998); Karadžić, ICTY TC Judgment, ¶ 477 (Mar. 24, 2016).

⁶²⁷ Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019); Bemba, ICC-01/05-01/08, ICC TC III Judgment, ¶ 163 (Mar. 21, 2016); Katanga, ICC TC II Judgment, ¶ 1123 (Mar. 7, 2014). *See also* Karadžić, ICTY TC Judgment, ¶ 477 (Mar. 24, 2016).

⁶²⁸ Karadžić, ICTY TC Judgment, ¶ 477 (Mar. 24, 2016).

⁶²⁹ U.N. Office of the High Commissioner of Human Rights (OHCHR), UN Commission of Inquiry on Ukraine Finds Continued Systematic and Widespread Use of Torture and Indiscriminate Attacks Harming Civilians (Sept. 25, 2023), https://perma.cc/9NUQ-QCN8.

The widespread nature of Russia's attack on populated areas is evident by its scale and cumulative effects. ⁶³⁰ Ukrainians have submitted over 10,000 claims for damage or destruction of residential housing to the Register of Damage for Ukraine at the Council of Europe since the beginning of the war, with 20% of claims related to damage from aerial attacks. ⁶³¹ These property damage claims originate from 621 cities, towns, and villages across 19 oblasts and the city of Kyiv. ⁶³² These claims, however, account for only a fraction of the approximately 250,000 housing facilities that, as of January 2024, had been damaged or destroyed during the war. ⁶³³ Official assessments estimate the cost of conflict-related damage to residential buildings in Ukraine at \$58.9 billion. ⁶³⁴

In the three years since Russia's full-scale invasion, attacks on the civilian population have killed over 12,000 civilians. Explosive weapons with wide area effects caused nearly 9,000 of these civilian deaths, as well as 19,000 injuries. The UN HRMMU in Ukraine has verified civilian casualties from explosive weapons with wide area effects in 22 oblasts and the city of Kyiv. The large-scale harm to civilians and civilian infrastructure across Ukraine demonstrates the attack's widespread nature.

The systematic nature of Russia's attacks is evident from "a series of repeated actions" and "continual repetition of the same modus operandi."⁶³⁸ Russia's consistent use of aerial drone and missile strikes, the recurring pattern of targeting densely populated urban centers and residential areas, and the use high-precision weapons when there is no military target nearby, as in **Case Nos.** 3 and 20,⁶³⁹ satisfy the systematic element of the attack. These attacks are aimed at producing the same effect—to demoralize and debilitate the Ukrainian civilian population. ⁶⁴⁰ A senior UN official reporting to the Security Council described the rising civilian casualties resulting from "relentless attacks" on cities and towns as a "daily destructive pattern."⁶⁴¹ This pattern has become so pronounced that some experts characterize it as "urbicide," ⁶⁴² which refers to a distinct form of

⁶³⁰ Prosecutor v. William Samoei Ruto, Henry Kiprono Kosgey, & Joshua Arap Sang, ICC-01/09-01/11, ICC PTC II Decision, ¶¶ 176–7 (Jan. 23, 2012) ("There are substantial grounds to believe that the attack perpetrated was widespread. Viewed as a whole, the evidence shows that the attack was massive, frequent, carried out collectively with considerable seriousness and directed against a large number of civilian victims"). *See also* Prosecutor v. Omar Hassan Ahmad Al Bashir, ICC-02/05-01/09-3, Decision on the Prosecution's Application for a Warrant of Arrest, ¶ 81 (Mar. 4, 2009) ("The Chamber has previously held that this language excludes random or isolated acts of violence, and that the term 'widespread' refers to the large-scale nature of the attack, as well as to the number of victims, while the term 'systematic' pertains to the organised nature of the acts of violence and to the improbability of their random occurrence").

631 Over 10,000 Claims for Damage or Destruction to Residential Housing Submitted to the Register of Damage for Ukraine, REGISTER OF DAMAGE FOR UKRAINE (Oct. 1, 2024), https://perma.cc/FM6M-VZPN.

⁶³³ Kyiv School of Economics, Report on Damages to Infrastructure from the Destruction Caused by Russia's Military Aggression against Ukraine as of January 2024 7 (2024), https://perma.cc/FM2K-LGCP 634 Id. at 9.

⁶³⁵ OHCHR, Treatment of Prisoners of War, at 21.

⁶³⁶ UN OHCHR defines explosive weapons with wide area effects as shelling from artillery, tanks, and multiple launch rocket systems, cruise and ballistic missiles, and air strikes. See OHCHR, Two-Year Update, at 2.

⁶³⁸ See Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019) (using same factors).

⁶³⁹ See Appendix I (Case Nos. 3, 20).

⁶⁴⁰ See Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019) (using same factors).

⁶⁴¹ Russian Attacks 'A Daily Destructive Pattern' in Ukraine, Security Council Hears, UNITED NATIONS (Apr. 11, 2024), https://perma.cc/FQU9-89MA.

⁶⁴² Aaron Clements-Hunt, Russia's Campaign of Urbicide in Ukraine, NEW LINES INST. (Jun. 7, 2022), https://perma.cc/92X7-9UVR.

mass violence characterized by the deliberate destruction of vital civilian infrastructure, undergirded by a logic of collective punishment.

The cases presented in this Report demonstrate the Russian military's systematic criminal conduct. In order "to produce always the same effects on a civilian population," the Russian military targets every element of civilian life. Ukrainians are not safe in their homes at night, because the Russian military consistently strikes and demolishes residential areas when civilians are expected to be home. For example, in **Case No. 4**, 644 Russian forces completely destroyed a civilian dormitory in Kharkiv at night, killing 19 civilians using an Iskander-K missile, known for its devastating destructive capacity and precision. Russia routinely uses this tactic on residences across Ukraine's densely populated cities, so civilians feel that "anyone can die at any time." In **Case Nos. 18** and **20**, 646 Russia's massive attacks on residential buildings also caused extensive damage to surrounding structures, forcing civilians and businesses to evacuate with little hope of return. Repeated attacks of this pattern have emptied Ukraine's cities, like Kramatorsk, 647 where the strike in **Case No. 11** with an Iskander-K missile completely destroyed an apartment building.

The Russian military has also devoted significant resources⁶⁴⁹ and effort to planning⁶⁵⁰ massive attacks on parks, schools, office buildings, markets, and all elements of civilian infrastructure, leaving Ukrainians unable to maintain their ordinary lives. Russia frequently targets civilian gathering spaces with multiple drones or missiles to maximize damage and casualties. For example, in **Case No. 3**,⁶⁵¹ Russian forces launched four missiles at Vinnytsia City Center, damaging a concert hall, parking lot, medical building, offices, stores, and residential buildings and causing over 100 casualties. Similarly, in **Case No. 22**,⁶⁵² Russian forces dropped three bombs on a hypermarket on a busy weekend afternoon. CCTV confirms the absence of any military activity or targets in the area. That attack resulted in over 70 casualties.

⁶⁴³ See Katanga, ICC TC II Judgment, ¶ 1113 (Mar. 7, 2014) ("Such analysis also entails inquiry as to whether a series of repeated actions seeking to produce always the same effects on a civilian population was undertaken with consideration – identical acts or similarities in criminal practices, continual repetition of a same modus operandi, similar treatment meted out to victims or consistency in such treatment across a wide geographic area"); Ntaganda, ICC TC VI Judgment, ¶ 692 (Jul. 8, 2019).

⁶⁴⁴ See Appendix I (Case No. 4).

⁶⁴⁵ "Anyone Can Die at Any Time" Indiscriminate Attacks by Russian Forces in Kharkiv, Ukraine, AMNESTY INTERNATIONAL 23 (Jun. 13, 2022), https://perma.cc/VZX5-NY7D. See also Ukraine: Russian Strikes Killed Scores of Civilians in Chernihiv, HUMAN RIGHTS WATCH (Jun. 10, 2022), https://perma.cc/S68M-LKDM.

⁶⁴⁶ See Appendix I (Case Nos. 18, 20).

⁶⁴⁷ Kramatorsk had a population of 150,000 Ukrainians prior to Russia's full-scale invasion on February 24, 2022. Thomas d'Istria, 'Now, we're the last ones': In Kramatorsk, the difficult lives of Ukraine's wartime teenagers, LE MONDE (Aug. 18, 2023), https://perma.cc/FHL3-4FBT; Tim Lister & Frederik Pleitgen, The war for Donbas moves to a different phase as Russia pounds cities that civilians can't afford to leave, CNN (Feb. 3, 2023), https://perma.cc/B573-ACTX. Estimates indicate that the population has reduced by half as the war continues. Lister & Pleitgen, The war for Donbas.

⁶⁴⁸ See Appendix I (Case No. 11).

⁶⁴⁹ See Kenya, ICC PTC II Decision, ¶ 96 (Mar. 31, 2010) ("The Chamber notes that the "systematic" element has been defined by the ICTR as (iv) involving substantial public or private resources, whilst the ICTY has determined that the element requires (iii) use of significant public or private resources").

⁶⁵⁰ See Situation in the Republic of Côte d'Ivoire, ICC-02/11, ICC PTC II Decision, ¶¶ 58, 96 (Oct. 3, 2014) (Large-scale serious crimes are considered part of a plan or in furtherance of a policy). See also Gbagbo, ICC PTC I Decision, ¶ 216 (Jun. 12, 2014) ("....the concept of "policy" and that of the "systematic" nature of the attack under article 7(1) of the Statute both refer to a certain level of planning of the attack").

⁶⁵¹ See Appendix I (Case No. 3).

⁶⁵² See Appendix I (Case No. 22).

2. Russian attacks on civilians and civilian objects were committed pursuant to the State policy to wage "total war" on Ukraine

As detailed in Section V(a)(i)(2), Russia has pursued a policy of "total war" on Ukraine, which entails intentionally and systematically harming the civilian population to win the war. Because this policy defines victory as "returning" Ukraine to Russia and asserting Russia's cultural and ethnic hegemony over Ukraine, Russia's attacks seek to demoralize the population, erode Ukrainian identity, and destroy all underpinnings of civilian life. 653

Like Russia's attacks on critical infrastructure examined in Section V(a)(i)(2), Russia's systematic and widespread airstrikes on populated civilian areas are intended to force Ukrainian civilians to either surrender or flee. In response to a massive Russian airstrike on Vinnytsia, Ukraine's Foreign Minister remarked that "[t]his is terrorism, deliberate murder of civilians to spread fear." Amnesty International's Secretary General similarly characterized Russia's airstrikes as aiming to "spread terror among the entire civilian population." Zelenskyy has frequently condemned the deliberate targeting of civilians as acts of terror, stating that "[t]hey are trying to destroy us and wipe us off the face of the Earth." Indeed, the Russian military has repeatedly launched airstrikes intended to cause civilian suffering as a "consequence" of Ukraine's refusal to negotiate, or as retaliation for Ukraine's military advances.

Russia's aerial attacks on Ukrainian cities force civilians to either flee or risk death. For example, in Kharkiv, daily bombardment forced hundreds of thousands of residents to evacuate. By March 2022, more than 600,000 of Kharkiv's 1.4 million residents had evacuated, according to the Governor. For civilians who remain, relentless airstrikes on residential areas have often left them homeless, forced to seek emergency shelter. As of February 2025, nearly four million civilians have been internally displaced and 6.8 million have become refugees outside of Ukraine.

3. There is an identifiable nexus between each individual strike on civilians and civilian objects and the overall attack

As elaborated in Section V(a)(i)(3), establishing that Russian officials' actions formed part of a widespread and systematic attack against Ukraine's civilian population—in this case, through aerial attacks on populated civilian areas and civilian infrastructure—is sufficient to satisfy the requisite

⁶⁵³ See Section V(a)(i)(2) for a thorough analysis of Russia's State policy against Ukrainian civilians.

⁶⁵⁴ Dmytro Kuleba (@DmytroKuleba), X (Jul. 14, 2022), https://perma.cc/42TP-TNCK.

⁶⁵⁵ Russian Attacks on Kyiv and Cities Across Ukraine Are an Escalation of Aggression and Apparent Violations of Laws of War, AMNESTY INTERNATIONAL (Oct. 10, 2022).

⁶⁵⁶ Max Hunder, Twenty killed, dozens hurt in Russian missile strike on central Ukraine – Zelenskiy, REUTERS (Jul. 14, 2022), https://perma.cc/7UBE-QTLS.

⁶⁵⁷ Peter Beaumont et. al., *Putin warns of further retaliation as Ukraine hit by massive wave of strikes,* THE GUARDIAN (Oct. 10, 2022), https://perma.cc/LXX4-3UJ2.

⁶⁵⁸ AFP, Civilians Suffering as a 'Consequence' of Kyiv's Refusal to Negotiate – Kremlin, MOSCOW TIMES (Nov. 17, 2022), https://perma.cc/K8EK-JW4Y.

⁶⁵⁹ See Appendix I (Case No. 8 & Case No. 15).

^{660 @}synegubov, TELEGRAM (Mar. 8, 2022), https://perma.cc/F7HM-F852.

⁶⁶¹ Ukraine Emergency, USA FOR THE U.N. HIGH COMMISSIONER FOR REFUGEES (UNHCR), https://perma.cc/B3ZD-K8Q9.

⁶⁶² *Id*.

nexus between individual acts and the broader attack. 663 While identifying the specific perpetrators behind each attack requires additional research, there is a reasonable basis to conclude that the responsibility for these attacks lies with Russian officials and the Russian Armed Forces. These attacks are not "[i]solated acts" but rather part of the widespread and systematic attack against Ukraine's civilian population pursuant to Russia's "total war" against Ukraine.

4. Russian officials possessed the requisite knowledge that their conduct constituted part of a widespread and systematic attack against Ukraine's civilian population

Russian officials were aware that their aerial attacks constituted part of a widespread and systematic attack against the civilian population, therefore satisfying the *mens rea* requirement in Article 7 of the Rome Statute. The State policy to this effect, discussed in Section V(a)(i)(2) and Section VI(a)(i)(2), demonstrates that the Russian forces possessed the necessary knowledge of the attack. Further, as elaborated in Section V(a)(i)(4), statements by Russian officials reveal their knowledge of the broader attack and the extent of the resulting harm to civilians. International outcry alerted the Russian military to its illegal conduct. In addition, Russian and international media, human rights organizations, and UN bodies have reported widely on the harm to Ukrainian civilians inflicted by Russia's attacks, including within the first few months following Russia's full-scale invasion. This stream of information provided Russian forces with constructive knowledge of the broader attack.

For example, in September 2022, Russia Today reported on UN findings and allegations of Russian crimes committed through "airstrikes in populated areas." The Moscow Times reported extensively on several of Russia's aerial attacks on civilians and civilian objects in 2022,666 including a notorious attack on the Mariupol theater sheltering over 1,000 Ukrainians,667 repeated strikes against civilian buildings in Kyiv,668 and the attack on Vinnytsia's city center.669 In March 2022, UN OHCHR warned of crimes committed by Russian forces using missiles, artillery shells, and airstrikes.670 In May 2022, the UN Human Rights Council detailed the "pattern of abuses" against civilians by Russia's aerial attacks on populated areas.671 In September 2022, the UN COI reported

⁶⁶³ See Katanga, ICC TC II Judgment, ¶ 1124 (Mar. 7, 2014) ("In determining whether an act within the ambit of article 7(1) of the Statute forms part of a widespread or systematic attack, the bench must, with due regard for the nature of the act at issue, the aims it pursues and the consequences it occasions, inquire as to whether it is part of the widespread or systematic attack, considered as a whole, and in respect of the various components of the attack (i.e. not only the policy but also, where relevant, the pattern of crimes, the type of victims, etc.").

⁶⁶⁴ Id. at ¶ 1124. See also Kunarac, ICTY AC Judgment, ¶ 96 (Jun. 12, 2002).

⁶⁶⁵ AFP, Ukrainian Theater Sheltering 'More Than 1,000' Civilians Bombed, MOSCOW TIMES (Mar. 17, 2022), https://perma.cc/Q63E-ZD4R.

⁶⁶⁶ Hervé Bar for AFP, *Civilians Flee East Ukraine, Warnings of 'Horrific' Abuses, MOSCOW TIMES (Apr. 8, 2022)*, https://perma.cc/ZAA9-6S8D.

⁶⁶⁷ AFP, Ukrainian Theater Sheltering 'More Than 1,000' Civilians Bombed.

⁶⁶⁸ Hervé Bar for AFP, Civilians Flee East Ukraine.

⁶⁶⁹ James Beardsworth, As Civilian Deaths Mount in Ukraine, Russia Deploys Familiar Excuses, MOSCOW TIMES (Jul. 20, 2022), https://perma.cc/UNC8-9YVY.

⁶⁷⁰ United Nations, Russian attacks on civilian targets in Ukraine could be a war crime: UN rights office (Mar. 11, 2022), https://perma.cc/7QWG-D2HQ.

⁶⁷¹ Report of the 34th Special Session of the Human Rights Council on the Deteriorating Human Rights Situation in Ukraine Stemming from the Russian Aggression, UNIVERSAL RIGHTS GROUP (May 13, 2022), https://perma.cc/A783-ER3M.

on numerous aerial attacks violating the principle of distinction.⁶⁷² In October 2022, Council of Europe leaders condemned Russia's air strikes on cities as "serious violations of international humanitarian law."⁶⁷³ Thus, the Russian government and military has long had constructive knowledge of Russia's deliberate targeting of civilians and civilian objects. Such knowledge has only mounted as the war, and Russia's attacks against civilians and civilian objects, has persisted.

ii. Murder

The ICC defines murder as "unlawfully and intentionally causing the death of a human being" through either an affirmative act or omission.⁶⁷⁴ As elaborated in <u>Section IV(a)(ii)(1)</u>, the elements of murder under Article 7(1)(a) of the Rome Statute are:

- (1) "The perpetrator killed⁶⁷⁵ one or more persons";
- (2) "The conduct was committed as part of was widespread or systematic attack directed against a civilian population"; and
- (3) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack against a civilian population."

The missile and drone strikes on Ukrainian civilians examined in this Report satisfy the requisite elements. In each case, Russian forces "unlawfully and intentionally" caused the death of several civilians. ⁶⁷⁶ For example, **Case Nos. 2**, **3**, **4**, **15**, **16**, **17**, **20**, and **22**, ⁶⁷⁷ resulted in 76 civilian casualties and may constitute the crime against humanity of murder. This section focuses on three exemplary attacks, offering detailed analysis to demonstrate how they fulfill the requisite elements: ⁶⁷⁸

- Case No. 6: Mass Attack on Civilian Infrastructure in Kyiv (October 10, 2022).
- Case No. 8: Mass Attack on Civilian Infrastructure in Kyiv Oblast (October 17, 2022).
- Case No. 11: Attack on Apartment Buildings in Kramatorsk (February 1, 2023).

1. Russian attacks on civilians and civilian objects resulted in the death of one or more persons

Multiple Russian aerial attacks in civilian areas have caused the death of one or more civilians, satisfying the first element of Article 7(1)(a) of the Rome Statute. For example, in **Case No.** 6,⁶⁷⁹ on October 10, 2022, Russian forces launched 83 missiles against Ukraine, which killed at

⁶⁷² U.N. Office of the High Commissioner of Human Rights (OHCHR), Update by the Chair of the Independent International Commission of Inquiry on Ukraine, at the 51st session of the Human Rights Council (Sept. 23, 2022), https://perma.cc/YEW9-IAVE.

⁶⁷³ Council of Europe Leaders Condemn Russian Air Strikes against Towns and Cities in Ukraine, COUNCIL OF EUROPE (Oct. 10, 2022), https://perma.cc/4X6L-WR5Z.

⁶⁷⁴ See Katanga, ICC TC II Judgment, ¶¶ 766−7 (Mar. 7, 2014); Kenya, ICC PTC II Decision, ¶¶ 141−50 (Mar. 31, 2010); Bemba, ICC PTC II Decision, ¶ 132 (Jun. 15, 2009); Bemba, ICC TC III Judgment, ¶ 87 (Mar. 21, 2016). See also Akayesu, ICTR TC Judgment, ¶ 589 (Sept. 2, 1998Kupreškić, ICTY TC Judgment, ¶ 560 (Jan. 14, 2000).

⁶⁷⁵ Elements, art. 7(1)(a)(1), n. 7 (clarifies that "the term 'killed' is interchangeable with the term 'caused death").
676 See Katanga, ICC TC II Judgment, ¶¶ 766–7 (Mar. 7, 2014); Kenya, ICC PTC II Decision, ¶¶ 141–50 (Mar. 31, 2010); Bemba, ICC PTC II Decision, ¶¶ 132 (Jun. 15, 2009); Bemba, ICC TC III Judgment, ¶ 87 (Mar. 21, 2016). See also Akayesu, ICTR TC Judgment, ¶ 589 (Sept. 2, 1998); Kupreškić, ICTY TC Judgment, ¶ 560 (Jan. 14, 2000).

⁶⁷⁷ See Appendix I (Case Nos. 2, 3, 4, 15, 16, 17, 20, 22).

⁶⁷⁸ See Appendix I (Case Nos. 6, 8, 11).

⁶⁷⁹ See Appendix I (Case No. 6).

least 23 civilians and damaged residential buildings, schools, medical facilities, a pedestrian bridge, and public gathering places. In **Case No. 8**,⁶⁸⁰ on October 17, 2022, Russian forces used approximately 28 Shahed-136 drones to target Kyiv, killing at least five civilians, including a 34-year-old pregnant woman and her husband. The drone strikes hit an office building, an apartment building in the historic downtown area, and several other residential buildings.

These attacks occurred during morning rush hour, demonstrating a strategy to maximize civilian harm. As the UN High Commissioner for Human Rights commented, "[t]he location and timing of the strikes – when people were commuting to work and taking children to school – is particularly shocking." The perpetrators acted with the necessary awareness that "the death(s) would occur in the ordinary course of events," given that a barrage of shelling targeted crowded civilian areas during rush hour. 682

There was no discernable military necessity to justify these attacks. Instead, they appear motivated by retaliatory intent towards civilians. In **Case No. 8**,⁶⁸³ one of the weapons bore the marking "for Belgorod," suggesting the attack was launched in retaliation for Ukraine's attacks on the Russian border city. In **Case No. 6**,⁶⁸⁴ Putin indicated that the attack was a "severe" response to Ukraine's attack on the Crimea bridge.

Russian forces routinely launch aerial attacks on residential areas at times of day when civilians are expected to be home. For example, in **Case No. 11,**⁶⁸⁵ Russian forces destroyed an apartment building and damaged nine others in Kramatorsk on February 1, 2023. Russia conducted the strike at 9:45 p.m., when civilians were expected to be home, and used an Iskander-K missile, known for its high precision and devastating effects on targeted areas. The strike killed four civilians, including a husband and wife, and a pensioner. As the Regional Governor stated, "this is the centre of the city. Only civilians live here."

Russian attacks on civilians and civilian objects were part of a widespread and systematic attack against the civilian population

As established in Section VI(a)(ii)(2), these aerial strikes are carried out pursuant to Russia's "total war" strategy and form part of a widespread and systematic attack aimed at spreading terror by damaging civilian infrastructure and harming civilians. For example, the Institute for the Study of War characterized Case No. 8,⁶⁸⁶ the October 17 attack on residential infrastructure, as "consistent with the broader pattern of Russian forces prioritizing creating psychological terror effects on Ukraine over achieving tangible battlefield effects." The Shahed-136 drone used in that attack can

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⁶⁸⁰ See Appendix I (Case No. 8).

⁶⁸¹ See Appendix I (Case No. 6).

⁶⁸² See Bemba, ICC TC III Judgment, ¶ 90 (Mar. 21, 2016) ("Thus, the Prosecution must prove beyond reasonable doubt that the perpetrators (ii) were aware that the death(s) would occur in the ordinary course of events"); Katanga, ICC TC II Judgment, ¶¶ 781–2 (Mar. 7, 2014) (stating that the prosecution must demonstrate that "the perpetrator acted deliberately or failed to act (1) in order to cause the death of one or more persons or (2) where he or she was aware that death would occur in the ordinary course of events").

⁶⁸³ See Appendix I (Case No. 8).

⁶⁸⁴ See Appendix I (Case No. 6).

⁶⁸⁵ See Appendix I (Case No. 11).

⁶⁸⁶ See Appendix I (Case No. 8).

⁶⁸⁷ Karolina Hird et.al., Russian Offensive Campaign Assessment, October 17, INST. FOR THE STUDY OF WAR (Oct. 17, 2022), https://perma.cc/8K4A-E3H2.

inflict significant damage on civilian infrastructure and result in numerous casualties, while having no military justification. This analysis suggests that Russian forces deploy Shahed-136 drones primarily to induce "psychological effects associated with targeting civilian areas instead of attempting to generate asymmetric operational effects by striking legitimate military and frontline targets in a concentrated manner." Similarly, Russian attacks on multi-story buildings using high payload weapons like the Iskander-K missile are intended to effectively remove safe havens for Ukrainian civilians. **Case No. 4**, the attack on a civilian dormitory with an Iskander-K missile on August 17, 2022, totally demolished the building and killed 19 civilians. Amnesty International's Secretary General described **Case No. 6** a pattern of "Russia launching multiple strikes that hit residential areas, city centres and civilian infrastructure. . . . The ultimate goal of today's attacks is to spread terror among the entire civilian population."

3. Russian officials possessed the requisite intent and knowledge that their conduct constituted part of a widespread or systematic attack against Ukraine's civilian population

As explained in Section IV(a)(i)(5), to establish the requisite *mens rea* for murder as a crime against humanity, Article 30 of the Rome Statute requires that the perpetrator act "with intent and knowledge." In line with ICC jurisprudence, and as analyzed above, Russian officials "meant to kill or to cause the death of one or more persons," or at minimum, "were aware that the death(s) would occur in the ordinary course of events" based on the systematic use of highly precise weapons to strike civilian objects in populated areas. The choice of weapon and lack of measures taken to minimize harm indicate an intent to cause civilian deaths.

Public statements from Russian officials and aligned figures explicitly advocating for the death of Ukrainians further demonstrate this intent. For instance, in a speech delivered on August 28, 2022, Russian mercenary Igor Mangushev asserted that Russia was "not at war with people of blood and flesh," but rather "with the idea of Ukraine as an anti-Russian state." Therefore, he argued, "[i]f [Russia] were at war with people, we could make peace with them. But we are at war with the idea, so all bearers of an idea must be killed." Similarly, Pavel Gubarev, a Russia-aligned leader in the DPR occupied Ukrainian territory, issued a warning to Ukrainians, whom he described

⁶⁹⁶ Id.

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⁶⁸⁸ *Id.* ("US military analyst Brett Friedman observed on October 17 that a Shahed-136's payload is 88 pounds of explosives, whereas a typical 155mm M795 artillery round carries 23.8 pounds of explosives, which means that one Shahed-136 drone carries about three shells worth of explosive material but without the consistent pattern of fragmentation").

⁶⁸⁹ Hird et.al., Russian Offensive Campaign Assessment, October 17. See also Karolina Hird et. al., Russian Offensive Campaign Assessment, October 6 (Oct. 6, 2022), https://perma.cc/7LJA-TPG7.

⁶⁹⁰ See Appendix I (Case No. 4).

⁶⁹¹ See Appendix I (Case No. 6).

⁶⁹² Russian Attacks on Kyiv and Cities Across Ukraine Are an Escalation of Aggression and Apparent Violations of Laws of War, AMNESTY INTERNATIONAL (Oct. 10, 2022).

⁶⁹³ Rome Statute, art. 30; see Katanga, ICC TC II Judgment, ¶ 780 (Mar. 7, 2014).

⁶⁹⁴ Bemba, ICC TC III Judgment, ¶ 90 (Mar. 21, 2016); see Katanga, ICC TC II Judgment, ¶¶ 776–7 (The standard of the occurrence of the consequences in the ordinary course of events means "virtual certainty" or "oblique intention" to show that his or her actions will bring the consequences in question). Id. at ¶¶ 781–2 (stating that the prosecution must demonstrate that "the perpetrator acted deliberately or failed to act (1) in order to cause the death of one or more persons or (2) where he or she was aware that death would occur in the ordinary course of events").

⁶⁹⁵ Apt, Russia's Eliminationist Rhetoric (Speech of Russian mercenary Igor Mangushev, translated by journalist Denys Kazanskyi, Aug. 28, 2022).

as "Russian people, possessed by the devil." He asserted: "We will kill as many of you as we have to . . . we can exterminate all of you until you understand that you're possessed and you have to be cured." These and similar statements illustrate the dehumanizing rhetoric used to demand the destruction of the Ukrainian people as a step towards victory, and are evidence of the necessary intent.

iii. Extermination

The crime against humanity of extermination encompasses both direct and indirect killings and requires that the killings constitute part of a "mass killing of members of a civilian population." The elements of the crime of extermination are as follows:

- 1) "The perpetrator killed one or more persons, including by inflicting conditions of life calculated to bring about the destruction of part of a population";
- 2) "The conduct constituted, or took place as part of, a mass killing of members of a civilian population";
- 3) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 4) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." ⁷⁰⁰

The Elements further specify that: (1) the conduct could be committed by different methods of killing, either directly or indirectly;⁷⁰¹ (2) the infliction of such conditions could include the deprivation of access to food and medicine;⁷⁰² and (3) the term "as part" in the second element includes the initial conduct in a mass killing.⁷⁰³ The "mass" qualification requires acts which contribute to the killing of a large number of individuals.⁷⁰⁴ However, it does not mandate a strict numerical approach with a certain number of victims, and has been found to apply across a wide range of casualty numbers.⁷⁰⁵ As such, the assessment must be made on a case-by-case basis, taking

⁶⁹⁹ Al Bashir, ICC PTC I Decision, ¶ 96 (Mar. 4, 2009).

⁶⁹⁷ *Id.* (speech by Russia-aligned leader in the DPR Pavel Gubarev on Oct. 11, 2022, translated by media monitor Julia Davis).

⁶⁹⁸ *Id*.

⁷⁰⁰ Elements, art. 7(1)(b). *See also* Kayishema & Ruzindana, ICTR-95-1-T, ICTR TC II Judgment, ¶ 147 (May 21, 1999) ("An actor may be guilty of extermination if he kills, or creates the conditions of life that kills, a single person providing the actor is aware that his act(s) or omission(s) forms part of a mass killing event").

⁷⁰¹ Elements, art. 7(1)(b), n. 8.

⁷⁰² *Id.* at art. 7(1)(b), n. 9.

⁷⁰³ *Id.* at art. 7(1)(b), n. 10.

⁷⁰⁴ See Prosecutor v. Eliézer Niyitegeka, ICTR-96-14-T, ICTR TC I Judgment, ¶ 450 (May 16, 2003) (citing Prosecutor v. Mitar Vasiljević, IT-98-32-T, ICTY TC II Judgment, ¶ 229 (Nov. 29, 2002)) ("The Trial Chamber therefore finds that the elements of the crime of "extermination" are 1. The material element of extermination consists of any one act or combination of acts which contributes to the killing of a large number of individuals").

⁷⁰⁵ Lukić & Lukić, IT-98-32/1-A, ICTY AC Judgment, ¶ 537 (Dec. 4, 2012).

into account the totality of circumstances and consequences. 706 Individual incidents of killings, as part of the "attack," may also accumulate to rise to the level of extermination. 707

The cases analyzed in this section point to two separate bases for the crime of extermination in the context of civilian infrastructure: (1) mass attacks on residential buildings and civilian infrastructure in densely populated urban areas, including but not limited to shopping centers, concert halls, and dormitories, which result in and suggest an intention to directly effectuate mass civilian casualties; and (2) targeted attacks on hospitals and medical centers, which not only directly result in civilian death, but also pose an indirect yet substantial risk of "inflicting conditions of life calculated to bring about the destruction of part of a population." As such, the following section will examine both categories of attacks to demonstrate Russian officials' responsibility for the crime of extermination.

1. Russian attacks on civilians and civilian objects in densely populated urban areas amount to the crime against humanity of extermination

Russian attacks on civilian infrastructure in Ukrainian cities, especially when employing high-precision weapons, likely amount to the crime against humanity of extermination. As noted above, to qualify as extermination, a perpetrator's act—which would presumably encompass the planning and execution of each strike—must constitute part of "a mass killing of members of a civilian population." Importantly, "[t]he term 'mass' which may be understood to mean 'large scale,' does not mandate a numerical imperative but may be determined on a case-by-case basis using a common sense approach."

Recent reports from Ukrainian and UN authorities estimate more than 12,000 Ukrainian civilian fatalities during the war.⁷¹¹ The London-based NGO Action on Armed Violence ("AOAV") recorded a total of 27,217 civilian casualties, inclusive of both deaths and injuries, as of September

⁷⁰⁹ Rome Statute, art. 7(1)(b).

⁷⁰⁶ Co-Prosecutors v. Khieu Samphân and Nuon Chea, 002/19-09-2007/ECCC/TC, ECCC TC Judgment, ¶ 2862 (Nov. 16, 2018) ("The Chamber has assessed their evidence on a case-by-case basis and in light of the totality of evidence before it"). See also id. at ¶¶ 655–7 (the mens rea of extermination requires direct intent to kill (on a large scale), while the actus reus of extermination consists of an act, omission or combination of each that results in the death of persons on a massive scale).

⁷⁰⁷ Prosecutor v. Vujadin Popović et al., IT-05-88-T, ICTY TC II Judgment, ¶ 805 (Jun. 10, 2010) ("In light of the temporal and geographical proximity of the killings, the similarities between them and the organized and coordinated manner in which the Bosnian Serb Forces conducted them, the Trial Chamber finds that they formed part of a single operation. It is clear from evidence that the Bosnian Serb Forces intended to kill Bosnian Muslim able-bodied males from Srebrenica on a massive scale").

⁷⁰⁸ Elements, art. 7(1)(b).

⁷¹⁰ Kayishema & Ruzindana, ICTR TC II Judgment, ¶ 145 (May 21, 1999).

⁷¹¹ Only the Establishment of a Just Peace and Holding the Aggressor to Account will Stop Russia's War Crimes in Ukraine – a Separate Discussion on the Humanitarian Dimension of the War Was Held at the Peace Summit, PRESIDENT OF UKRAINE OFFICIAL WEBSITE (Jun. 17, 2024), https://perma.cc/LEW3-BU53; Norwegian Refugee Council, Destruction and Displacement in Ukraine 5 (Mar. 2023), https://perma.cc/W55T-NYHH (In February 2024, although over 10,200 civilians have been confirmed to be killed and more than 19,300 injured, due to under reporting, "it is likely the actual number of those killed and injured is significantly higher"); UN Hum. Rights Off. of the High Commissioner, 3 Years since the full-scale invasion of Ukraine (reporting at least 12,654 civilians have been killed since the full-scale invasion in February 2022).

2024. The group also reported that 82% of these casualties occurred in "towns and cities under attack," with urban areas bearing "the brunt of the conflict," where strikes and shelling have "devastated civilian infrastructure, from homes and schools to hospitals and markets." AOAV's data "underscores the extreme danger" civilians face in densely populated areas, particularly as urban warfare has left non-combatants "with few places to escape." Cities under siege have effectively become "death zones" for Ukraine's civilian population. Sa such, the context of the underlying armed conflict between Russia and Ukraine, in which Russian forces have been responsible for the deaths of many civilians, particularly in urban areas, satisfies the contextual element for extermination.

A number of attacks detailed in this Report provide compelling evidence to support charges of the crime of extermination, particularly:⁷¹⁶

- Case No. 3: Attack on Civilian Infrastructure in the center of Vinnytsia (July 14, 2022).
- Case No. 4: Attack on Civilian Dormitory in Kharkiv (August 17, 2022),
- Case No. 6: Attack on Civilian Infrastructure in Kyiv (October 10, 2022).
- Case No. 22: Attack on Hypermarket in Kharkiv (May 25, 2024).

Russian forces conducted these aerial attacks on commercial or public spaces during daytime hours when civilians are likely to be present, and also at night on dormitories and homes when civilians are typically sleeping. As noted above, although a numerical threshold of deaths is not required to prove extermination, these attacks often result in high rates of civilian casualties which, when aggregated, would constitute a substantial, or mass, number of deaths.

Each of these four attacks targeted densely populated urban areas and resulted in a high number of civilian casualties. **Case No. 3**,⁷¹⁷ which resulted in 23 confirmed civilian deaths and over 100 injured, occurred at around 11:00 a.m., a time when civilians would likely be present in the city center. Using high-precision Kalibr 3M-14 cruise missiles, Russian forces attacked civilian infrastructure including a concert hall, a parking lot, a medical building, offices, stores, and residential buildings—all of which were foreseeably filled with civilians during the work week. Similarly, in **Case No. 6**, Russian forces launched a massive morning missile attack that killed at least 23 civilians. In Kyiv alone, the airstrikes killed seven people and destroyed 45 residential buildings, three schools, a kindergarten, and the building that houses the German consulate in bustling downtown area. In **Case No. 22**, Russian forces struck a busy hypermarket at 4:00 p.m., a time when up to 200 civilians were reportedly inside. Dropping two UMPDB D30-SN bombs from a SU-34 aircraft, Russia's strike caused a massive fire which took 16 hours to extinguish, destroying the entire market. That airstrike killed 19 civilians, including women and children, and injured 54

⁷¹⁴ *Id*.

⁷¹² Civilian Casualties in Ukraine Surge by 28% Over Six Months, ACTION ON ARMED VIOLENCE (AOAV) (Sept. 20, 2024), https://perma.cc/GD5S-YZUM.

⁷¹³ *Id*.

⁷¹⁵ *Id*.

⁷¹⁶ See Appendix I (Case Nos. 3, 4, 6, 22).

⁷¹⁷ See Appendix I (Case No. 3).

⁷¹⁸ July 14, 2022 was a Thursday.

⁷¹⁹ See Appendix I (Case No. 6).

⁷²⁰ See Appendix I (Case No. 22).

others. In **Case No. 4**,⁷²¹ Russian forces struck a civilian dormitory at night, when most residents were likely to be at home and asleep, which necessarily resulted in a high number of deaths. Russian forces deployed an Iskander missile, a highly destructive and precise weapon that completely destroyed the building and resulted in a large-scale fire. Reports indicate that the attack killed 19 civilians and injured an additional 22 civilians. No legitimate military targets were reported or identified near the areas struck in each of these attacks.

a. Russian officials possessed the requisite intent and knowledge that their conduct constituted part of a widespread and systematic attack against Ukraine's civilian population

As for *mens rea*, Article 7(1)(b) of the Elements requires that the accused "knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." Additionally, Article 30 of the Rome Statute stipulates that the material elements of extermination were perpetrated "with intent and knowledge", which may established in a number of ways. The use of high-precision weaponry, including Kalibr missiles, UMPDB D30-SN bombs, and Iskander missiles, strongly indicates that the perpetrators intentionally targeted these specific areas. The timing of these strikes—often during daytime hours in busy locations where civilians were most likely to be present, or at night when civilians were likely sleeping in their homes—combined with the systematic nature of the attacks⁷²⁴ and the absence of legitimate military objects nearby, suggest a clear intent to inflict high civilian casualties. This pattern points to an underlying objective not only to target densely populated urban areas but also to cause substantial harm to the civilian population, resulting in what can be characterized as mass killings.

Statements by high-ranking Russian political leaders indicate, at the very least, an intent to target and destroy densely populated urban areas. Dmitry Medvedev, Deputy Chairman of Russia's Security Council, posted on Telegram on August 19, 2023: "We must not stop until the current inherently terrorist Ukrainian state is completely dismantled. It must be destroyed completely. Or rather, so that not even ashes remain from it. So that this abomination can never, under any circumstances, be reborn." Vladislav Shurygin, a Russian military expert, spoke on Russian State television on March 27, 2024, declaring: "[Ukrainians] will face total destruction, where their wives, their kids, mothers and fathers live. Where the entire pack lives. . . . You can't treat them in any other way. These are animals. They aren't capable of understanding anything human." On April 4, 2023, Vladimir Solovyov, a pro-Kremlin presenter, made a number of statements on Russian State television encouraging the destruction of specific Ukrainian cities:

Let's destroy the city of Kyiv, to hell with it. . . . It should be destroyed, as well as Kharkiv, Odesa, Mykolaiv, Ivano-Frankivsk and Lviv. This is it, jokes are over. You can fight the unclean only with a holy fire falling from the skies, fire and brimstone,

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⁷²¹ See Appendix I (Case No. 4).

⁷²² Elements, art. 7(1)(b).

⁷²³ Rome Statute, art. 30.

⁷²⁴ See AOAV, Civilian Casualties in Ukraine (As evidenced by AOAV's finding that 82% of strikes occurred in dense urban areas).

⁷²⁵ Apt, Russia's Eliminationist Rhetoric (citing the Telegram post of Dmitry Medvedev on Aug. 19, 2023).

⁷²⁶ Russian Media Monitor, *Vladislav Shurygin says Ukrainians are animals*, YOUTUBE (Nov. 11, 2024), https://perma.cc/9PPJ-4ESJ.

like Sodom and Gomorrah. . . . The Lord has chosen us as the weapon of his judgment. ⁷²⁷

Taken together, such statements demonstrate that Russian attacks on densely populated urban areas constitute mass killings of members of a civilian population, and were carried out with knowledge or intent to be part of a widespread or systematic attack directed against civilian population. Therefore, these attacks may amount to the crime against humanity of extermination.

2. Russian attacks on hospitals and medical centers amount to the crime against humanity of extermination

The crime of extermination also includes the indirect perpetration of killings by "inflicting conditions of life calculated to bring about the destruction of part of a population." Notably, such "conditions of life" can be created by withholding basic necessities to sustain life or by preventing proper medical care. Accordingly, Russian strikes on hospitals, which have occurred at an alarmingly high rate, are evidence of Russia's intention to exterminate the civilian population through the indirect harms caused by the systematic destruction of medical infrastructure. Ad hoc tribunal jurisprudence has found that an individual can be convicted for extermination exclusively on the basis of planning to create deadly conditions, provided that a nexus between the perpetrator's planning and resulting killings can be sufficiently demonstrated.

According to the WHO data from August 2024, Russian forces have carried out a total of 1,940 attacks on health care facilities in Ukraine since the start of the full-scale war. These attacks led to numerous deaths, as patients and doctors operate under the assumption of humanitarian protection and are not prepared or able to evacuate on a moment's notice. For example, in July 2024, Russia forces attacked multiple Ukrainian cities, killing at least 42 civilians and injured at least 190 more. As part of this attack, Russia struck one of the largest children's hospitals in Ukraine, Kyiv Okhmatdyt hospital, with a high-precision Kh-101 missile. The attack damaged intensive care units and the oncology and surgical wings, and completely destroyed the toxicology and traumatology departments, forcing hundreds of children, including those undergoing dialysis treatment, to evacuate. Similarly, in September 2024, two Russian drones struck a hospital in the city of Sumy, killing at least nine civilians and injuring 21 civilians. That strike was the third Russian attack impacting medical facilities in the city within six weeks. Russian attacks on medical

⁷²⁹ Kayishema & Ruzindana, ICTR TC II Judgment, ¶ 146 (May 21, 1999).

⁷²⁷ Russian Media Monitor, *Propagandist claims that Russia is a weapon of God's judgment*, YOUTUBE (Nov. 11, 2024), https://perma.cc/6SL5-CJGF. *See also* the following statement: "If we'd taken Kharkiv, it's obvious that their main logistics and supply centre is there! Wipe it off the face of the [...] earth if we have to! Warn the civilians, tell them 'You've got 24, 48 hours!' After that we begin to destroy the city block by block." For a translated version, *see* Franciss Scarr (@francis_scarr), X (Oct. 24, 2022), https://perma.cc/2FJU-BFG3.

⁷²⁸ Elements, art. 7(1)(b).

⁷³¹ Grim milestone on World Humanitarian Day: WHO records 1940 attacks on health care in Ukraine since start of full-scale war, WORLD HEALTH ORGANIZATION (Aug. 19, 2024).

⁷³² Russia's July 8 Attack on a Children's Hospital in Ukraine, HUMAN RIGHTS WATCH (Jul. 11, 2024), https://perma.cc/KA8L-RX5F; Type of Russian missile that struck Kyiv children's hospital uses western components, FINANCIAL TIMES (Jul. 9, 2024), https://perma.cc/7MAS-VT46.

⁷³³ UN Human Rights Monitors Deplore Deadly Attacks on Medical Facilities in North-Eastern Ukraine, UNITED NATIONS IN UKRAINE (Sept. 28, 2024), https://perma.cc/Q3KN-8EFW. ⁷³⁴ Id.

centers across Ukraine have killed hundreds of Ukrainian medical professionals and resulted in "billions of dollars' worth of damage to Ukrainian health care facilities." ⁷³⁵

Several attacks analyzed in this Report illustrate how such attacks meet the thresholds for the crime against humanity of extermination. For example, in **Case No. 19**,⁷³⁶ Russian forces attacked a hospital and emergency medical station in Beryslav. That attack caused extensive damage to the Beryslav Central District Hospital and ambulances, and injured three medical workers. At the time of attack, in the Kherson region alone, Russian forces had completely destroyed 24 medical facilities, damaging at least 154 more, ⁷³⁷ with over 1,000 attacks on health care facilities recorded across Ukraine between February 2022 and October 2023 alone. ⁷³⁸ Therefore, the conditions of life inflicted by Russian attacks on medical facilities likely satisfies the contextual element for extermination. ⁷³⁹

The crime of extermination also encompasses indirect killings through "the inflict[ion of] conditions of life" which result in the "destruction of part of a population." It is likely that Russia's attack on medical facilities in Beryslav had a substantial effect on the civilian population, given that the Beryslav Central District Hospital was the only medical facility for tens of thousands of people living in the frontline region under constant Russian shelling. As a result of the attack, the hospital ceased functioning, likely leading to deaths of civilians who would previously have sought medical treatment at this facility. Future investigation may uncover deaths indirectly resulting from said attack—or any other attacks on Ukraine's medical sector—that would potentially provide the necessary link to satisfy the objective element for extermination. Medical facilities were also targeted in the mass Russian attacks against Vinnytsia and Kharkiv in **Case Nos. 3** and **20**, and **20**, inevitably straining the already overwhelmed healthcare systems in those cities.

To prove the crime of extermination, even "a single killing" is sufficient, "if it occurred in the broader context of a mass killing, and if the perpetrator acted with knowledge of this context." Existing independent investigations, such as that conducted by PHR, have demonstrated the reverberating effects of the attacks on Ukraine's health care system. A 2024 PHR publication found that Russia's persistent attacks caused blackouts which "disrupted and delayed surgeries, harmed vital infrastructure, and placed immense strain on Ukraine's already overburdened medical

737 MO3 @mozofficial, TELEGRAM (Oct. 27, 2024), https://perma.cc/OV3U-PIMZ.

⁷³⁵ Olha Fokaf, *Hospital Bombing Was Latest Act in Russia's War on Ukrainian Healthcare*, ATLANTIC COUNCIL (Jul. 11, 2024), https://perma.cc/2XS4-CJP3.

⁷³⁶ See Appendix I (Case No. 19).

⁷³⁸ On the Russian Federation's Ongoing Aggression Against Ukraine, U.S. MISSION OSCE (Oct. 6, 2023), https://perma.cc/CVL4-SSMG.

⁷³⁹ Kayishema & Ruzindana, ICTR TC II Judgment, ¶ 145 (May 21, 1999).

⁷⁴⁰ Elements, art. 7(1)(b)(1).

⁷⁴¹ See Appendix I (Case No. 19). See also MSF Ukraine (@MSF_Ukraine), X (Oct. 6, 2023), https://perma.cc/U7MG-297Z; Russian army continues to terrorize Kherson region: destroyed residential buildings, agricultural machinery, three children injured, MVS GOV. (Mar. 7, 2023), https://perma.cc/JM6H-U69X; Nick Paton Walsh et al., Kherson was liberated over a year ago. Now the residents who returned are battered by Russia's advancing forces, CNN (Feb. 23, 2024), https://perma.cc/4JWX-Z57Y.

⁷⁴²Id. See also Margarita Dotsenko, After Russian Airstrike, Hospital in Beryslav, Kherson Region, Ceases Operations, MOST (Oct. 7, 2023), https://perma.cc/7T6Q-C8KJ.

⁷⁴³ See Appendix I (Case Nos. 3, 20).

⁷⁴⁴ Elements, art. 7(1)(b) (Elements 3 and 4). *See also* Kayishema & Ruzindana, ICTR TC II Judgment, ¶¶ 146−7 (May 21, 1999).

personnel."⁷⁴⁵ On top of resource constraints and mounting stress, health care workers reported frequently being forced to "transport vulnerable and ailing patients to shelters . . . in some cases to insufficient shelter" following an air raid siren. ⁷⁴⁶ These last-minute, drastic adjustments can have life-threatening outcomes for the civilian population, on top of the deleterious, long-term impact of an overburdened and decimated health care system.

a. Russian officials possessed the requisite intent and knowledge that their conduct constituted part of a widespread and systematic attack against Ukraine's civilian population

To meet the requisite *mens rea* for the crime of extermination, the perpetrator must possess both "intent and knowledge" as to the material elements during the commission of the crime. Under IHL, hospitals are granted special protections, which may only be lifted under narrowly defined conditions not met in the attack on Beryslav. With respect that strike, it is notable that Russian forces attacked the city hours prior to returning with an SU-34 jet to directly drop a highly destructive KAB bomb on the hospital. This sequence of actions and modalities reveals Russia's deliberate intent to target the hospital.

Given the double-tap nature of the strike on Beryslav, and the fact that it targeted a hospital, knowledge that "death would occur in the ordinary course of events" can be reasonably inferred to satisfy the requisite *mens rea* articulated by Article 30 of the Rome Statute. The first attack on the city would presumably lead to deaths or injuries, with civilians who required medical treatment being taken to Beryslav Central District Hospital. In returning hours later to specifically strike the hospital, Russian forces showed an intent to finish the job and kill civilians who had been injured but not eliminated in the first round of attacks. Russian strikes on medical facilities, as in Beryslav, are thus a form of "weaponizing the provision of medical services" as part of a "campaign aimed at breaking Ukrainian resistance," with direct effects on the most vulnerable members of Ukraine's civilian population, the sick and injured. Intent to kill may also be reasonably discerned from Russia's systematic targeting of the Ukrainian medical sector more broadly. Potentially foreseeable civilian deaths would inevitably result from Russia's decimation of Ukraine's medical facilities, insofar as said infrastructure is essential to ensuring the safety and wellbeing of the Ukrainian civilian population, particularly during an armed conflict.

⁷⁴⁵ PHR & TH, Health Care in the Dark, at 47.

⁷⁴⁶ I.d

⁷⁴⁷ Rome Statute, art. 30; The ICTR jurisprudence presents an alternative, expansive interpretation of the requisite mental element for extermination. *See* Kayishema & Ruzindana, ICTR TC II Judgment, ¶ 144 (May 21, 1999) (ICTR affirmed that for a perpetrator's acts to amount to extermination, he or she must have acted "having intended the killing, or being reckless, or grossly negligent as to whether the killing would result and being aware that his act(s) or omission(s) forms part of a mass killing event." Systematic targeting of the medical sector in the Ukrainian context may be inherently reckless as to the foreseeable consequence of resulting deaths). Nonetheless, as discussed above, the ICC imposes a different *mens rea* standard (intent and knowledge).

⁷⁴⁸ See ICRC, International Humanitarian Law Database: Customary IHL Rule 28, https://perma.cc/BKJ9-4PNH.

⁷⁴⁹ Rome Statute, art. 30(2)(b).

⁷⁵⁰ Fokaf, Hospital Bombing.

⁷⁵¹ See PHR & TH, Health Care in the Dark, at 48 ("Accumulating damage to health care as a result of these attacks [...] is an eminently foreseeable result of a campaign that has damaged or destroyed nearly all energy-producing infrastructure in Ukraine. Because attacks on energy infrastructure resulted in foreseeable damage to health care and can only have had minimal anticipated military advantage, in cumulative form they likely violate the principle of proportionality").

In sum, the attack on the hospital in Beryslav was carried out with deliberate intent and knowledge as a part of a widespread and systematic attack on health care infrastructure as a civilian object. Therefore, this attack may amount to the crime against humanity of extermination.

iv. Persecution

The crime against humanity of persecution constitutes the "intentional and severe deprivation of fundamental rights contrary to international law by reason of identity of the group or collectivity."⁷⁵² Article 7(1)(h) of the Rome Statute sets forth the following material and mental elements of persecution:

- 1) "The perpetrator severely deprived, contrary to international law, one or more persons of fundamental rights";
- 2) "The perpetrator targeted such person or persons by reason of the identity of a group or collectivity or targeted the group or collectivity as such";
- 3) "Such targeting was based on political, racial, national, ethnic, cultural, religious, gender as defined in article 7, paragraph 3, of the Statute, or other grounds that are universally recognized as impermissible under international law";
- 4) "The conduct was committed in connection with any act referred to in article 7, paragraph 1, of the Statute or any crime within the jurisdiction of the Court";
- 5) "The conduct was committed as part of a widespread or systematic attack directed against a civilian population"; and
- 6) "The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack directed against a civilian population." ⁷⁵³

Given that Sections VI(a)(i)(1) and VI(a)(i)(4) examined the contextual elements for crimes against humanity and established the satisfaction of the fifth and sixth elements, respectively, this section will analyze the other four elements of persecution.

1. Russian officials' conduct was committed "in connection with" the requisite underlying persecutory acts

Under Article 7(1)(h)(4), to amount to persecution, the alleged persecutory conduct must be "committed in connection with" other enumerated acts in Article 7. The underlying acts must be contrary to international law to constitute a "fundamental deprivation."⁷⁵⁴ Further, the underlying acts must meet a "level of severity" that is analogous to other crimes against humanity, such as murder, serious injury, or rape.⁷⁵⁵

As this Report demonstrates, Russian attacks on civilians and civilian objects constitute multiple acts enumerated in Article 7 of the Rome Statute, notably murder⁷⁵⁶ and extermination.⁷⁵⁷

⁷⁵² Rome Statute, art. 7(2)(g).

⁷⁵³ Elements, art. 7(1)(h).

⁷⁵⁴ Ntaganda, ICC TC VI Judgment, ¶ 993 (Jul. 8, 2019)

⁷⁵⁵ *Id.* at ¶ 994.

⁷⁵⁶ See Section VI(a)(ii).

⁷⁵⁷ See Section VI(a)(iii).

The ICC has recognized that the commission of any act amounting to a crime against humanity will result in a "deprivation of fundamental rights" and trigger the threshold required for Article 7(1)(h).⁷⁵⁸ As such, the crimes against humanity of murder and extermination may constitute the underlying acts of persecution, provided that the remaining material and mental elements are met. Furthermore, the murder of children, who are especially vulnerable, may heighten the severity of the crime.⁷⁵⁹

This Report also analyzes Russia's attacks on civilians and civilian objects as war crimes, including the war crimes of intentionally directing attacks against civilians and civilian objects, and intentionally using starvation of civilians as a weapon of warfare. Each of these war crimes is within the jurisdiction of the ICC. Therefore, it is evident that persecutory acts examined in this section were committed "in connection with" other acts within the ICC's jurisdiction and, as such, can be prosecuted by the ICC or the prosecuting authorities in Ukraine, as a State party to the Rome Statute. The statute of the s

In addition to the aforementioned underlying acts, the ICC and *ad hoc* tribunals have recognized that destruction of property may constitute an underlying act that gives rise to the crime against humanity of persecution. The ICTY, for instance, stipulated that "so long as the victimized persons were specially selected on grounds linked to their belonging to a particular community," attacks on property can constitute the deprivation of a fundamental right in contravention of international law. In accordance with *ad hoc* tribunal jurisprudence, in *Ntaganda* the ICC Trial Chamber characterized "the destruction and looting of property, in the situation where the civilian population had to flee," as acts of plunder and murder that deprived civilians of their fundamental rights. Attacks against civilians and civilian objects in densely populated areas similarly comprise acts of destruction of property that occur in conjunction with murder. The determination of severity, a factual inquiry grounded in the "context" and "cumulative effect" of acts "taken alone or in conjunction with other acts," underscores that Russia's targeting of civilian populations—characterized by severe property destruction and the killings of civilians—amounts to a deprivation of fundamental rights.

⁷⁵⁸ Rome Statute, arts. 7(1)(c), (h); *see* Ntaganda, ICC TC VI Judgment, ¶ 1023 (Jul. 8, 2019); Prosecutor v. Momćilo Krajišnik, IT-00-39-T, ICTY TC I Judgment, ¶ 744 (Sept. 27, 2006) ("An act of murder, carried out on discriminatory grounds, and for which the general elements of crimes against humanity are fulfilled, constitutes the crime of persecution").

persecution").

⁷⁵⁹ Krajišnik, ICTY TC I Judgment, ¶ 1149 (Sept. 27, 2006) ("The Chamber may also take into account the special vulnerability of some victims, such as children, the elderly, the disabled or wounded, and those held in confinement").

⁷⁶⁰ See Section VI(b).

⁷⁶¹ See International Criminal Court, Situation in Ukraine, https://perma.cc/8C3A-MN2X (last visited Mar. 7, 2025).
⁷⁶² Ntaganda, ICC TC VI Judgment, ¶ 999 (Jul. 8, 2019); Blaškić, ICTY TC I Judgment, ¶ 233 (Mar. 3, 2000); Blaškić, ICTY AC Judgment, ¶ 137 (Jul. 29, 2004) (In the case law, such destruction has been characterized as "the destruction and lotting of property," "wanton destruction of cities, towns, or villages," and the "plunder of public or private property").

⁷⁶³ Blaškić, ICTY TC I Judgment, ¶ 233 (Mar. 3, 2000); Blaškić, ICTY AC Judgment, ¶ 137 (Jul. 29, 2004); Krajišnik, ICTY TC I Judgment, ¶¶ 778–9 (Sept. 27, 2006) (finding that "[T]he Chamber finds that an act of destruction of property that has a severe impact on the victim, carried out on discriminatory grounds, and for which the general elements of crimes against humanity are fulfilled, constitutes the crime of persecution" or in the contrary if the act does not have a severe impact on the victim, may still constitute persecution, "when considered in conjunction with other acts").

⁷⁶⁴ Ntaganda, ICC TC VI Judgment, ¶ 999 (Jul. 8, 2019).

⁷⁶⁵ *Id.* at ¶¶ 992, 1008.

Some case law establishes a higher evidentiary bar for proving persecution when the underlying act is the destruction of property. For example, in *Kordić & Čerkez*, the ICTY found that the destruction of property can constitute persecution if it has the "cumulative effect" of displacing civilians on discriminatory grounds. Here, the cumulative effect of Russia's attacks meets this evidentiary bar, as the destruction of property has resulted in the displacement of millions of Ukrainian civilians.

Mass civilian displacement from Kharkiv, coupled with evidence of Russian targeting of civilian infrastructure in the city, indicates that the following attacks on residential properties qualify as acts of persecution:⁷⁶⁹

- Case No. 4: Attack on civilian dormitory in Kharkiv (August 17, 2022) The Russian military targeted a residential three-story dormitory in the Saltivskyi District of Kharkiv, housing over 30 civilians. The attack resulted in a large-scale fire and, ultimately, the complete destruction of the building. Given the nature and extent of the damage, it is reasonable to infer that residents were forcibly displaced from their homes.
- Case No. 20: Attack against residential area in Kharkiv (March 27, 2024) This strike targeted a school, a five-story apartment building, and a four-story apartment building, and inflicted substantial damage on each structure. According to the National Police of Ukraine, the attacks on the residential apartment buildings necessitated the evacuation of residents, who were subsequently relocated to temporary housing. This attack formed part of a broader Russian offensive against at least 20 settlements in the Kharkiv region, further damaging several private houses, residential apartment buildings, and a kindergarten.
- Case No. 21: Attack against civilian infrastructure in Kharkiv (May 22, 2024) This Russian attack targeted the Shevchenkivskyi and Kholodnohirskyi Districts of Kharkiv. The strikes caused significant property damage to civilian homes and property, which notably threatens housing security for Kharkiv residents.

These attacks demonstrate a pattern of property destruction that had the "cumulative effect" of forcing residents to flee their homes and communities. The widespread targeting of civilian infrastructure in Kharkiv, coupled with the resulting displacement of residents, substantiate the conclusion that the destruction of property in these aerial attacks contributed to the displacement of civilians from their homes, and likely from the Kharkiv region altogether. While this analysis focuses on Russian attacks against Kharkiv due to its particularly high number of IDPs, it is reasonable to

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⁷⁶⁶ See, e.g., Kordić & Čerkez, ICTY TC I Judgment, ¶ 205 (Feb. 26, 2001). See also Ntaganda, ICC TC VI Judgment, ¶ 999 (Jul. 8, 2019) (noting that "the civilian population had to flee" as a factor that "compounded" the deprivation of fundamental rights but leaving open whether that it necessary element in the context of the destruction of property to constitute an underlying act of persecution).

⁷⁶⁷ Kordić & Čerkez, ICTY TC I Judgment, ¶ 205 (Feb. 26, 2001) (*quoting* Kupreškić, ICTY TC Judgment, ¶ 634 (Jan. 14, 2000)). If the ultimate aim of persecution is the "removal of those persons from society in which they live alongside the perpetrators, or eventually from humanity itself," the widespread or systematic, discriminatory, destruction of individuals' homes and means of livelihood would surely result in such removal from society. In the context of an overall campaign of persecution, rendering a people homeless and with no means of economic support may be the method used to "coerce, intimidate, terrorise and forcibly transfer ... civilians from their homes and villages." *Id.*

⁷⁶⁸ See Ntaganda, ICC TC VI Judgment, ¶ 999 (Jul. 8, 2019). According to the International Organization for Migration, as of December 2023, there were more than three million internally displaced persons ("IDPs") in Ukraine, with IDPs from Kharkiv Oblast making up the largest share. See International Organization for Migration (IOM), Ukraine Internal Displacement Report 3 (2023), https://perma.cc/9YSP-NY3F.

⁷⁶⁹ See Appendix I (Case Nos. 4, 20, 21).

infer based on the large number of IDPs throughout Ukraine that similar attacks on property in other regions have resulted in comparable patterns of displacement. Therefore, Russia's widespread destruction of property, combined with the resulting displacement of civilians, amounts to the deprivation of Ukrainian civilians' fundamental rights and constitutes an underlying persecutory act pursuant to international law.

The attacks examined in this section were therefore unequivocally committed "in connection with" other acts falling within the ICC's jurisdiction. Moreover, destruction of property as a common pattern across numerous attacks likely meets the requisite severity threshold for persecution pursuant to ICC jurisprudence. Hence, the analysis strongly supports the conclusion that the fourth element of Article 7(1)(h) of the Rome Statute is satisfied.

2. Russian attacks severely deprived Ukraine's civilian population of fundamental rights contrary to international law

Establishing that Russia's attacks "severely deprived" Ukrainian civilians of their "fundamental rights" pursuant to Article 7(1)(h)(1) first requires understanding how rights are designated as "fundamental" under international law. The ICC has previously noted that it considers international standards, including but not limited to those set forth in international human rights law ("IHRL") and IHL treaty and customary law, to identify rights whose "severe infringement may constitute persecution."⁷⁷⁰ In Ntaganda, for example, the Trial Chamber pointed to the Universal Declaration of Human Rights and two UN Covenants as evidence that various rights, including "the right to life, liberty, and security of the person," are fundamental. 771 This assessment is generally made on a case-by-case basis, examining the acts "in their context and with consideration to their cumulative effect."772

In line with the ICC's approach, this subsection establishes that Russia's attacks on civilians and civilian objects deprived Ukraine's civilian population of the following fundamental rights, as defined by various international human rights instruments, contrary to international law: the right to life, the right to education, the right to take part in cultural life, and the right to health.

a. Right to life

The murder of civilians, discussed further in Section VI(a)(ii), constitutes an "intentional and severe deprivation" of the right to life of Ukrainians, amounting to a "gross or blatant denial" of fundamental rights." The right to life is universally recognized by numerous human rights instruments and the international community, 774 and explicitly protected under the International Covenant on Civil and Political Rights ("ICCPR"), which both Ukraine and Russia have ratified.⁷⁷⁵ Article 6 of the ICCPR affirms that "the inherent right to life . . . shall be protected by law," and that

⁷⁷⁰ Ntaganda, ICC TC VI Judgment, ¶ 991 (Jul. 8, 2019)

⁷⁷¹ *Id*.

⁷⁷² *Id.* at ¶ 992.

⁷⁷³ Ntaganda, ICC TC VI Judgment, ¶¶ 991–2 (Jul. 8, 2019) (citing Kupreškić, ICTY TC Judgment, ¶¶ 615, 620–2 (Jan. 14, 2000); Situation in the Republic of Burundi, ICC-01/17-X, ICC PTC I Decision, ¶ 132 (Oct. 25, 2017)). See also Blaškić, ICTY TC I Judgment, ¶ 220 (Mar. 3, 2000).

⁷⁷⁴ See, e.g., Universal Declaration of Human Rights, art. 3 (stating that "[e] veryone has the right to life, liberty and security of person"); International Covenant on Civil and Political Rights, art. 6.

⁷⁷⁵ See, e.g., Universal Declaration of Human Rights, art. 3; International Covenant on Civil and Political Rights, art. 6.

"[n]o one shall be arbitrarily deprived of []life." Further, the ICC has recognized the right to life as fundamental. In *Ntaganda*, the ICC Trial Chamber found that murdered civilians "were severely deprived of their fundamental rights, including their right to life . . . [a] right . . . that they enjoyed – without doubt – pursuant to international law." Furthermore, IHL has historically recognized the impermissibility of targeting civilians, such that these acts contravene international law. To Crucially, as the *lex specialis* governing armed conflict, IHL applies even as IHRL applies concurrently. While IHL may tolerate some incidental civilian harm, the deliberate targeting of civilians remains unequivocally illegal.

The following attacks, each of which resulted in civilian fatalities, represent a sample of Russia's "intentional and severe deprivation of fundamental rights contrary to international law," particularly the right to life: **Case Nos. 2**, 781 **3**, 782 **4**, 783 **8**, 784 **11**, 785 **15**, 786 **16**, 787 **17**, 788 **20**, 789 and **22**. 790 As will be established in Section VI(b)(i), the foregoing attacks amount to the war crime of intentionally directing attacks against civilians and civilian objects. Hence, the extensive resulting civilian casualties show that Russia's attacks against populated civilian areas constitute a grave infringement on Ukrainian civilians' fundamental right to life "contrary to international law," and reinforce that these persecutory acts were committed "in connection with" the underlying crime of murder, as required by the Article 7(1)(h).

b. Right to education

Russia's destruction of various educational institutions infringes on Ukrainian civilians' right to education, protected by Article 26 of the UDHR, ⁷⁹¹ Article 28 of the Convention on the Rights of the Child, ⁷⁹² and Article 13(1) of the International Covenant on Economic Social and Cultural Rights ("ICESCR"), which has been ratified by both Ukraine and Russia. ⁷⁹³ Concurrently, a pattern of

⁷⁷⁹ AP I, art. 51(2).

⁷⁷⁶ International Covenant on Civil and Political Rights, art. 6.

⁷⁷⁷ See, e.g., Ntaganda, ICC TC VI Judgment, ¶ 999 (Jul. 8, 2019).

⁷⁷⁸ Id.

⁷⁸⁰ International Court of Justice (ICJ), Legality of Threat or Use of Nuclear Weapons, https://www.icj-cij.org/case/95.

⁷⁸¹ This attack resulted in two civilian casualties, including a teenager who was training on a sports field with her father at the time of the strike, and injured three others. *See* Appendix I (Case No. 2).

⁷⁸² Kalibr 3M-14 strikes on Vinnytsia's city center resulted in the deaths of 23 civilians and injured 100 others. *See* Appendix I (Case No. 3).

⁷⁸³ This attack on a three-story dormitory in the Saltiyskyi District of Kharkiv, housing elderly residents, children, and people with disabilities, killed 19 people and injured 22 others. *See* Appendix I (Case No. 4).

⁷⁸⁴ This Shahed drone attack killed five civilians, including a 34-year-old pregnant woman and her husband. *See* Appendix I (Case No. 8).

⁷⁸⁵ This Iskander-K missile attack on Kramatorsk resulted in the deaths of four civilians, including a husband and wife, and a pensioner, and injured 18 others. *See* Appendix I (Case No. 11).

 $^{^{786}}$ This attack killed at least nine people, including a 40-year-old man and an emergency ambulance driver, and injured 29 more, some of whom required hospitalization. *See* Appendix I (Case No. 15).

⁷⁸⁷ This attack on the settlement of Bilopillia, Sumy Oblast killed two civilians, a police officer, and a school security guard, and left ten other civilians injured. *See* Appendix I (Case No. 16).

⁷⁸⁸ This attack on the city of Mykolaiv killed at least one civilian and injured 23 others. See Appendix I (Case No. 17).

⁷⁸⁹ This attack killed a 59-year-old civilian and injured 19 others, including four children. See Appendix I (Case No. 20).

⁷⁹⁰ This attack on a busy hypermarket, located in a highly populated area of Kharkiv, killed 19 civilians, including six women and two children, and injured at least 54 more. *See* Appendix I (Case No. 22).

⁷⁹¹ Universal Declaration of Human Rights, art. 26.

⁷⁹² Convention on the Rights of the Child, art. 28.

⁷⁹³ International Covenant on Economic, Social, and Cultural Rights, art. 13(1).

targeting of educational institutions may also infringe on the right to life by endangering the lives of Ukrainian civilians, including school-aged children protected by Article 6 of the Convention on the Rights of the Child.⁷⁹⁴

The ICTY has recognized that the destruction or damage of religious or educational property may "manifest] a nearly pure expression" of a crime against humanity, as it amounts to the destruction of unique cultural objects. 795 When combined with the requisite discriminatory intent, such destruction can constitute a clear case of persecution.⁷⁹⁶

Russia's destruction of educational institutions has occurred in conjunction with other unlawful acts that have the cumulative effect of depriving Ukrainian children of their right to education. A November 2023 report by Human Rights Watch noted that between February 2022 and October 2023, Russian strikes damaged 3,428 educational facilities across Ukraine and destroyed 365 more. 797 As demonstrated in Section VI(b)(ii), Russian attacks on schools and other educational facilities documented in this Report—including **Case Nos. 2,** 798 **6,** 799 **10,** 800 **15,** 801 **16,** 802 **17,** 803 **18,** 804 and 20⁸⁰⁵—constitute deliberate, unlawful attacks against specially protected objects, without any evidence indicating their military use, amounting to a war crime pursuant to Article 8(2)(b)(ix) of the Rome Statute. Accordingly, these attacks are illustrative of Russia's deprivation of Ukrainian's right to education "contrary to international law," along with the right to life where civilian casualties resulted.

Finally, the shelling of civilian and critical energy infrastructure, examined thoroughly in Section V(A) as constituting several crimes against humanity and war crimes, led to widespread

⁷⁹⁴ *Id.* at art. 6.

⁷⁹⁵ Kordić & Čerkez, ICTY TC I Judgment (Feb. 26, 2001).

⁷⁹⁶ Id. at ¶¶ 206-7 (extending ICTY jurisprudence on the destruction or willful damage dedicated to religion to the destruction of Muslim religious and educational institutions).

⁷⁹⁷ "Tanks on the Playground": Attacks on Schools and Military Use of Schools in Ukraine, HUMAN RIGHTS WATCH (2023), https://perma.cc/YFD4-QP55.

⁷⁹⁸ According to the head of the Dnipropetrovsk Military Administration, this attack on a residential neighborhood in Kryvyi Rih damaged a school, amongst several other buildings. The attack killed two civilians, including a teenage girl who was training on a sports field with her father at the time of the strike. See Appendix I (Case No. 2).

⁷⁹⁹ This attack damaged three schools and a kinxdergarten in a series of missile and drone strikes. See Appendix I (Case

⁸⁰⁰ Part of a larger Russian aerial assault on Ukraine, this attack destroyed various schools, killed at least 30 civilians, and injured 160 others. See Appendix I (Case No. 10).

⁸⁰¹ This attack, using Shahed drones, partially destroyed a school, causing the death of nine civilians and injuring 29 others, including two children. The school was identified as the Rzhyshchiv Vocational Lyceum, with young students between the ages of 15 and 18 years old. See Appendix I (Case No. 15).

⁸⁰² This attack on the settlement of Bilopillia, Sumy Oblast hit the Bilopillia Gymnasium No. 4, at which approximately 80 students from grades one to four studied. The strike inflicted severe structural damage on the school and killed a school security guard. Crucially, media reports indicate that this attack represents merely one among many Russian attacks against educational institutions in the Kherson and Sumy regions, with at least 16 such attacks documented between February 2022 and January 2025. See Appendix I (Case No. 16).

⁸⁰³ According to Oleksander Senkeych, the mayor of Mykolaiv, this Russian attack on Mykolaiv with precision-guided Kalibr missiles damaged a kindergarten and four other educational buildings. See Appendix I (Case No. 17). 804 In a succession of two strikes, the use of guided munitions released from a SU-34/SU-35 aircraft destroyed Hlukhiv

School No. 5. See Appendix I (Case No. 18). 805 Russian forces launched two strikes against the Shevchenkivskyi District of Kharkiv using UMPB D30-SN bombs. The first strike directly exploded on a children's playground, while the second strike targeted a school and a pre-school, both of which sustained structural damage. See Appendix I (Case No. 20).

blackouts that inflicted deleterious damage. ⁸⁰⁶ For instance, power outages resulting from such attacks frequently disrupted school lessons, and the loss of internet connectivity impeded children's' education. ⁸⁰⁷ Although certain schools might have retained electricity, internet connections have been reliable nor adequate to guarantee the provision of quality education to Ukrainian children during the war. ⁸⁰⁸

Consequently, the foregoing attacks, in conjunction with a broader campaign of shelling educational institutions and the disruptive effects of blackouts on educational access, represent a severe deprivation of Ukrainian civilians' fundamental right to education and thus satisfy the first element of Article 7(1)(h) of the Rome Statute.

c. Right to take part in cultural life

Article 15(1)(a) of ICESCR protects the right "to take part in cultural life." According to the Committee on Economic, Social and Cultural Rights:

[C]ulture . . . encompasses, inter alia, ways of life, language, oral and written literature, music and song, non-verbal communication, religion or belief systems, rites and ceremonies, sport and games, methods of production or technology, natural and man-made environments, food, clothing and shelter and the arts, customs and traditions through which individuals, groups of individuals and communities express their humanity and the meaning they give to their existence, and build their worldview representing their encounter with the external forces affecting their lives.⁸⁰⁹

The 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict defines "cultural property" to include: "immovable structures (e.g., monuments of architecture, art or history, whether religious or secular); movable objects (e.g., paintings and other works of art, books, manuscripts, etc.); and buildings that house the latter (e.g., museums, archives, and libraries)."⁸¹⁰ The ICTY has affirmed that the destruction of religious or culturally significant property amounts to a severe deprivation of fundamental rights.⁸¹¹

Despite the special obligation to protect cultural property, UNESCO has reported that since February 24, 2022, Russian attacks have damaged 457 such properties in Ukraine, including

⁸⁰⁶ See generally PHR & Truth Hounds, Health Care in the Dark; UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 9. 807 UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 9.

⁸⁰⁸ Id.; see also Krzysztof Janowski, Attacks on Ukraine's Electricity Infrastructure Threaten Key Aspects of Life As Winter Approaches—UN Human Rights Monitors Say, UN HRMMU (Sept. 19, 2024), https://perma.cc/M24M-KCQS; Ukraine: More than Half of Children Missing Out on Education Due to Blackouts—Survey, SAVE THE CHILDREN (Nov. 22, 2022), https://perma.cc/RE4S-7AUP.

⁸⁰⁹ Committee on Economic, Social, and Cultural Rights, General Comment No. 21, ¶ 13 (2009).

⁸¹⁰ Human Rights Watch & International Human Rights Clinic at Harvard Law School (HRW & IHRC), Destroying Cultural Heritage: Explosive Weapons' Effects in Armed Conflict and Measures to Strengthen Protection (Apr. 18, 2024), https://perma.cc/W5R8-EXJX.

⁸¹¹ Prosecutor v. Vlastimir Dorđević, IT-05-87/1-A, ICTY AC Judgment, ¶ 567 (Jan. 27, 2014); Prosecutor v. Momćilo Krajišnik, IT-00-39-T, ICTY TC Judgment, ¶¶ 780–3, 836–7 (Sept. 26, 2006).

Ukrainian museums, historical monuments, and places of worship. 812 **Case Nos. 3** and 17813 exemplify these types of attacks. As established in Section VI(b)(ii), Case No. 3814 resulted in the destruction of various cultural objects located in Vinnytsia's city center, likely constituting a war crime in violation of Article 8(2)(b)(ix)'s prohibition on directing attacks against specially protected objects, including "buildings dedicated to . . . art." Notably, the attack destroyed the House of Officers concert hall, a significant local cultural site for Ukrainian music and song which had long served as a hub for community gatherings.

Similarly, in **Case No. 17**, 815 Russia attacked the city of Mykolaiv and targeted various civilian structures including the Mykolaiv Admiralty, a historical landmark located in the Mykolaiv shipyard that had been rendered inoperative by prior airstrikes in July 2022. Absent any evidence of military use at the time of the attack, it is reasonable to conclude that the Mykolaiv Admiralty was of civilian character. Thus, Russia's strike represented an unlawful attack on civilian objects in contravention of IHL's principle of distinction. 816 The strike resulted in significant structural damage to the Mykolaiv Admiralty and formed part of a larger assault on cultural objects in the Mykolaiv region of Ukraine, where 11 additional cultural sites were damaged in separate attacks.

These cases typify a broader pattern of Russian air strikes against cultural properties in Ukraine. Such destruction is one element of Russia's systematic attacks against the civilian population and, when committed contrary to international law, represents a deprivation of Ukrainian civilians' right to take part in cultural life.

d. Right to health

Russia's attacks on hospitals deprive civilians of "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health," protected by Article 12(1) of ICESCR. Case Nos. 3, 10, 19, and 20⁸¹⁸ illustrate Russia's persistent targeting of hospitals and other health care structures, which has severely impeded Ukraine's ability to ensure "conditions which would assure to all medical service and medical attention in the event of sickness" in contravention of the ICESCR. ⁸¹⁹ As elaborated in Section VI(b)(ii), hospitals are specially protected under IHL. ⁸²⁰ Russia's deliberate targeting of medical facilities constitutes the war crime of intentionally directing attacks against specially protected objects, as there is no evidence of any Ukrainian military use or

815 See Appendix I (Case No. 17).

⁸¹² Damaged Cultural Sites in Ukraine Verified by UNESCO, UNESCO (Feb. 7, 2024), https://perma.cc/KMV2-FFEF; see also HRW & IHRC, Destroying Cultural Heritage.

⁸¹³ See Appendix I (Case Nos. 3, 17).

⁸¹⁴ See Appendix I (Case No. 3).

⁸¹⁶ Alexandra Strand Holm, *Mykolaiv: A city without doors, windows and half of its citizens*, RELIEF WEB (Feb. 14, 2023), https://perma.cc/4RLJ-YSBD.

⁸¹⁷ In addition, in Case No. 8, Russian forces attacked Kyiv's downtown, destroying one of its historic buildings. In Case No. 16, a Russian aerial bomb hit a historic building of Bilopillia Gymnasium ("High School") No. 4, which was built in 1885, destroying it beyond repair.

⁸¹⁸ See Appendix I (Case Nos. 3, 10, 19, 20).

⁸¹⁹ International Covenant on Economic, Social, and Cultural Rights, art. 12(1)(d).

⁸²⁰ See AP I, art. 12 ("[m]edical units shall be respected and protected at all times and shall not be the object of attack"); Geneva Convention Relative to the Protection of Civilian Persons in Time of War (GC IV) (1950), art. 19 (civilian hospitals must not be attacked "unless they are used to commit, outside their humanitarian duties, acts harmful to the enemy").

presence within or near the targets of such attacks.⁸²¹ It therefore follows that Russia's deprivation of Ukrainian's fundamental right to physical and mental health was carried out "contrary to international law," as required by the first element of Article 7(1)(h).

In **Case No. 19**,⁸²² for example, Russian forces utilized SU-34/SU-35 aircraft loaded with KAB bombs to strike Beryslav Central District Hospital and emergency medical station, depriving Beryslav's civilians of the ability to obtain health care. The attack injured three medical personnel, damaged two ambulances, and caused extensive structural harm to the hospital, ultimately forcing the hospital to cease operations. Médecins Sans Frontières Ukraine confirmed that the Beryslav Central District Hospital was the nearest medical facility for tens of thousands of Ukrainians, underscoring that this attack deprived civilians of their fundamental right to physical and mental health care.

Case Nos. 3, 10 and 20⁸²³ involved attacks on a wide range of civilian infrastructure, resulting in damage to several hospitals. The attack in Case Nos. 3 and 20⁸²⁴ inflicted damage on medical buildings, while the strike in Case No. 10⁸²⁵ formed part of a broader Russian aerial campaign on the night of December 28-29 which destroyed multiple hospitals, amongst other civilian infrastructure. Although determining the full extent of the damage to medical facilities resulting from such attacks requires further investigation, it is reasonable to infer that the damage sustained by hospitals has severely disrupted the provision of essential health care services across Ukraine. As a result, Russia's attacks deprived Ukrainians of their fundamental right to access health care.

Additionally, Russia's attacks on critical energy infrastructure across Ukraine, analyzed in Section V as crimes against humanity and war crimes, compounded the strain on Ukraine's health care system. Russia's deliberate strikes on energy infrastructure deprived medical facilities of many essential resources required to provide health care, including electricity and clean water, thereby denying civilians their fundamental right to health care. As noted by the WHO Europe Director, "continued attacks on health and energy infrastructure mean hundreds of hospitals and health-care facilities are no longer fully operational—lacking fuel, water, and electricity to meet basic needs." Moreover, as elaborated in Section V(a)(ii)(2), the destruction of energy infrastructure during Ukraine's harsh winter burdened hospitals with an influx of patients suffering from cold-related injuries and illnesses. This influx triggered a public health crisis by further straining Ukraine's health care system when it was already severely impaired by the impacts of aerial attacks.

In sum, the direct damage to medical facilities inflicted by Russia's aerial attacks, coupled with the deprivation of resources critical to a functional health care system caused by blackouts from Russia's attacks, has prevented numerous hospitals across Ukraine from providing even the most

⁸²¹ See Section VI(b)(ii).

⁸²² See Appendix I (Case No. 19).

⁸²³ See Appendix I (Case Nos. 3, 10, 20).

⁸²⁴ See Appendix I (Case Nos. 3, 20).

⁸²⁵ See Appendix I (Case No. 10).

⁸²⁶ Ukraine: Russian Attacks on Energy Grid Threaten Civilians, HRW (Dec. 6, 2022). See also Statement – Winter in Ukraine: people's health cannot be held hostage, WORLD HEALTH ORGANIZATION (Nov. 21, 2022), https://perma.cc/69RM-EVNE; UN HRMMU, Attacks on Ukraine's Energy Infrastructure, at 8; Grim milestone on World Humanitarian Day: WHO records 1940 attacks on health care in Ukraine since start of full-scale war, WORLD HEALTH ORGANIZATION (Aug. 19, 2024), https://perma.cc/MT3U-NEK9.

basic care. Russia's attacks therefore infringe on civilians' right to "the enjoyment of the highest attainable standard of physical and mental health" pursuant to Article 12(1) of ICESCR.

Within the broader systematic campaign against Ukraine detailed in this Report, and considering the cumulative impact of Russia's drone and missile strikes—including murder, the destruction of property, and damage to cultural heritage, educational institutions, and medical facilities—Russia's attacks against civilian infrastructure likely amount to a "gross or blatant denial" of fundamental rights contrary to international law.

3. Russian officials possessed the requisite discriminatory intent to target Ukraine's civilian population as such and by reason of their identity

Persecution requires specific discriminatory intent beyond the requisite *mens rea* for all crimes against humanity articulated in Article 30 of the Rome Statute.⁸²⁷ In order for Russia's attacks on civilians and civilian infrastructure to amount to the crime against humanity of persecution, Russian perpetrators must have targeted the Ukrainian civilian population "by reason of the identity of the group or collectivity" or "targeted the group or collectivity as such."⁸²⁸ This subsection demonstrates that this discriminatory intent requirement is satisfied across the attacks examined throughout this Report. First, this subsection shows that Russia targeted Ukrainians as such. It then presents evidence that Russia targeted the Ukrainian population on "national" and "political" grounds, which the third element of Article 7(1)(h) explicitly enumerates as protected groups.

a. Targeting of Ukrainians as such

Drone and missile attacks, by their scale and impersonal nature, frequently target groups "as such" rather than any one individual. For the purpose of persecution, a group ⁸²⁹ can be defined in various ways, as long as it is "identifiable" either through an objective criterion or based on the subjective perceptions of the accused. ⁸³⁰ In the context of Russia's drone and missile campaign against Ukrainian civilians, the victims can be objectively identified as Ukrainian civilians, demonstrable by their nationality and residence. Alternatively, Russian perpetrators may subjectively characterize the victims as "Russophobes," a term often used to denote individuals opposed to Russia's regime, or Ukrainian nationalists. This "subjective notion[] of the accused" is reinforced by statements from Russian officials and narratives propagated by state-controlled media. ⁸³¹

For instance, in his essay, On the Historical Unity of Russians and Ukrainians, Putin posited that the "slogans, ideology, and blatant aggressive Russophobia" of "radical nationalist groups" have become "defining elements of state policy in Ukraine."832 Similarly, in his Presidential Address to the Federal Assembly on February 21, 2023, Putin asserted that "Russophobia and extremely aggressive nationalism formed Ukraine's ideological foundation."833 These statements speak to Russian officials' perception of Russophobia as foundational to Ukraine as a nation, and their collective

833 *Id.*

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⁸²⁷ Rome Statute, art. 7; Ambos, Rome Statute Commentary, at 156, n. 25, 176.

⁸²⁸ Elements, art. 7(1)(h).

⁸²⁹ For the sake of simplicity, the term "group" will be used interchangeably with the phrase "group or collectivity".

⁸³⁰ Ambos, Rome Statute Commentary, at 221.

⁸³¹ See, e.g., Apt, Russia's Eliminationist Rhetoric.

⁸³² *Id.*

framing of the Ukrainian population as ideologically opposed to Russia. Putin's rhetoric effectively generalizes Russophobia and radical nationalism as traits inherent to all Ukrainians, rather than recognizing the internal diversity of thought within Ukraine. Maria Zakharova, the Russian Foreign Ministry's official spokeswomen, reinforced this view in a Telegram post on November 15, 2023: "Russophobia is being spread everywhere and perverted interpretations of history are being imposed. Mental adjustment is used against Ukrainian citizens by those who call themselves pro-Ukrainian politicians."834 Zakharova's comments bolster Putin's assertions by framing Ukrainians as victims of ideological manipulation by Ukraine's leadership.

Other statements by Russian officials weaponize this rhetoric to justify Russia's occupation of Ukraine, broadening the notion of the enemy to encompass not only the Ukrainian government but the Ukrainian population as a whole. For example, the Director of the Institute of Contemporary Studies in the Diplomatic Academy of the Russian Ministry of Foreign Affairs, Oleg Karpovich, framed Russia's occupation as a means of "liberating not only territories, but also minds that have been repeatedly poisoned by the Russophobic authorities of the country."835 By suggesting that the entire Ukrainian population has been ideologically corrupted, Karpovich justified Russia's occupation as a means of saving Ukrainian civilians from their own leadership.

Yuri Kot, a pro-government Russian journalist, escalated the government's rhetoric by dehumanizing Ukrainians who oppose Russian rule. He claimed that Ukrainians "have taken to the dark side and are proving themselves to be Russophobes, so it's simply pointless to try talking to them in human terms."836 In Kot's view, Ukrainians are not merely "victims of their government" but rather "active participants" in Russophobia and "enemies, just enemies. . . . The enemy's children can be re-educated, but the enemy himself must be eliminated."837

In a Telegram post on April 26, 2022, Head of the Chechen Republic Ramzan Kadyrov similarly proclaimed that Russians "simply do not have the right to leave a single nationalist . . . on Ukraine's soil."838 Notably, his calls for the complete eradication of perceived nationalists, coupled with Russian rhetoric conflating nationalists with the broader Ukrainian population, legitimize Russia's occupation and acts of violence against Ukrainians as necessary to eliminate a collective threat.

The foregoing statements represent a fraction of the numerous public statements by Russian officials which perpetuate an image of Ukrainians as Russophobic nationalists. Taken together, these statements reveal Russia's depiction of Ukrainians' identity as fundamentally antagonistic towards Russia.

Having demonstrated that Russian officials targeted Ukrainian civilians as such, the following subsections show that Russia's attacks were directed against an identifiable group or collectivity by reason of its national and political identity. Accordingly, Russian officials acted with the discriminatory intent required for persecution.

⁸³⁴ *Id*.

⁸³⁵ *Id.* 836 *Id.*

⁸³⁷ *Id.*

⁸³⁸ *Id.*

b. Targeting of Ukrainians by reason of their nationality

Russia's attacks on Ukrainian civilians and civilian infrastructure are a targeted effort to eradicate Ukrainian nationality and identity. This conclusion is supported by: (1) statements made by Russian officials and media figures that explicitly undermine the existence of Ukrainian nationality; (2) the deliberate targeting of specially protected objects, which reveal an effort to destroy symbols of Ukrainians' group identity; and (3) the imposition of Russian citizenship on Ukrainians through coercive passport measures, undermining their national identity.

i. Statements by Russian officials reveal their discriminatory intent

The term "nation" typically refers to "a large body of people united by common descent, history, culture, or language, inhabiting a particular state or territory."⁸³⁹ Ukrainian nationality, as used in this subsection, therefore encompasses Ukraine's "traditions, culture, language, ethnicity, [and] race."⁸⁴⁰ Notably, the term "nation" is not necessarily defined by a single race or ethnicity, but rather may include diverse ethnic, racial, and religious groups.⁸⁴¹ In objective terms, modern Ukraine represents a rich array of ethnic, religious, and language groups; yet "[a]ll these groups are united into one nation – Ukrainians – by their allegiance to the Ukrainian state and the shared belief in the independence of their state and nation."⁸⁴²

Public statements by Russian officials evince a subjective perception of Ukrainians as a distinct group defined by their claim to Ukrainian nationality, which Russian officials explicitly deny exists. Russian politicians and other prominent Russian figures have consistently presented a conception of Russians and Ukrainians as members of the same Russian nation, underscoring the targeting of Ukrainians on grounds of nationality.

Numerous statements⁸⁴³ illustrate Russia's direct denial of Ukrainian nationality and identity. For example, in a comment to U.S. President George W. Bush in April 2008, Putin asserted that "Ukraine is not even a state Part of its territories is Eastern Europe, but the greater part is a gift from us." Since then, Putin has consistently undermined the legitimacy of Ukrainian nationality and identity, contending that there is "no historical basis" for the "idea of Ukrainian people as a nation separate from the Russians." Rather, as he proclaimed during a concert rally in support of the accession of the so-called DPR, LPR, and other regions of Ukraine to Russia, "[i]t was Russia that created modern Ukraine, giving it significant swathes of land, historical lands of Russia, along with the people." Putin reinforced this view in his book, On the Historical Unity of Russians and

841 *Id.*

⁸³⁹ Denys Azarov et al., Understanding Russia's Actions in Ukraine as the Crime of Genocide, 21 J. INT'L CRIM. JUSTICE 233 (2023)

⁸⁴⁰ Id.

⁸⁴² *Id.*

⁸⁴³ See, e.g., Apt, Russia's Eliminationist Rhetoric.

⁸⁴⁴ Id

⁸⁴⁵ Vladamir Putin, On the Historical Unity of Russians and Ukrainians, KREMLIN (Jul. 12, 2021), https://perma.cc/43FD-SCX8

⁸⁴⁶ Vladamir Putin, *People's Choice: Together Forever concert rally speech*, KREMLIN (Sept. 30, 2022), https://perma.cc/2X5V-8WQN.

Ukrainians, stating that, "Russians and Ukrainians are one nation, they are one whole." Moreover, as recently as February 9, 2024, Putin explicitly announced his belief that "Ukrainians are part of the one Russian people" in an interview with American journalist Tucker Carlson. 848

Similarly, Medvedev, the former President and Prime Minister of Russia and current Vice Chairman of the Security Council of the Russian Federation, has publicly declared that "the Ukrainian nation and its identity is one big fake, the phenomenon never existed in the history, and does not exist now."⁸⁴⁹ Former Putin aide Vladislav Surkov has also denied Ukraine's existence, asserting that there is "no Ukraine."⁸⁵⁰ Sergey Aksyonov, the Russian head of occupation authority in Crimea, stated in a Telegram post on September 1, 2022 that "[t]he future of Ukraine, or rather what remains of it, is possible only with the complete elimination of Ukrainian statehood."⁸⁵¹ Pavel Gubarev, a Russia-aligned leader in the Donetsk region of Ukraine occupied by Russia, described the Ukrainian population as "Russian people, possessed by the devil," thus necessitating that Russia "exterminate all of [them] until [they] understand that [they're] possessed and … have to be cured."⁸⁵²

Leading figures in the Russian media have echoed the views of their political leaders. For example, Russian journalist and military expert Igor Korotchenko asserted on Russian State media that "Ukraine is part of the historical Russia. Ukraine as a country never existed."853 In an interview with Russian State TV on October 23, 2022, pro-Kremlin blogger and war correspondent Vladlen Tatarsky stated: "A Ukrainian is a Russian spiritual transvestite, who is trying to squeeze into another skin. . . . The future of Ukraine, those people who live there, is that they are Russian people and they will return to their normal state."854 Petr Akopov, in his article *A New Stage of Dismantling Ukraine Has Begun* published on November 10, 2022, emphasized the need for Russia "to return Ukraine to its natural state as part of the Russian world."855 In a later piece, published on February 16, 2023, Akopov reinforced this conflation of Russian and Ukrainian identity, describing Ukrainians as "fictitious people (fictionalized because the Little Russian part of the Russian people turned into 'non-Russian Ukrainians', and then Russophobes)."856 Finally, Russian State TV Host Sergey Mardan strongly denounced claims of Ukrainian identity:

... any person who takes on the identity as a citizen of independent Ukraine, sings this hideous thing called the Ukrainian anthem, warps his brain by speaking someone else's language, which is not his native tongue He rejects himself, rejects the entire Russian culture. And if you, being Russian by culture, reject the Russian culture, what is left within you, what do you become? You simply become an animal!⁸⁵⁷

852 *Id.*

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⁸⁴⁷ Azarov et al., *Understanding Russia's Actions*.

⁸⁴⁸ Vladamir Putin, Interview to Tucker Carlson, KREMLIN (Feb. 9, 2024), https://perma.cc/D6BB-7DLR.

⁸⁴⁹ Azarov, Understanding Russia's Actions (citing D. Medvedev, On the Fakes and Real History, https://perma.cc/2EHH-5VH6).

⁸⁵⁰ Apt, Russia's Eliminationist Rhetoric.

⁸⁵¹ *Id.*

⁸⁵³ *Id.*

⁸⁵⁴ Julia Davis (@JuliaDavisNews), X (Oct. 23, 2022), https://perma.cc/8AB7-LB5V.

⁸⁵⁵ Petr Akopov, A New Stage of Dismantling Ukraine Has Begun, DISCRED (Oct. 11, 2022), https://perma.cc/P39C-588Y.

⁸⁵⁶ Petr Akopov, *Ukrainian dreams will lead Europe to self-destruction*, RIA NOVOSTI (Feb. 16, 2023), https://perma.cc/EV4Y-WN22.

⁸⁵⁷ Apt, Russia's Eliminationist Rhetoric.

In reference to Ukrainians, he later asserted: "They are the same Russian people that I am!"858

This sampling of statements provides compelling evidence that Russian officials firmly deny the existence of Ukrainian nationality pursuant to their belief that Ukraine is, and always has been, a part of Russian territory. Within this context, by framing the war as a campaign to reclaim Ukraine, these public declarations indicate that Russia is systematically targeting the Ukrainian population and depriving Ukrainians of their fundamental rights based on their claimed nationality.

ii. Russia's targeting of specially protected cultural objects tied to Ukrainian national identity demonstrates discriminatory intent

As explained further in Section VI(b)(ii), cultural property and schools are specially protected objects under IHL due to their particular importance to the civilian population. 859 Russia's persistent targeting of these objects elucidates a discriminatory attack on Ukrainian nationality. Per the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, "cultural property" includes: "immovable structures (e.g., 'monuments of architecture, art or history, whether religious or secular'); movable objects (e.g., paintings and other works of art, books, manuscripts, etc.); and buildings that house the latter (e.g., museums, archives, and libraries)."860 Despite the special obligation to protect these objects, UNESCO has reported that since February 24, 2022, Russian attacks have damaged 457 cultural properties in Ukraine, including Ukrainian museums, historical monuments, and places of worship. 861 The repeated and systematic nature of Russia's strikes against cultural objects evinces an intent to target these objects, and by extension, an intent to undermine Ukrainian identity and nationality.862

A report by Human Rights Watch and the Harvard Law School's IHRC demonstrated the "inextricabl[e]" link between cultural heritage and civilian populations, which "keeps people united

⁸⁵⁸ Id.

⁸⁵⁹ See Robin Geiß & Christophe Paulussen, Specifically Protected Persons and Objects, OXFORD GUIDE TO INT'L HUMANITARIAN L. (Ben Saul & Dapo Akande eds., 2020); What objects are specially protected under IHL?, INT'L COMMITTEE OF THE RED CROSS (Aug. 14, 2017), https://perma.cc/U7KZ-WZYB.

⁸⁶⁰ Human Rights Watch & International Human Rights Clinic at Harvard Law School (HRW & IHRC), Destroying Cultural Heritage: Explosive Weapons' Effects in Armed Conflict and Measures to Strengthen Protection (Apr. 18, 2024), https://perma.cc/W5R8-EXJX.

⁸⁶¹ Damaged Cultural Sites in Ukraine Verified by UNESCO, UNESCO (Feb. 7, 2024), https://perma.cc/KMV2-FFEF; see also HRW & IHRC, Destroying Cultural Heritage.

⁸⁶² Russia's discriminatory intent is further evidenced by statements from Russian officials. For example, on April 27, 2022, Sergey Aksyonov, head of the Crimea occupation, declared that "[a]fter liberation, Ukraine will need not only denazification, but also spiritual 'treatment."' See Apt, Russia's Eliminationist Rhetoric. This framing of the war as a liberatory effort, coupled with other statements by Russian officials emphasizing the need to free Ukrainians from ills attributed to its culture and identity, illustrate Russia's state policy to undermine the independent cultural identity of Ukraine and to remove distinctions between the two nations. The targeting of cultural objects is consistent with a broader discriminatory project of attacking Ukraine's unique cultural identity and national heritage. See Apt, Russia's Eliminationist Rhetoric (citing Konstantin Kevorkian, A Fair Military Operation or Return of the Stolen ("Today's Ukraine has been turned into a huge concentration camp. A just military operation is the return of stolen freedom and scolded human dignity"); Sergey Aksyonov, Russian head of occupation authority in Crimea ("Does anyone still have doubts that Russia is freeing the Ukrainian people from absolute evil?"); Maria Zakharova, Russian Foreign Ministry (Russian forces are "freeing Ukraine from the neo-Nazi dominance..."); Oleg Karpovich (Russia was "liberating not only territories, but also minds that have been repeatedly poisoned by the Russophobic authorities of the country.").

and anchored and gives them identity."⁸⁶³ Attacks on cultural objects not only destroy symbols of heritage and education but also fracture networks of community and belonging, creating "deep cultural trauma."⁸⁶⁴ This understanding is supported by *ad hoc* tribunal jurisprudence. For example, the ICTY has held that the repeated deployment of explosive, indiscriminate weapons against religious objects may give rise to a finding of persecution on religious grounds. ⁸⁶⁵ In Ukraine, Russia's deliberate targeting of cultural property—including, for example, the strike against a historical concert hall in **Case No. 3**, ⁸⁶⁶ the strike against the Mykolaiv Admiralty in **Case No. 17**, ⁸⁶⁷ and the strikes against historic buildings in Kyiv and Bilopillia in **Case Nos. 8** and **16** ⁸⁶⁸—could similarly support a finding of persecution on grounds of nationality, as the destruction of cultural property may operate to eradicate elements of Ukraine's history, identity, and statehood.

In addition to cultural property, Russian aerial strikes have frequently targeted educational facilities, as captured by Case Nos. 2, 6, 10, 15, 16, 17, 18, and 20869—all instances where schools or other educational facilities were either damaged or destroyed. Indeed, according to the Ukrainian government, Russia damaged 3,428 educational facilities and completely destroyed 365 more between February 2022 and October 2023. 870 The harm inflicted on Ukraine's educational system, however, extends beyond physical destruction. These attacks are compounded by Russia's deliberate efforts to reshape Ukrainian education to align with Russia's denial of Ukrainian identity. For instance, Human Rights Watch has documented various measures taken by Russian occupying forces to impose the Russian educational curriculum on Ukrainian schools. This curriculum largely focuses on Russian history, promotes the portrayal of Ukraine as a "neo-Nazi state," and enforces the use of Russian as the language of instruction. 871 These changes to Ukraine's education system undermine and substantially limit Ukrainian children's exposure to their "own cultural identity, language, and values" and Ukraine's "national values." 872 Consequently, it is reasonable to infer that Russia's is deliberately targeting schools to obstruct Ukrainian children's education and erode future generations' understanding of Ukrainian history, culture, and language, thereby denying Ukrainian children their national identity. This pattern of attacks underscores the conclusion that Russian forces have intentionally targeted Ukrainian civilians—and in the case of schools, Ukrainian children—on the basis of their nationality.

iii. Russia's coercive passport measures reveal discriminatory intent

Russia's imposition of its passport on Ukrainian civilians under occupation, along with threats of retaliation against any Ukrainians who refuse, reinforces the conclusion that Russia is targeting

865 Dorđević, ICTY AC Judgment, ¶¶ 791–824 (Jan. 27, 2014).

⁸⁶³ HRW & IHRC, Destroying Cultural Heritage.

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⁸⁶⁶ See Appendix I (Case No. 3).

⁸⁶⁷ See Appendix I (Case No. 17).

⁸⁶⁸ See Appendix I (Case Nos. 8, 16)

⁸⁶⁹ See Appendix I (Case Nos. 2, 6, 10, 15, 16, 17, 18, 20).

^{870 &}quot;Tanks on the Playground", HUMAN RIGHTS WATCH (2023).

⁸⁷¹ Education under Occupation: Forced Russification of the School System in Occupied Ukrainian Territories, HUMAN RIGHTS WATCH (2024), https://perma.cc/BR4T-KSCX.

⁸⁷² Id. (citing Convention on the Rights of the Child, art. 29 (1)(c)).

Ukrainians on grounds of nationality. This policy, referred to as "passportization," 873 represents a coercive effort to erase Ukrainian national identity and replace it with Russian citizenship.

On April 27, 2023, Putin signed a decree establishing procedures for issuing Russian passports to residents of occupied territories in Ukraine, including the Zaporizhzhia, Kherson, Donetsk, and Luhansk regions. 874 The decree also authorized Russian authorities to detain or deport individuals who fail to obtain a Russian passport by July 1, 2024, after which non-compliant residents would be classified as "foreigners" or "stateless."875

On March 20, 2025, Putin signed another decree mandating that Ukrainian nationals living in Russian-occupied territories either "settle their legal status" by September 10, 2025, or leave the territory. According to British intelligence services, this decree is almost certainly intended to force out remaining Ukrainian nationals who refuse to accept Russian passports and citizenship "as part of longstanding efforts to extirpate Ukrainian culture, identity and statehood."876

Ukrainians who refuse Russian passports already face severe consequences, including "threats, intimidation, restrictions on humanitarian aid and basic necessities, and possible detention or deportation, all designed to force them to become Russian citizens."877 For example, Russian passports are required to own property, and to access health care and retirement benefits. Additionally, to further coerce Ukrainians to accept Russian citizenship, Russia has offered incentives like "residential certificates" and stipends for those willing to relocate to Russia. 878 Such efforts leave no doubt that Russia is attempting to eradicate Ukrainian nationality.⁸⁷⁹

c. Targeting of Ukrainians by reason of their perceived political affiliation

In addition to targeting Ukrainian civilians on national grounds, Russia also appears to be targeting civilians on political grounds. As mentioned earlier, the ICC has interpreted the mens rea of Article 7(1)(h) based on the perpetrator's subjective perception of the victims: 880 "Of import to Ithe perpetrator's judgment are 'political' grounds that do not pertain only to the victim's membership of a political party or adherence to a particular ideology but also to differences of opinions over public affairs, or (actual or presumed) political affiliations."881 Other international tribunals have similarly interpreted political grounds for persecution quite broadly, finding that "political

874 See Lori Hinnant et al., Russia forces Ukrainians in occupied territories to take its passports – and fight in its army, AP NEWS (Mar. 15, 2024), https://perma.cc/8LT9-X6VF; Helen Sullivan, Russia 'systematically' forcing Ukrainians to accept citizenship, US report finds, THE GUARDIAN (Aug. 2, 2023), https://perma.cc/3RZ6-UF9R; Kseniya Kvitka, Russia Threatens Ukrainians Who Refuse Russian Citizenship, HUMAN RIGHTS WATCH (May 16, 2023), https://perma.cc/NQE2-H2FT.

⁸⁷³ Kvitka, Russia Threatens Ukrainians.

⁸⁷⁵ See Hinnant, Russia forces Ukrainians; Sullivan, Russia 'systematically' forcing Ukrainians; Kvitka, Russia Threatens Ukrainians.

⁸⁷⁶ UK Ministry of Defence (@DefenceHQ), X (Mar. 22, 2025), https://archive.ph/Zm8MG.

⁸⁷⁷ Sullivan, Russia 'systematically' forcing Ukrainians.

⁸⁷⁸ Hinnant, Russia forces Ukrainians.

⁸⁷⁹ Sullivan, Russia 'systematically' forcing Ukrainians.

⁸⁸⁰ Ntaganda, ICC TC VI Judgment, ¶ 1010 (Jul. 8, 2019); see also Ioannis Kalpouzos & Itamar Mann, Banal Crimes Against Humanity: The Case of Asylum Seekers in Greece, 16 MELB. J. INT'L L. 1, 18 (2015) ("[t]he political grounds leading to the infliction of widespread human rights violations are in the eye of the persecutor").

⁸⁸¹ Burundi, ICC PTC III Decision, ¶ 133 (Nov. 9, 2017).

persecution occurred where discrimination has been effected pursuant to political motivations or a political agenda against a group which itself may not hold any political views."882

Accordingly, the victims' actual political views are immaterial to determining whether Russia's indiscriminate aerial strikes on civilians amount to persecution. So long as Russian officials attributed a particular political affiliation to the Ukrainian civilian population—and said understanding motivated Russian attacks on civilians and civilian infrastructure, at least in part—the requisite discriminatory intent for persecution is satisfied.

Russia's repeated characterization of its invasion as an effort to "denazify" Ukraine, in concert with persistent targeting of civilians and civilian objects, indicates an intent to target civilians on the grounds of their attributed political affiliation with Nazism or political support of the Nazi party. Timothy Snyder, an American historian and professor at Yale University, proposed that Russia defined "Nazi" as "a Ukrainian who refuses to admit being a Russian." 883

Various statements by Russian actors who seek to "denazify" Ukraine reveal their subjective association of Ukraine and Nazism. ⁸⁸⁴ For example, on several occasions Putin has highlighted "denazifying Ukraine" as a "key goal[]" of Russia's occupation. ⁸⁸⁵ This framing is reinforced by other Russian officials, ⁸⁸⁶ including Dmitry Medvedev, who indicated that Russia's military operation seeks to ". . . denazify and demilitarize Ukraine," ⁸⁸⁷ and Sergey Aksyonov, who equated "demilitarization, denazification, and the trial of Nazi criminals" to Russian victory. ⁸⁸⁸ Zakharova similarly noted that "the task of denazification and demilitarization of Ukraine" is "an absolute priority of Russian foreign policy." ⁸⁸⁹

Statements by Russian officials and Russian State media also indicate that Russians have imputed Ukraine's alleged support of Nazism not only to its leadership but also to its civilian population at large. For instance, in a Telegram post on September 3, 2022, Aksyonov declared:

Unfortunately, the ideology of state terrorism is shared by at least part of Ukrainian society. This is evidenced by the outbursts of demonic joy on the Internet about every terrorist attack staged by the Kyiv regime. This is a disease of public

888 Id.

⁸⁸² Kalpouzos & Mann, *Banal Crimes Against Humanity*, at 17–8 (citing Prosecutor v. Chea Nuon, 002/19-09-2007/ECCC/TC, ECCC TC I Judgment (Aug. 7, 2014)).

⁸⁸³ Timothy Snyder, *Russia's Genocide Handbook*, SUBSTACK (Apr. 8, 2022), https://perma.cc/8GYL-ZLYB.
884 For example, shortly after negotiations between Ukraine and Russia, on December 20, 2023, Leonid Slutsky of the Duma Committee on International Affairs stated: "We do not refuse negotiations today, but subject to the main condition – the elimination of the Neo-Nazi threat and guarantees of security for Russians. This means denazification and demilitarization of Ukraine." Apt, *Russia's Eliminationist Rhetoric*.

⁸⁸⁵ Plenary session of the St Petersburg International Economic Forum, KREMLIN (Jun. 16, 2023), https://perma.cc/EXU6-CS5L (Putin stated, at a Plenary session of the St. Petersburg International Economic Forum on June 16, 2023: "We have every right to believe that our goal of denazifying Ukraine is one of the key goals..."); see, e.g., Valdai International Discussion Club Meeting, KREMLIN (Oct. 5, 2023) https://perma.cc/455D-54NQ (On October 5, 2023, during his speech at the Valdai International Discussion Club, Putin asserted: "Is this not a sign of the Nazification of Ukraine? Does not this give us the right to talk about its denazification?"); Results of the Year with Vladimir Putin, KREMLIN (Dec. 14, 2023) https://perma.cc/8KL7-K5VX (At the Results of the Year Live News Conference, Putin asserted that "the issue of denazification is relevant").

⁸⁸⁶ See Apt, Russia's Eliminationist Rhetoric.

⁸⁸⁷ *Id.*

⁸⁸⁹ *Id.*

consciousness, which will also have to be treated during the demilitarization and denazification of Ukraine. Everyone should know that the end of terrorists is always the same – dog death and eternal damnation. So it was, is and will be.⁸⁹⁰

The characterization of terrorism and Nazism as a "disease" to be "treated" reveals a broader Russian perception that Ukrainians are either complicit in, or have succumbed to, Nazism. This narrative is invoked as a purported justification for Russian occupation, which will "cure" Ukraine's ideological affliction.

For example, Russian State TV host Sergey Mardan described "Political Ukrainianness" as "a type of Nazism," indicating that Ukraine "is poisoned with it." He urged that although "it may be incurable," Russia "will have to do something about it." These views align with the rhetoric of Timofei Sergeitsev, a pro-Kremlin journalist. In his article, *What Should Russia Do with Ukraine?*, Sergeitsev defined "denazification" as "a set of measures in relation to the nazified mass of the population..." and equated it to "de-Ukrainization – a rejection of the large-scale artificial inflation of the ethnic component of self-identification of the [Ukrainian] population."

Although Aksyonov notes that "at least part of Ukrainian society"⁸⁹⁴ has suffered from this disease, ICC jurisprudence holds that "not all victims of the crime of persecution are required to be members, sympathisers, allies of, or in any other way related to, the protected group."⁸⁹⁵ Therefore, the general imputation of Nazism to the Ukrainian population, deemed by Aksyonov as "incompatible" with Russian culture, ⁸⁹⁶ is sufficient to satisfy discriminatory intent on grounds of political differences, a protected ground enumerated by Article 7(1)(h) of the Rome Statute.

In sum, the evidence presented in this subsection demonstrates Russia's perception of the Ukrainian civilian population as politically aligned with "Nazism" and thereby collectively opposed to Russia's occupation of Ukraine. This subjective perception has fueled Russia's discriminatory targeting of Ukrainian civilians on political grounds, in addition to the national grounds established above. Therefore, it is reasonable to conclude that Russia's attacks on civilians and civilian objects amount to the crime against humanity of persecution pursuant to Article 7(1)(h). Russia has deprived Ukrainians of numerous fundamental rights through the commission of multiple crimes against humanity and war crimes. Finally, Russian officials appear to possess the requisite discriminatory intent, as their statements and actions make plain that Ukraine's civilian population has been targeted on national and political grounds.

891 *Id.*

⁸⁹⁰ Id.

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⁸⁹³ Timofey Sergeytsev, What Russia Should Do With Ukraine, RIA NOVOSTI (Apr. 5, 2022), https://perma.cc/89PB-AP2X.

⁸⁹⁴ Apt, Russia's Eliminationist Rhetoric.

⁸⁹⁵ Ntaganda, ICC TC VI Judgment, ¶ 1011 (Jul. 8, 2019).

⁸⁹⁶ Apt, Russia's Eliminationist Rhetoric.

b. Attacks on Civilians and Civilian Objects as War Crimes

Russia has likely committed the following three war crimes: (1) intentionally directing an attack against civilians;⁸⁹⁷ (2) intentionally directing an attack against civilian objects;⁸⁹⁸ and (3) intentionally directing an attack against specially protected objects.⁸⁹⁹ Each of these crimes share certain elements—including that "[t]he conduct took place in the context of and was associated with an international armed conflict" and "[t]he perpetrator was aware of factual circumstances that established the existence of an armed conflict"⁹⁰⁰—which, as in Section V(b), this section assumes are met. The attacks occurred in Ukraine amidst the ongoing armed conflict and were allegedly committed by Russian military and civilian officials against primarily Ukrainian victims. The Russian military's use of missile and drone strikes is clearly "associated with" the armed conflict⁹⁰¹ and intended to advance "the ultimate goal of [Russia's] military campaign."⁹⁰² This section will not address whether "the perpetrator directed an attack,"⁹⁰³ as specific perpetrators remain unidentified.

This section will therefore focus on establishing the elements of each respective war crime related to: (1) the alleged civilian (and/or specially protected) status of the object destroyed and/or the individual(s) killed or injured in the attack; (2) the *mens rea* of the attacker; and (3) whether the attack complied with relevant rules of IHL, namely distinction.

In many of these cases, the Russian military may attempt to claim that Ukrainian soldiers were present at or near the targeted objects or areas. If proven true, the attacks could conceivably have been directed against military objectives or combatants. However, such Russian attacks must still withstand scrutiny under the principle of proportionality pursuant to Article 51(5)(b) of AP I and criminalization of disproportionate attacks in Article 8(2)(b)(iv) of the Rome Statute. Mirroring the argument set forth in Section V(b)(ii) in the context of critical infrastructure attacks, this subsection asserts that even if these attacks were aimed at legitimate military objects, the attacks would still be unlawful because the substantial harm to civilians and civilian objects is "clearly excessive in relation to the concrete and direct overall military advantage anticipated." 904

i. Intentionally Directing Attacks Against Civilians and Civilian Objects

Under the Rome Statute, "intentionally directing attacks against the civilian population as such" and "against civilian objects" constitute war crimes. ⁹⁰⁵ Proving the elements of these two war crimes relies on evidence common to both. Therefore, this section addresses the crimes in parallel.

The war crime of directing attacks against civilians includes the following elements:

(1) "The perpetrator directed an attack";

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897 Rome Statute, art. 8(2)(b)(i).
898 Id. at art. 8(2)(b)(ii).
899 Id. at art. 8(2)(b)(ix).
900 See Elements, arts. 8(2)(b)(i)–(ii), (iv), (ix).
901 See id. at arts. 8(2)(b)(i)–(ii), (iix).
902 Bemba, ICC TC III Judgment, ¶ 143 (Mar. 21, 2016).
903 See Elements, arts. 8(2)(b)(i)–(ii), (iv), (ix).
904 See Rome Statute, arts. 8(2)(b)(iv); AP I, art. 51(5)(b).
905 Rome Statute, arts. 8(2)(b)(i)–(ii).
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- (2) "The object of the attack was a civilian population as such or individual civilians not taking direct part in hostilities";
- (3) "The perpetrator intended the civilian population as such or individual civilians not taking direct part in hostilities to be the object of the attack";
- (4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- (5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict." 906

The war crime of directing attacks against civilian objects includes the following elements:

- (1) "The perpetrator directed an attack";
- (2) "The object of the attack was civilian objects, that is, objects which are not military objectives";
- (3) "The perpetrator intended such civilian objects to be the object of the attack";
- (4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- (5) "The perpetrator was aware of the factual circumstances that established the existence of an armed conflict." 907

Before proceeding with the analysis, it is essential to understand the definition of civilians and civilian objects under IHL. IHL defines "civilians" negatively as all individuals who are *not* combatants and thus not legally targetable. Further, the civilian population "comprises all persons who are civilians" and is not "deprive[d]" of "its civilian character" due to the "presence of persons who do not come within the definition of civilians" therein. Many of the attacks analyzed in this Report resulted in civilian casualties, with no evidence suggesting that affected civilians were actively participating in hostilities. Therefore, absent evidence to the contrary, the analysis in this section builds on the presumption that the victims of each attack were unlawfully targeted.

With respect to objects, and as elaborated in <u>Section IV(b)(ii)(2)</u>, IHL defines military objectives as:

[T]hose objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage. 910

Based on the two-pronged test inherent in this definition, all documented objects targeted, damaged, or destroyed in the cases under review in this section are civilian in nature. There is no evidence

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⁹⁰⁶ Elements, art. 8(2)(b)(i).

⁹⁰⁷ Id. at art. 8(2)(b)(ii).

⁹⁰⁸ AP I, art. 50 defines a civilian as "any person who does not belong to one of the categories of persons referred to in Art. 4 A (1), (2), (3) and (6) of the Third Convention and in Article 43 of this Protocol. In case of doubt whether a person is a civilian, that person shall be considered to be a civilian."

⁹⁰⁹ AP I, arts. 50(2)–(3).

⁹¹⁰ AP I, art. 52(2).

indicating that such objects lost their civilian status or protection by virtue of their "location, purpose, or use." ⁹¹¹

In line with ICC practice, this section analyzes apparently deliberate strikes on civilians and civilian objects separately from indiscriminate attacks which, because of their factual circumstances, likely also rise to the level of deliberate attacks against civilians and civilian objects. ⁹¹² As explained below, Russian attacks on populated civilian areas and civilian objects amount to the war crimes proscribed in Articles 8(2)(b)(i) and (ii) of the Rome Statute.

1. Russian officials launched direct attacks against civilians and civilian objects using high-precision weapons

Eleven Russian aerial attacks carried out using high-precision weaponry are analyzed in this Report and constitute direct attacks on civilians and civilian objects:⁹¹³

- Case No. 3: Attack on civilian infrastructure in the center of Vinnytsia (July 14, 2022).
- Case No. 4: Attack on civilian dormitory in Kharkiv (August 17, 2022).
- Case No. 8: Mass attack on civilian infrastructure in Kyiv, Kyiv Oblast (October 17, 2022).
- Case No. 11: Attack on apartment buildings in Kramatorsk (February 1, 2023).
- Case No. 15: Attack on two dormitories and a school in Rzhyshchiv, Kyiv Oblast (March 22, 2023).
- Case No. 16: Attack against Sumy Oblast (March 24, 2023).
- Case No. 17: Attack on Mykolaiv (April 27, 2023).
- Case No. 18: Attack against Hlukhiv, Sumy Oblast (May 5, 2023).
- Case No. 20: Attack against residential area in Kharkiv (March 27, 2024).
- Case No. 21: Attack against civilian infrastructure in Kharkiv (May 22, 2024).
- Case No. 22: Attack against civilian infrastructure in Kharkiv (May 25, 2024).

The subsection first analyzes three categories of attacks against civilians and civilian objects: (i) attacks on residential and commercial areas; (ii) attacks on specially protected objects; and (iii) retaliatory attacks. Then, it establishes that the requisite *mens rea* is satisfied across attacks.

a. Russian attacks on residential and commercial areas

Russia's attack on Kharkiv detailed in **Case Nos. 20, 21,** and **22**⁹¹⁴ represent clear violations of the principle of distinction under IHL⁹¹⁵ and likely constitute war crimes under Articles 8(2)(b)(i) and (ii) of the Rome Statute. Each of these attacks targeted populated areas—both residential and commercial—and caused extensive harm to civilians and civilian objects, with no evidence suggesting the presence of legitimate military targets. Notably, all three attacks used the UMPB D30-SN bomb, a guided munition with a high payload that allows Russian forces to accurately strike a

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⁹¹¹ Id. See also Ambos, Rome Statute Commentary, at 407.

⁹¹² See Ntaganda, ICC TC VI Decision, ¶ 921 (Jul. 8, 2019). The ICC has recognized that indiscriminate attacks can also qualify as a deliberate attack against civilians "so long as the perpetrator was aware of the presence of civilians in the relevant area."

⁹¹³ See Appendix I (Case Nos. 3, 4, 8, 11, 15, 16, 17, 18, 20, 21, 22).

⁹¹⁴ See Appendix I (Case Nos. 20, 21, 22).

⁹¹⁵ See AP I, art. 51.

target and inflict serious damage. The use of such precise weaponry in densely populated areas highlights the Russian military's operational strategy to deliberately inflict harm on the civilian population.

In Case No. 20,916 Russian forces hit a school and two apartment buildings in the Shevchenkivskyi District, a residential area in Kharkiv, during daylight hours. The attack killed one civilian and injured 19 others, including four children. Russia's attack on a residential area, where civilians are expected to be present, maximized the risk to civilians absent any identifiable military objects in the vicinity. In Case No. 21,917 Russian forces attacked a café, car wash, residential buildings, and commercial shops in the Shevchenkivskyi District, and destroyed a local business in the Kholodnohirskyi District, injuring at least twelve civilians. These areas were not situated near identifiable military objectives, which indicates that civilians and civilian objects were the object of Russia's attack. The attack on a hypermarket—a quintessential civilian establishment—detailed in Case No. 22⁹¹⁸ similarly demonstrates Russia's deliberate targeting of an area frequented by civilians during busy operating hours. The strike killed 19 civilians, almost half of whom were women and children, and injured 54 more. The absence of any credible evidence pointing to the hypermarket's use for military purposes, supported by CCTV footage, undermines any Russian claim that this was a legal strike against a military object or combatants.

In Case Nos. 18 and 16, 919 Russian forces used guided KAB bombs, specifically designed for high accuracy strikes, to deliberately and precisely strike civilians. KAB bombs utilize precision guidance systems and aerodynamic designs that enable remote employment outside air defense zones, ensuring a high degree of control over target selection and delivery. 920 The use of these precision bombs on civilian areas and infrastructure renders accidental targeting or erroneous deployment against civilians highly improbable.

In Case No. 18, 921 Russian forces launched a nighttime attack against a densely populated area of Hlukhiv, destroying five civilian houses and heavily damaging 34 to 50 other homes. The attack also caused structural damage to a school, in addition to the widespread destruction of the surrounding civilian area. The absence of any discernible military objectives underscores the civilian nature of the targets. Furthermore, the extensive damage to civilian properties, and the timing of the attack when civilians are expected to be home sleeping, suggests that Russia deliberately targeted the civilian population. Similarly, in Case No. 16,922 Russia's attack specifically targeted and destroyed the Bilopillia Gymnasium No. 4, along with several civilian houses in the area. No evidence suggests that these civilian structures were being used for military purposes, nor were combatants killed rather, the strike killed a police officer and a school security guard.

Finally, in **Case Nos. 4** and **11**, ⁹²³ Russian forces targeted multi-story civilian apartment buildings at night, when civilians are expected to be home asleep. Russia utilized one of its most advanced missiles for precision strikes, the Iskander-K missile system, in both attacks. The Iskander

917 See Appendix I (Case No. 21).

⁹¹⁶ See Appendix I (Case No. 20).

⁹¹⁸ See Appendix I (Case No. 22).

⁹¹⁹ See Appendix I (Case Nos. 16, 18).

⁹²⁰ See Appendix II.

⁹²¹ See Appendix I (Case No. 18).

⁹²² See Appendix I (Case No. 16).

⁹²³ See Appendix I (Case Nos. 4, 11).

is also known for its ability to cause acute structural damage—often, as in these cases, completely flattening multi-story buildings. The precision capabilities of the Iskander missile underscore Russia's intentional targeting of the civilian buildings.

In **Case No. 4**,⁹²⁴ at 9:30 p.m., Russia attacked a civilian dormitory in a residential area of Kharkiv, housing more than 30 residents. The dormitory's residential nature, coupled with the absence of any indication that combatants were using the dormitory for a military purpose, demonstrates that it was an impermissible civilian target under international law. The strike completely demolished the dormitory, killing 19 civilians and injuring 22 others. In **Case No. 11**,⁹²⁵ a Russian strike in Kramatorsk at 9:45 p.m. completely destroyed one apartment building and damaged nine others. All buildings were located in the center of a civilian neighborhood, and there was no evidence of military objectives nearby. The airstrike killed four civilians and injured 18 civilians.

The civilian nature of the residential buildings, the timing of the attacks at night to maximize the presence of civilians, and the accuracy and destructive capacity of the weapons selected, all indicate that these Russian strikes intentionally targeted the civilian population and civilian objects.

b. Russian attacks on specially protected objects

Case Nos. 3, 8, 16, and **17**⁹²⁶ involve the targeting of cultural and historical sites, which are specially protected under international law. ⁹²⁷ The inherently civilian nature of these cultural sites demonstrate Russia's calculated strategy to target the civilian population and civilian objects.

In **Case Nos. 3** and **17**, Russian forces deployed Kalibr 3M-14 cruise missiles, known for their high precision due to their satellite navigation capabilities and onboard inertial guidance systems. ⁹²⁸ **Case No. 3**, ⁹²⁹ a missile attack on downtown Vinnytsia at approximately 11:00 a.m.—a busy time of day when many civilians can be expected to be downtown for work, school, or shopping—killed 23 civilians, injured over 100 civilians, and caused extensive destruction to civilian infrastructure. A concert hall, a medical building, residential buildings, and other civilian infrastructure sustained significant damage. The Russian military explicitly stated that it targeted the concert hall, a historic cultural site. There is no evidence that combatants were using the concert hall. In fact, a Ukrainian pop singer was scheduled to perform on the day of the attack, an event that would have been publicly advertised and thus knowable to Russian officials. This evidence strongly suggests that the venue was deliberately targeted as a civilian gathering space, further underscoring the intentional nature of Russia's attack against the civilian population.

Similarly, **Case No. 17**, 930 the attack on Mykolaiv, caused extensive damage to civilian infrastructure, including a museum, four educational buildings, a kindergarten, and over 100 residential buildings and homes. The strikes on Mykolaiv Admiralty, one of the main historic sites in

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⁹²⁴ See Appendix I (Case No. 4).

⁹²⁵ See Appendix I (Case No. 11).

⁹²⁶ See Appendix I (Case Nos. 3, 8, 16, 17).

⁹²⁷ See AP I, art. 53 (regarding protection of cultural objects and of places of worship); ICRC, International Humanitarian Law Database: Customary IHL Rule 38, https://perma.cc/WQ45-7VDP.

⁹²⁸ See Appendix II.

⁹²⁹ See Appendix I (Case No. 3).

⁹³⁰ See Appendix I (Case No. 17).

Mykolaiv which is frequented by civilians taking historical tours and viewing exhibits, reinforces Russia's intention to impermissibly strike civilian objects. In **Case No. 8**, ⁹³¹ Russian forces attacked Kyiv's historical downtown, causing catastrophic damage to city infrastructure. In **Case No. 16**, ⁹³² a Russian aerial bomb hit the historical 1885 building of Bilopillia Gymnasium ("High School") No. 4, destroying it beyond repair.

c. Retaliatory attacks

Reprisals against civilians and civilian objects violate the principle of distinction and are explicitly prohibited under IHL. 933 Nevertheless, Russia has launched retaliatory attacks in which it stood to gain no legitimate military advantage. Instead, these attacks appear to be an intentional effort by Russia to target civilians and civilian objects in response to Ukraine's military advances, in violation of Articles 8(2)(b)(i) and (ii) of the Rome Statute.

In **Case Nos. 8** and **15**, ⁹³⁴ Russian forces used Shahed-136 drones to launch strikes against civilians and civilian infrastructure. Shahed-136 drones, equipped with GPS/GLONASS navigation systems and preprogrammed for precision strikes, exhibit a high degree of accuracy, comparable to a propeller-driven cruise missile. ⁹³⁵ Their design lacks real-time, autonomous target identification capabilities, meaning they strike only pre-programmed targets set by drone operators. ⁹³⁶ In these two attacks, Russian forces likely programmed the civilian targets into the drones' navigational system, thus deliberately targeting the civilian population.

In **Case No. 8**, 937 Russian forces launched a massive drone attack on Kyiv's historical downtown, striking an office building and significantly damaging nearby residential buildings. A second wave of Shahed-136 drones struck an apartment building, exacerbating the destruction in one of the city's most densely populated civilian areas. Russia's choice of targets—a mix of residential and commercial buildings with no indication of military use—belies any justification of military necessity for the operation. Markings on one drone read "for Belgorod," suggesting Russia had a retaliatory motivation for the attack, which it launched in response to cross-border strikes. The targeting of civilians and civilian objects in this case not only breaches explicit IHL protections but also reinforces the deliberate nature of the attack, which appears motivated by a retaliatory intent to harm civilians, rather than by any legitimate military objective.

In **Case No. 15**, 938 Russia struck two dormitories and a school in Rzhyshchiv in the middle of the night. The attack killed nine civilians and injured 29, including at least two children. Interviews with witnesses and survivors indicate that soldiers were not present in the area, undermining any claim that the targets were military in nature. An engine from a Shahed drone was found hanging on the branches of a tree after the attack, along with remnants of wings bearing the inscription: "for Dzhankoi." This message suggests Russia was retaliating for strikes in the town in

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⁹³¹ See Appendix I (Case No. 8).

⁹³² See Appendix I (Case No. 16).

⁹³³ AP I, art. 52(1).

⁹³⁴ See Appendix I (Case Nos. 8, 15).

⁹³⁵ See Appendix II.

⁹³⁶ Id.

 $^{^{937}}$ See Appendix I (Case No. 8).

⁹³⁸ See Appendix I (Case No. 15).

Northern Crimea. As in Case No. 8,939 this evidence strongly indicates that Russian forces deliberately targeted civilians and civilian objects, intending to cause civilian harm in retaliation for Ukrainian military advances.

d. Russian officials possessed the requisite intent to target civilians and civilian objects

The Rome Statute does not prescribe a specific mens rea for the war crimes of intentionally directing attacks against civilians and against civilian objects. 940 Therefore, Article 30 of the Rome Statute applies, requiring that "the perpetrator meant to cause the consequence or is aware that it will occur in the ordinary course of events." ⁹⁴¹ In the case of attacks against civilians, the ICC has inferred the mental element by considering "the means and methods used during the attack, the number and status of the victims, [and] the discriminatory nature of the attack." For civilian objects, the ICTY considered whether "it was reasonable to believe, in the circumstances of the person(s) contemplating the attack, including the information available to the latter, that the object was being used to make an effective contribution to military action."943

The means and methods by which Russian forces conducted the eleven attacks analyzed in this subsection suggest that the Russian military intended to harm civilians and damage civilian objects. All of the attacks used weapons specifically designed for high accuracy strikes, including the Kalibr missile, KAB bomb, UMPD D30-SN bomb, Iskander missile, and Shaded-136 UAV. The selection of such advanced weaponry eliminates the likelihood of targeting or technical errors, and underscores the deliberate nature of these strikes, which were calculated to maximize civilian harm.

Russia's use of precision-guided munitions and UAVs demonstrates its intent to target the civilian population and civilian objects. Russian officials and military forces directed the attacks at locations considerably remote from the active combat zone, allowing advanced surveillance capabilities to ensure accurate and informed strikes, as well as ample time to carefully and deliberately select targets. It is reasonable to infer, from Russian commanders' access to intelligence and capacity to execute deliberate strikes with precision, that these attacks were intentionally directed at civilians and civilian objects.

In the *ad hoc* tribunal jurisprudence, failure to take necessary precautions to minimize civilian harm fulfilled the requisite mens rea for the war crimes of intentionally directing attacks against civilians and civilian objects, as required by Article 57 of AP I. 944 The cases in this Report highlight the Russian military's failure to implement such precautionary measures. In each of the eleven attacks, women, children, pensioners, and first responders were killed or injured. Given the types of weapons Russia deployed, the extensive civilian harm resulting from each attack, and Russia's repeated striking of civilian objects in locations and at times where civilians are likely to be present, it

⁹³⁹ See Appendix I (Case No. 8).

⁹⁴⁰ See Rome Statute, arts. 8(2)(b)(i)-(ii).

⁹⁴² Katanga, ICC TC II Decision, ¶ 807 (Mar. 7, 2014) (citing Elements, General Introduction, ¶ 3; Kunarac et al., ICTY AC Judgment, ¶ 91 (Jun. 12, 2002); Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006); Blaškić, ICTY TC Judgment, ¶ 512 (Mar. 3, 2000)).

⁹⁴³ Karadzic, IRMCT AC Judgment, ¶ 489 (Mar. 20, 2019).

⁹⁴⁴ See Blaškić, ICTY TC Judgment, ¶ 179 (Mar. 3, 2000); and Galić, IT-98-29-T, ICTY TC I Judgment and Opinion, ¶ 54 (Dec. 5, 2003); see also Ambos, Rome Statute Commentary, at 404.

is implausible that civilians were not the intended target. Thus, it is reasonable to conclude that Russian officials intended "the civilian population as such or individual civilians not taking direct part in hostilities" and "civilian objects" "to be the object of the attack," satisfying the requisite *mens* rea set forth in Articles 8(2)(b)(i) and (ii) of the Rome Statute.⁹⁴⁵

In sum, the attacks analyzed in this section violate the principle of distinction under IHL and amount to the war crimes of intentionally directing attacks against civilians and civilian objects. Russia's strikes targeted residential and commercial areas where civilians and civilian objects were foreseeably present, including schools, apartment buildings, civilian homes, businesses, and hypermarkets. The civilian nature of the targets, along with the absence of any evidence suggesting the targets were used for military purposes, confirms their civilian character and protection under IHL. Russia's deliberate use of precision-guided missiles and drones in civilian areas, and failure to take precautionary measures to distinguish civilians from combatants or civilian from military objects, underscore Russia's intent to deliberately target civilians.

2. Russian officials launched indiscriminate attacks against civilians and civilian objects

Indiscriminate attacks do not necessarily qualify as intentional attacks against civilians and civilian objects. However, in *Katanga*, the ICC found that indiscriminate attacks can satisfy the necessary elements, "especially where the damage caused to civilians is so great that it appears to the Chamber that the perpetrator meant to target civilian objectives." Customary and codified IHL rules prohibit indiscriminate attacks, defined as attacks:

(a) which are not directed at a specific military objective; (b) which employ a method or means of combat which cannot be directed at a specific military objective; or (c) which employ a method or means of combat the effects of which cannot be limited as required by international humanitarian law; and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction. 947

This subsection focuses on four indiscriminate attacks that amount to the war crime of intentionally directing attacks against civilians and civilian objects:⁹⁴⁸

- Case No. 1: Attack on residential area with private homes in Pokrovsk (March 3, 2022).
- Case No. 2: Attack on Kryviy Rih with Tornado-S Multiple Rocket Launchers (July 9, 2022).
- Case No. 6: Mass attack on civilian infrastructure in Kyiv (October 10, 2022).

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⁹⁴⁵ Rome Statute, arts. 8(2)(b)(i)-(ii).

⁹⁴⁶ Katanga, ICC TC II Decision, ¶ 802 (Mar. 7, 2014) (citing AP II, art. 51(4)); see also Ntaganda, ICC TC VI Decision, ¶ 921 (Jul. 8, 2019) ("The crime under Article 8(2)(e)(i) of the Statute may encompass attacks that are carried out in an indiscriminate manner, that is by targeting an area, as opposed to specific objects, or not targeting specific military objects or persons taking a direct part in hostilities, so long as the perpetrator was aware of the presence of civilians in the relevant area. It may also include attacks that are launched without taking necessary precautions to spare the civilian population or individual civilians. Therefore, the use of weapons that have inherently indiscriminate effects in an area where civilians are present may constitute an attack directed at the civilian population or individual civilians").

947 ICRC, International Humanitarian Law Database: Customary IHL Rule 11, https://perma.cc/C7JY-HG7K; ICRC, International Humanitarian Law Database: Customary IHL Rule 12, https://perma.cc/76SF-YNQM.

• Case No. 13: Large-scale attacks on civilian objects and energy infrastructure in Kyiv, Zhytomyr, Sumy, Odesa (March 8–9, 2023).

It first examines Russian attacks that are indiscriminate in deploying multiple weapons, and then analyzes attacks that deploy cluster munitions, which are inherently indiscriminate. Finally, it demonstrates that the requisite *mens rea* has been met.

a. Swarm attacks deploying multiple weapons

In **Case Nos. 6** and **13**, ⁹⁴⁹ Russian forces bombarded Ukrainian cities in large-scale swarm attacks using a broad array of weapons and causing extensive civilian harm, leading to the reasonable inference that the indiscriminate attacks were deliberate. These attacks clearly violate the fundamental principle of distinction under IHL, leading to the commission of the war crimes prohibited under Articles 8(2)(b)(i) and (ii) of the Rome Statute. A careful analysis of these incidents, focusing on the absence of military targets and Russia's use of diverse weapons in an indiscriminate manner, supports this conclusion.

Both attacks caused extensive damage to urban centers and civilian infrastructure in populated areas of large cities, including Kyiv, despite Russian officials claiming to have successfully hit military targets. The October 2022 missile barrage outlined in **Case No. 6**950 inflicted severe damage on 45 residential buildings, killing seven and injuring 49 civilians. Russia's assertion that this attack was justified retaliation for the Crimea bridge incident is legally untenable and indicates a retaliatory intent to attack civilians and civilian infrastructure. As noted above, IHL categorically prohibits reprisals against the civilian population or civilian objects. Similarly, in **Case No. 13**,951 the March 2023 large-scale strikes in Kyiv, Zhytomyr, Sumy, and Odesa, residential buildings bore the brunt of the attacks. **Case No. 13**,952 further illuminates a consistent Russian strategy of targeting civilian infrastructure and urban centers to disrupt civilian life and morale, rather than to achieve any direct military advantage. The absence of discernible military objectives or necessity in either case underscores the indiscriminate and punitive nature of the attacks.

The nature and scale of the weapons Russia employed in these attacks provide further evidence of their indiscriminate nature. In **Case No. 6**,953 Russia launched 83 missiles, including Kh-101, Kh-555, Kalibr, Iskander, S-300, and Tornado MLRS. Although these weapons vary in their range, payload, and precision, both the Tornado MLRS and S-300 weapon systems are designed for broad-area strikes. In other words, these weapons are unsuitable for distinguishing between military and civilian targets in densely populated areas. This array of weapons, employed simultaneously, demonstrates Russia's deliberate strategy to maximize destruction over a widespread geographic area, without regard for civilian harm. Similarly, in **Case No. 13**,954 Russia used an arsenal of 81 missiles and Shahed-136/131 UAVs, including Kh-101/Kh-555 air-based cruise missiles, Kalibr seabased cruise missiles, and X-22 and S-300 anti-aircraft missiles. The deployment of such a mix of munitions, some of which are known to be inaccurate, underscores the indiscriminate nature of the

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⁹⁴⁹ See Appendix I (Case Nos. 6, 13).

⁹⁵⁰ See Appendix I (Case No. 6).

⁹⁵¹ See Appendix I (Case No. 13).

⁹⁵² See Appendix I (Case No. 13).

⁹⁵³ See Appendix I (Case No. 13)

⁹⁵⁴ See Appendix I (Case No. 13).

attack. In short, Russia's use of weapons with wide area effects—weapons that could not precisely target military objectives in densely populated civilian areas—coupled with the sheer number of civilian objects and civilians affected by these attacks, indicates that these indiscriminate attacks were deliberate.

In addition, the scale of destruction caused by these indiscriminate attacks provides additional compelling evidence that Russia committed war crimes. In Case No. 6, 555 Russia's strike on Kyiv destroyed and severely damaged vast amounts of civilian infrastructure, while in Case No. 13, 956 Russia's strikes inflicted extensive harm to residential buildings and other civilian structures, leading to dozens of civilian deaths and more than 100 civilian injuries. Crucially, no evidence indicates the existence of specific military objectives within the targeted areas, negating any claim of military necessity. Civilians and civilian objects are unequivocally protected under IHL unless and until they are directly used for military purposes.

b. Russian attacks deploying cluster munitions

In Case Nos. 1 and 2,957 Russian forces deployed cluster munitions in residential areas, which indiscriminately cause harm to civilians and military targets. The use of cluster munitions in populated residential areas rises to the level of a deliberate attack on civilians and civilian objects, as the effects of these munitions cannot be directed and limited to specific military objectives. Although Russia has not signed the Convention on Cluster Munitions, 958 AP I offers authoritative legal standards for evaluating the problems posed by these weapons. Article 51(4) prohibits indiscriminate attacks, including those "which employ a method or means of combat which cannot be directed at a specific military objective."959 Cluster munitions, by their nature, are designed to disperse submunitions over wide areas. This core characteristic makes it impossible to limit their effects to specific military objectives. As a result, the use of cluster munitions in civilian areas is inherently indiscriminate and violates the principle of distinction. Finally, although the cluster munitions in Case No. 1960 did not explode, the elements of Articles 8(2)(b)(i) and (ii) of the Rome Statute do not require a particular result. 961 The mere use of cluster munitions, an inherently indiscriminate weapon, by Russian forces against populated regions of Ukraine is sufficient to amount to the war crime of intentionally directing attacks against civilians and civilian objects.

c. Russian officials possessed the requisite intent to attack civilians and civilian objects

The ICC has previously recognized that indiscriminate attacks can satisfy the requisite mens rea for direct attacks against civilians and civilian objects. 962 For example, as elaborated in Section

956 See Appendix I (Case No. 13).

⁹⁵⁵ See Appendix I (Case No. 6).

⁹⁵⁷ See Appendix I (Case Nos. 1, 2).

⁹⁵⁸ Convention on Cluster Munitions (2010).

⁹⁵⁹ AP I, art. 51(4)(b).

⁹⁶⁰ See Appendix I (Case No. 1).

⁹⁶¹ See Ambos, Rome Statute Commentary, at 410.

⁹⁶² Katanga, ICC TC II Decision, ¶ 802 (Mar. 7, 2014) (citing AP II, art. 51(4); Galić, ICTY TC I Judgment and Opinion, ¶ 57 (Dec. 5, 2003); Galić, ICTY AC Judgment, ¶ 132 (Nov. 12, 2009); Martić, ICTY TC Judgment, ¶ 69 (Jun. 12, 2007)). "The crime under Article 8(2)(e)(i) of the Statute may encompass attacks that are carried out in an indiscriminate

VI(b)(i)(2), in *Katanga* the ICC examined a case where an armed group opened fire on a mixed group of civilians and combatants. The ICC Trial Chamber found that "by shooting indiscriminately at fleeing persons," the perpetrators "knew that their death would occur in the ordinary course of events" and "thus intended to cause their death." In other words, an indiscriminate attack may amount to a deliberate attack on civilians even if lawfully targetable combatants are present.

The ICTY's jurisprudence, which has considered indiscriminate attacks by bombardment, is also instructive. In *Galii*, the ICTY Trial Chamber analyzed shelling in Dobrinja. Witnesses described attacks by "[t]housands of shells" aimed at targets "independently of whether they were civilians or military targets." The Trial Chamber found that virtually no area was safe from sniping and shelling, as civilians were "targeted during funerals, in ambulances, in hospitals, on trams, on buses, when driving or cycling, at home, while tending gardens or fires or clearing rubbish in the city." Importantly, the "most populated areas of Sarajevo seemed to be particularly subject to indiscriminate or random shelling." The Trial Chamber determined that shelling a residential area while children were at play, and no military activity was underway, was indiscriminate. Although the ICTY applied a lower *mens rea* threshold of recklessness, in contrast to Article 30 of the Rome Statute which requires "intent and knowledge," its evaluation of attacks through sniping and shelling can inform analysis in the context of Russian UAV and missile attacks.

The attacks in **Case Nos. 6** and **13**⁹⁶⁹ present the type of widespread bombardment that "showed scant regard for the fate of the civilians" and demonstrate Russian knowledge "that [civilian] death would occur in the ordinary course of events." Russia's deployment of a vast array of weaponry, including highly imprecise and indiscriminate weapons, against densely populated civilian areas including residential neighborhoods and urban centers, renders civilian deaths not only foreseeable but highly probable. Furthermore, this pattern of attacking the "most populated areas" "without taking necessary precautions to spare the civilian population" provides sufficient evidence to infer that Russia's attacks deliberately targeted civilians and civilian objects. In fact, "where the damage caused to civilians is so great" as in the cases presented, the factual reality defies legal arguments of military necessity or justifications of accident or error. The scale of the attacks on civilians instead demonstrates that civilians were deliberately targeted.

manner, that is by targeting an area, as opposed to specific objects, or not targeting specific military objects or persons taking a direct part in hostilities, so long as the perpetrator was aware of the presence of civilians in the relevant area. It may also include attacks that are launched without taking necessary precautions to spare the civilian population or individual civilians . . . the use of, *inter alia*, the type of heavy weapons in the possession of the UPC/FPLC against them, without awareness of the situation on the ground, or any information as to the concentration of fighters or the number of civilians, and without the taking of any precautions, was unlawful." Ntaganda, ICC TC VI Judgment, ¶¶ 921–6 (Jul. 8, 2019).

⁹⁶³ Katanga, ICC TC II Judgment, ¶ 865 (Mar. 7, 2014).

⁹⁶⁴ Galić, ICTY TC I Judgment and Opinion, ¶ 370 (Dec. 5, 2003).

 $^{^{965}}$ *Id.* at ¶ 584.

⁹⁶⁶ Id.

⁹⁶⁷ *Id.* at ¶¶ 339, 345.

⁹⁶⁸ See e.g., Galić, ICTY TC I Judgment and Opinion, ¶ 54 (Dec. 5, 2003).

⁹⁶⁹ See Appendix I (Case Nos. 6, 13).

⁹⁷⁰ See Katanga, ICC TC II Judgment, ¶ 865 (Mar. 7, 2014).

⁹⁷¹ See Galić, ICTY TC I Judgment and Opinion, ¶ 584 (Dec. 5, 2003).

⁹⁷² Ntaganda, ICC TC VI Judgment, ¶¶ 921–6 (Jul. 8, 2019).

⁹⁷³ Katanga, ICC TC II Judgment, ¶ 802 (Mar. 7, 2014).

Russia's choice of indiscriminate weaponry in executing the aforementioned attacks reinforces this conclusion. Indeed, the ICI's advisory opinion on nuclear weapons equated the use of indiscriminate weapons with a deliberate attack on civilians. 974 Further, ICTY jurisprudence indicates that attacks that employ weapons that cannot discriminate between civilian and military objectives may qualify as direct attacks against civilians. 975 For instance, in Galić, the ICTY Appeals Chamber found that "a direct attack can be inferred from the indiscriminate character of the weapon used." 976 The ICC has taken a similar view, indicating that "the use of weapons that have inherently indiscriminate effects in an area where civilians are present may constitute an attack directed at the civilian population or individual civilians." Accordingly, Russia's use of indiscriminate weapons like cluster munitions, and weapons with wide area effects like the S-300 and Tornado MLRS systems, in populated civilian areas indicates the necessary intent to harm civilians and civilian objects.⁹⁷⁸

Finally, Russia's failure to employ alternative, more precise weapons or to avoid targeting civilian areas altogether indicates a failure to comply with the requirement to take all feasible precautions set forth in Article 57 of AP I. Under ad hoc tribunal jurisprudence, courts may infer the requisite mens rea for intentionally directing attacks against civilians and civilian objects from a failure to take precautions both before and during an attack. 979 Russia's failure to take such precautions, coupled with its extensive use of wide area effect weapons in populated regions, reinforces the conclusion that Russian forces were aware of the civilian nature of the targeted objects as well as the immense and foreseeable harm to civilians and, nonetheless, deliberately chose to proceed with such attacks.

In short, Russia's large-scale bombardments of densely populated areas of Ukraine with dozens of missiles and UAVs at a time, including weapons with wide area effect and imprecise weapons, constitute an indiscriminate attack that flagrantly disregards the safety of civilians. An intention to target civilians and civilian objects can be reasonably inferred from these facts. These indiscriminate attacks thus rise to the level of a direct attack on civilians and civilian objects in violation of Articles 8(2)(b)(i) and (ii) of the Rome Statute.

ii. Intentionally Directing Attacks Against Specially Protected Objects

As noted in Section IV(b)(ii)(3), Article 8(2)(b)(ix) of the Rome Statute criminalizes intentional attacks against specially protected objects, defined as "buildings dedicated to religion,

⁹⁷⁴ ICJ, Nuclear Weapons AO, at ¶ 78.

⁹⁷⁵ See, e.g., Blaškić, ICTY TC Judgment, ¶¶ 501, 512 (Mar. 3, 2000); Galić, ICTY TC Judgment and Opinion, ¶ 57 (Dec. 5, 2003); Milošević, ICTY TC III Judgment, ¶ 948 (Dec. 12, 2007).

⁹⁷⁶ See Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006).

⁹⁷⁷ ICC, Ntaganda ICC TC VI Judgment, ¶ 921 (Jul. 8, 2019); see Katanga, ICC TC II Judgment, ¶ 802 (Mar. 7, 2014) ("It is important, however, to establish that the primary object of the attack was the civilian population or individual civilians. Thus, situations in which the attack is directed against a military objective and civilians are incidentally affected fall outwith article 8(2)(e)(i). It must be noted that indiscriminate attacks – proscribed by a rule of custom – may qualify as intentional attacks against the civilian population or individual civilians, especially where the damage caused to civilians is so great that it appears to the Chamber that the perpetrator meant to target civilian objectives. Use of weaponry that has indiscriminate effects may, inter alia, show that the attack was directed at the civilian population or individual civilians. The Chamber notes in this regard that an indiscriminate attack does not, however, automatically constitute an attack against the civilian population under article 8(2)(e)(i), as the subjective element is decisive in respect of the second case"). 978 See Ntaganda, ICC TC VI Judgment, ¶ 926 (Jul. 8, 2019); Galić, ICTY AC Judgment, ¶ 132 (Nov. 30, 2006). 979 See Blaškić, ICTY TC Judgment, ¶ 179 (Mar. 3, 2000); Galić, ICTY TC I Judgment and Opinion, ¶ 54 (Dec. 5, 2003).

education, art, science or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not military objectives."980 The elements of this war crime are:

- 1) "The perpetrator directed an attack";
- 2) "The object of the attack was one or more buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives";
- "The perpetrator intended such building or buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives, to be the object of the attack";
- 4) "The conduct took place in the context of and was associated with an international armed conflict"; and
- 5) "The perpetrator was aware of factual circumstances that established the existence of an armed conflict."981

The fourth and fifth elements—the context, association, and awareness of the IAC—have been previously established and apply across all the war crimes alleged in this Report. 982 This section therefore focuses on the other elements of this war crime.

1. Russian attacks targeted objects afforded special protection under international law

Article 8(2)(b)(ix) delineates certain categories of objects that are afforded special protection during armed conflict and may not be targeted but for the presence of a legitimate military objective. Since the full-scale invasion of Ukraine, Russia has attacked specially protected objects at an alarming rate. This section details five attacks that likely amount to the war crime of intentionally attacking specially protected objects:⁹⁸³

- Case No. 3: Attack on concert hall in Vinnytsia (July 14, 2022).
- Case No. 15: Attack on two dormitories and a school in Rzhyshchiv (March 22, 2023).
- Case No. 16: Attack on a high school in Bilopillia (March 24, 2023).
- Case No. 19: Attack on a hospital and emergency medical station in Beryslav (October 5, 2023).
- Case No. 20: Attack on a school in Kharkiv (March 27, 2024).

In each of these cases, Russian forces directed attacks against specially protected objects, including schools, hospitals, and cultural centers. As previously described in Section IV(b)(ii)(3), to date the ICC has only examined attacks on specially protected objects under Article 8(2)(e)(iv), in the context of a non-international armed conflict. In Mahdi, the ICC addressed the destruction of cultural heritage in Mali, finding that "mausoleums and mosques were . . . clearly the object of the attack, as the evidence establishes the deliberate manner in which the attackers went from one

⁹⁸⁰ Elements, art. 8(2)(b)(ix).

⁹⁸² See Section V(b). ⁹⁸³ See Appendix I (Case Nos. 3, 15, 16, 19, 20).

building to the next in a relatively short time period."984 While the facts of each attack presented in this Report differ, one similarity is critical: the repeated use of precision weapons to strike specially protected objects in areas with no military objectives, which strongly indicates Russia's intention to strike specially protected objects.

a. Russian attacks on "buildings dedicated to ... education"

In Rzhyshchiv, Bilopillia, and Kharkiv, Russian forces launched aerial attacks against schools, which are "buildings dedicated to . . . education" and thus afforded special protection under international law.985

In Case No. 15,986 Russian forces unleashed high-precision Shahed-136/131 UAVs beginning after midnight and continuing until three in the morning. Russian forces directed three drone attacks toward the Rzhyshchiv Vocational Lyceum (a high school) and two residential dormitories housing students, at a time of night when the occupants would have been asleep. The attack destroyed the fourth and fifth floors of the school building, causing massive fires that resulted in the evacuation of more than 200 civilians. Based on more than 10 interviews conducted by IPHR with survivors and eyewitnesses to this attack, there were no soldiers or military presence in the area.

In Case No. 16,987 during a large-scale attack on the Sumy region, a Russian SU-35 aircraft dropped a 500 aerial bomb directly onto the Bilopillia Gymnasium No. 4 (a high school), destroying it beyond repair. The attack also severely damaged the Bilopillia Higher Vocational School. Although Bilopillia is located approximately 13 kilometers from the Russian border, the school's headmaster confirmed that the Ukrainian Defence Forces were not stationed in the town or anywhere near the school at the time of the attack. The security guard present at the school died during the attack. This attack was one of roughly a dozen attacks on educational institutions in that region by Russian forces.

In Case No. 20, 988 Russian forces deployed guided munitions (UMPB D30-SN) on residential areas in Kharkiv during the afternoon. One of the two strikes on the city targeted and damaged a school, according to the regional police. The two strikes extensively damaged multiple apartment buildings, a preschool, a clinical hospital, and an emergency medical care facility. The head of the National Security Service in the region publicly stated that there were no military facilities nearby.

In each of these instances, there is no evidence that any of the schools served a military objective as defined in AP I. 989 AP I further notes that in case of doubt as to whether "a school si being used to make an effective contribution to military action, it shall be presumed not to be so used."990 Accordingly, these schools were not military objects and retained special protected status at the time of Russia's attacks.

⁹⁸⁴ Mahdi, ICC TC VIII Judgment, ¶ 47 (Sept. 27, 2016).

⁹⁸⁵ Elements, art. 8(2)(b)(ix).

⁹⁸⁶ See Appendix I (Case No. 15).

⁹⁸⁷ See Appendix I (Case No. 16).

⁹⁸⁸ See Appendix I (Case No. 20).

⁹⁸⁹ AP I, art. 52(2) (military objectives are "objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.").

⁹⁹⁰ *Id.* at art. 52(3).

b. Russian attacks on "hospitals or places where the sick and wounded are collected"

Attacks on hospitals or medical units are criminalized by the Rome Statute and prohibited by international law. Article 12 of AP I states that "[m]edical units shall be respected and protected at all times and shall not be the object of attack." According to Article 19 of the Fourth Geneva Convention, civilian hospitals must not be attacked "unless they are used to commit, outside their humanitarian duties, acts harmful to the enemy." Protection may be interrupted if, and only if, "due warning has been given, naming, in all appropriate cases, a reasonable time limit" and the warning "remained unheeded." Article 19 also specifies that "acts harmful to the enemy" excludes situations where "sick or wounded members of the armed forces" are being treated or the presence of "small arms and ammunition" taken from them remain before being transferred to "proper service."

Russian forces have attacked hospitals, medical centers, and emergency centers in Beryslav and Kharkiv. In both instances, Russian forces not only failed to extend protection to Ukrainian hospitals and medical centers but, in fact, deliberately made them the object of attack.

In **Case No. 19**,⁹⁹⁵ Russian forces launched an aerial attack on the Central District Hospital in Beryslav, a town adjacent to the Dnipro River, which separates Ukrainian and Russian-controlled territory. Russian forces used KAB bombs launched by either an SU-35 or SU-34 aircraft in the middle of the day, following a series of attacks just an hour earlier. Russian forces dropped the bomb directly over the hospital, destroying the fourth floor, damaging the third floor, damaging two ambulances located within 300 meters of the hospital, and injuring three medical workers. There is no evidence of active Ukrainian military operations or military presence at the hospital. The hospital served as the closest medical facility for tens of thousands of civilians in the area and ceased functioning due to the damage it sustained.

The attack in **Case No. 20**⁹⁹⁶ against residential areas in Kharkiv may also meet the threshold for Article 8(2)(b)(ix). Reports following the attack note that the Kharkiv Clinical Hospital and an emergency medical care center sustained damage due to multiple strikes carried out that day.

As noted, for each of these attacks, there is no indication of any Ukrainian military presence within or near these medical centers. Further, there is no indication that Russian forces provided any warning within "a reasonable time limit" before striking, rendering these attacks unlawful.

⁹⁹¹ See AP I, art. 12 ("[m]edical units shall be respected and protected at all times and shall not be the object of attack"). AP I, art. 21 affords the same protection to medical vehicles. These protections are also extended to situations of non-international armed conflict, as per AP II, art. 11. Rules 28 and 29 of the ICRC's rules of Customary International Law also mirror AP I's language and protection. See ICRC, International Humanitarian Law Database, Customary IHL Rule 28, https://perma.cc/QDS2-V7VT; International Humanitarian Law Database, Customary IHL Rule 29, https://perma.cc/ZZR9-V4CP.

⁹⁹² GC IV, art. 19.

⁹⁹³ Id.

⁹⁹⁴ Id.

⁹⁹⁵ See Appendix I (Case No. 19).

⁹⁹⁶ See Appendix I (Case No. 20).

c. Russian attacks on "buildings dedicated to . . . art"

The attack on the concert hall in Vinnytsia offers a strong example, under Article 8(2)(b)(ix), of Russian attacks on protected cultural sites such as "buildings dedicated to . . . art." Article 53 of AP I makes reference to protections afforded to "historical monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples." The ICRC also notes that under customary international law, "special care" must be afforded to avoid damage to buildings "dedicated to . . . art" unless they are military objectives. ⁹⁹⁹ The "seizure of," "destruction," or "wilful damage" to such institutions is prohibited. ¹⁰⁰⁰ Military forces have an obligation to take precautionary measures to verify a cultural site's purported military nature before striking. ¹⁰⁰¹

In **Case No. 3,**¹⁰⁰² Russian forces launched a missile attack on downtown Vinnytsia, using high-precision Kalibr 3M-14 cruise missiles to strike, among many sites, the House of Officers concert hall. The Russian Defense Ministry purportedly justified the attack as targeting an "officers" residence, where preparations by Ukrainian armed forces were underway."¹⁰⁰³ However, there is no evidence of any Ukrainian military presence in the concert hall, a conclusion which is reinforced by the scheduled performance that evening by a Ukrainian pop singer. Moreover, failures or omissions, whether deliberate or not, on the part of Russian forces to verify the military purpose of the hall may demonstrate a lack of precaution required under IHL. ¹⁰⁰⁴

The evidence from this attack undermines any Russian claim of a legitimate military object to justify the destruction of civilian and cultural objects. In the alternative, the severity of the consequent damage and casualties may amount to the war crime of intentional launching of an attack that causes incidental death, injury, or damage under Article 8(2)(b)(iv).

2. Russian officials possessed the requisite intent to attack specially protected objects

To satisfy the requisite *mens rea*, a perpetrator must be aware of the special nature of the object of the attack. Occasion to make it the object of the attack. Considering the enhanced capabilities of the weapons used in the above aerial strikes, Russian commanders likely knew or should have known that they were targeting protected objects like schools, hospitals, and cultural centers. High-precision weapons deployed in these attacks include the Shahed-136 drone, the Kalibr missile, and KAB bombs. Although the newly introduced UMPB D30-SN bomb is a precision-guided munition, these particular bombs are susceptible to malfunction and, as such, may arguably be considered inherently indiscriminate weapons. Nonetheless, intent to strike the protected object can be demonstrated through direct instructions to destroy that object, or statements by the perpetrator

⁹⁹⁷ Elements, art. 8(2)(b)(ix).

⁹⁹⁸ AP I, art. 53. For the NIAC analogue, see AP II, art. 16.

⁹⁹⁹ ICRC, International Humanitarian Law: Customary IHL Rule 38, https://perma.cc/WQ45-7VDP.

¹⁰⁰⁰ ICRC, International Humanitarian Law: Customary IHL Rule 40, https://perma.cc/8PQU-SAH4.

¹⁰⁰¹ AP I, art. 57.

¹⁰⁰² See Appendix I (Case No. 3).

¹⁰⁰³ See also, Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/F8T9-8SDR.

¹⁰⁰⁴ AP I, art. 57.

 $^{^{1005}}$ Ntaganda, ICC TC VI Judgment, ¶ 1147 (Jul. 8, 2019).

¹⁰⁰⁶ See Ntaganda, ICC PTC II Decision, ¶ 129 (Jun. 9, 2014).

¹⁰⁰⁷ Ntaganda, ICC PTC II Decision, ¶ 131 (Jun. 9, 2014).

that describe knowledge of the object's purpose. ¹⁰⁰⁸ The analysis below offers suggested approaches to establish intent, which should be substantiated by further investigation and evidence collection.

In **Case No. 15**,¹⁰⁰⁹ Russian forces unleashed multiple Shahed drones on the town of Rzhyshchiv. While Shaheds, like any drone, may be vulnerable to interference or disturbances, the sheer number of drones and repeated strikes on the school and its dormitories throughout the night strongly suggest a deliberate intent to target this object. These strikes constituted part of a large-scale overnight offensive across multiple regions of Ukraine. Furthermore, the dormitory served a residential purpose and housed civilians at the time of the strikes. Some reports also note that remnants of a Shahed's wings were found in Rzhyshchiv bearing the inscription: "for Dzhankoi," where, two days earlier, an explosion destroyed Russian Kalibr cruise missiles being transported by rail. This language indicates that an unlawful retaliatory intent motivated Russia's attack.

In **Case No. 16,**¹⁰¹⁰ Russian forces deployed highly precise, guided KAB bombs, supporting the inference that Russia intentionally targeted the Bilopillia Gymnasium. Additionally, given the KAB bomb's powerful warhead and extensive damage inflicted on the surrounding area, at a minimum, Russian forces intended to cause substantial damage in close proximity to a school. In the absence of a direct intent to target a specially protected object, this attack may nevertheless rise to the level an intentional incidental loss of life, damage, and injury under Article 8(2)(b)(iv) of the Rome Statue. The attack destroyed the school beyond repair, killed two civilians, and injured ten more.

In **Case No. 20**,¹⁰¹¹ Russian forces deliberately dropped a newly-developed projectile, the UMPB D30-SN, in Ukraine's second-largest city, Kharkiv. Russia had not previously used this type of projectile in an urban district, and the weapon's devastating consequences demonstrate a deliberate intent to inflict harm on the civilian population. The lack of Ukrainian military presence in Kharkiv and Russia's ability to launch the attack from a safe distance, giving ample opportunity to ensure proper precautions, strongly indicates Russia's intent to target civilian objects, including the school that was damaged in the attack. Even absent evidence demonstrating intent to target a specially protected object, the attack would likely still constitute a direct attack against a civilian object under Article 8(2)(b)(ii). The severity of the damage to multiple residential buildings, schools, clinical hospitals, and civilian infrastructure may also indicate an intentionally disproportionate attack under Article 8(2)(b)(iv).

In **Case No. 19**,¹⁰¹² Russian forces conducted strikes across the town of Beryslav and then returned an hour later to re-attack the hospital, indicating Russia's intent to target the hospital in particular. KAB bombs are high-precision weapons and their use against the hospital indicate that it was the intended target. This strike was not an isolated attack on medical facilities. Russian forces destroyed over two dozen medical facilities and damaged more than 150 others in the Kherson Oblast.

1010 See Appendix I (Case No. 16).

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¹⁰⁰⁸ Ntaganda, ICC TC VI Judgment, ¶ 1147 (Jul. 8, 2019).

¹⁰⁰⁹ See Appendix I (Case No. 15).

¹⁰¹¹ See Appendix I (Case No. 20).

¹⁰¹² See Appendix I (Case No. 19).

In **Case No. 3**,¹⁰¹³ Russian forces deployed a highly precise Kalibr missile in the center of Vinnytsia, damaging the concert hall. Statements offered by Russian officials provide no evidence of a legitimate military target. However, the concert hall in downtown Vinnytsia is close to several other buildings. Even if other buildings were the intended target of the attack, the lack of evidence of a military presence in the surrounding area indicates that other nearby buildings were also civilian objects. Thus, Russia's attack would likely still constitute a direct attack against a civilian object. Moreover, considering the extensive destruction inflicted on civilian infrastructure—including a concert hall, parking lot, medical facility, offices, stores, and residential buildings—as well as the significant loss of life (23 killed and over 100 injured), it is plausible that Russia intentionally launched this attack with knowledge that it would cause incidental loss of life or injury to civilians or damage to civilian objects, in violation of Article 8(2)(b)(iv).

In many of these cases, the Russian military may attempt to assert that Ukrainian soldiers were present at or near the specially protected objects. If true, the attacks could conceivably have been directed against the building (as a military objective) or the soldiers (as combatants). However, Russia would still need to comply with the IHL principles of proportionality and precautions for such attacks to be lawful.

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¹⁰¹³ See Appendix I (Case No. 3).

APPENDIX I: ATTACKS UNDER EXAMINATION

Case No. 1 - ATTACK ON RESIDENTIAL AREA WITH PRIVATE HOMES IN POKROVSK (MAR. 3, 2022)

On March 3, 2022, Russian forces struck Pokrovsk with cluster munitions launched by a Tornado-S multiple rocket launcher system ("MRLS"). No casualties were reported, as the shells did not explode. However, the shells damaged private homes before landing. Following the attack, the Ukrainian military cautioned that the gel detonators inside the shells are highly sensitive to temperature changes, making them dangerous to move. The Joint Forces Operations headquarters, in reference to this attack, stated that "cluster munition strikes that affect a large area are by definition indiscriminate and therefore, their use in populated areas is a ware crime."

Photographs of the remains of the warhead show markings "9B706." This marking refers to the control unit of the missile.

(left) Remnants of a Russian 9M54-series guided missile documented in Pokrovsk, Donbass Oblast, on March 4, 2022.8

(right) Close-up of part of the munition pictured left. The markings read, in part, "9B706", the GRAU index designation for the guidance system used in 9M54-series guided missiles.9





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¹ Conflict Intelligence Team, Russian Troops shelled the city of Pokrovsk, Donetsk region, with the latest guided cluster rockets of the Tornado-S MLRS, MEDIUM (Mar. 4, 2022), https://archive.ph/BEafv.

² Joint Forces Headquarters reported the Shelling of Pokrovsk with Cluster Munitions, RADIO LIBERTY (Mar. 4, 2022, 11:30 PM), https://archive.is/dMECA#selection-3999.2-3999.21.

³ Anastasia Sennikova, *Consequences of Yesterday's Hit in Pokrovsk (PHOTO)*, 06239 (Mar. 4, 2022, 10:13 AM), https://archive.ph/BMD28#selection-835.10-900.0.

⁴ Joint Forces Headquarters reported the Shelling of Pokrovsk with Cluster Munitions, RADIO LIBERTY (Mar. 4, 2022, 11:30 PM), https://archive.is/dMECA#selection-3999.2-3999.21.
⁵ Id.

⁶ Conflict Intelligence Team, Russian Troops shelled the city of Pokrovsk, Donetsk region, with the latest guided cluster rockets of the Tornado-S MLRS, MEDIUM (Mar. 4, 2022), https://archive.ph/BEafv.

⁸ N.R. Jenzen-Jones & Charlie Randall, *Russian 9M54-series cargo missile documented in Ukraine*, ARMAMENT RESEARCH SERVICES (Mar. 6, 2022), https://perma.cc/75M4-MHVD (photo source: Ukrainian social media via ARES CONMAT Database).

⁹ *Id*.



Forward end of the 9M54-series missile recovered in Pokrovsk.¹⁰

According to the Conflict Intelligence Team, an independent investigative organization, MRLS were discovered in Russia's Rostov Oblast and sourced from Russia's Southern Military District. MRLS are controlled by district brigades, which in the Southern Military District is the 439th Guards Rocket Artillery Brigade. Programme 12

¹⁰ *Id*.

¹¹ *Id*.

¹² *Id*.

Case No. 2 - ATTACK ON KRYVIY RIH WITH TORNADO-S MULTIPLE ROCKET LAUNCHERS (JULY 9, 2022)

On July 9, 2022, Russian forces struck Inhulets, a residential neighborhood in Kryvyi Rih, with cluster munitions launched by a Tornado-S MRLS.¹³ Russia launched ten of these missiles from occupied territory in Ukraine's Kherson Oblast, somewhere between the villages of Novoraysk and Kostyrka.¹⁴ In the aftermath, Kryvyi Rih's Mayor Oleksandr Vilkul instructed residents to avoid approaching "unfamiliar objects," warning of the dangers posed by unexploded cluster munitions. Kryvyi Rih, notably, is the hometown of President Volodymyr Zelenskyy.¹⁶

The head of the Dnipropetrovsk Military Administration reported that the attack damaged a school, several buildings, and private vehicles.¹⁷ Two civilian women were killed, and an additional three people were injured.¹⁸ One of the individuals killed was a 20-year-old athlete who was training on a sports field with her father when the strike occurred.¹⁹ Both suffered multiple shrapnel wounds and were hospitalized, but the young woman died in the intensive care unit.²⁰ The Ukrainian prosecutor's office confirmed that there are no military facilities in this area.²¹ Further, Valentyn Reznichenko, the governor of the eastern Dnipropetrovsk region, stated that Russia "deliberately targeted residential areas."²²

According to the Dnipropetrovsk Region Prosecutor's Office, a pre-trial investigation is underway into violations of international law, along with intentional murder as outlined in Part 2 of Article 438 of the Criminal Code of Ukraine.²³

¹³ Olha Hlushchenko, Women killed in Kryvyi Rih as Russian forces shell residential areas with Grad multiple rocket launchers, UKRAINSKA PRAVDA (Jul. 9, 2022), https://archive.is/JUIvO.

¹⁴ Sofiia Telishevska, *The Russian army fired 10 rockets at a residential quarter in Kryvyi Rih. Two women died*, BABEL (Jul. 9, 2022); Oleksandr Vilkul (@vilkul), TELEGRAM (Jul. 9, 2022), https://perma.cc/K4A5-BBZ8.

¹⁵ Russia creates 'true hell' in eastern Ukraine offensive: Governor, AL JAZEERA (Jul. 9, 2022), https://perma.cc/2RU7-TATJ; Russia continuing its intense assault on eastern Ukraine, local governor says, CBS NEWS (Jul. 9, 2022), https://perma.cc/WA59-TXET.

¹⁶ Russia continuing its intense assault on eastern Ukraine, local governor says, CBS NEWS (Jul. 9, 2022), https://perma.cc/WA59-TXET.

¹⁷ Olha Hlushchenko, Women killed in Kryvyi Rih as Russian forces shell residential areas with Grad multiple rocket launchers, UKRAINSKA PRAVDA (Jul. 9, 2022), https://archive.is/JUIvO; Dnipropetrovsk Region Prosecutor's Office, Missile attack on Kryvyi Rih: A kindergarten worker and a 20-year-old athlete were killed – proceedings have been launched (Jul. 10, 2022), https://perma.cc/E8YM-NFNN.

¹⁸ Iryna Balachuk, Shelling of Kryvyi Rih by Russia: the number of casualties has increased, UKRAINSKA PRAVDA (Jul. 9, 2022), https://archive.ph/FRPq8; Human Rights Watch, Cluster Munition Use in Russia-Ukraine War (May 29, 2023), https://perma.cc/FU4J-ZAAQ; Dnipropetrovsk Region Prosecutor's Office, Missile attack on Kryvyi Rih: A kindergarten worker and a 20-year-old athlete were killed – proceedings have been launched (Jul. 10, 2022), https://perma.cc/E8YM-NFNN. ¹⁹ Dnipropetrovsk Regional Prosecutor's Office (@dnipr_gp_gov_ua), Telegram (Jul. 9, 2022), https://perma.cc/KD8Q-6E93.

²⁰ Dnipropetrovsk Region Prosecutor's Office, Missile attack on Kryvyi Rih: A kindergarten worker and a 20-year-old athlete were killed – proceedings have been launched (Jul. 10, 2022), https://perma.cc/E8YM-NFNN.

²¹ Dnipropetrovsk Regional Prosecutor's Office (@dnipr_gp_gov_ua), TELEGRAM (Jul. 9, 2022), https://perma.cc/KD8Q-6E93.

²² Russia creates 'true hell' in eastern Ukraine offensive: Governor, AL JAZEERA (Jul. 9, 2022), https://perma.cc/2RU7-TATJ.

²³ Dnipropetrovsk Region Prosecutor's Office, Missile attack on Kryvyi Rih: A kindergarten worker and a 20-year-old athlete were killed – proceedings have been launched (Jul. 10, 2022), https://perma.cc/E8YM-NFNN.

Case No. 3 - ATTACK ON CIVILIAN INFRASTRUCTURE IN THE CENTER OF VINNYTSIA (JULY 14, 2022)

Vinnytsia is one of Ukraine's largest cities and is located in the western part of the country.²⁴ Following the initial Russian campaign in Ukraine, which had been concentrated in eastern and southern Ukraine, many Ukrainians fled their homes and headed west, including to Vinnytsia.²⁵

At approximately 11 a.m. on July 14, 2022, Russian forces launched a missile attack against the downtown city center of Vinnytsia. The House of Officers concert hall, a parking lot, a medical building, offices, stores, and residential buildings were significantly damaged by the attack. The strike in the parking lot ignited a fire which spread across 50 cars. The Governor of Vinnytsia reported that 36 apartment buildings were damaged, prompting an evacuation. As a result of the attack, 23 civilians were killed, including at least three children, and more than 100 civilians were injured.

Ukrainian officials determined that the Russian forces used Kalibr 3M-14 cruise missiles launched from a submarine in the Black Sea to execute the attack.³² At least four missiles were launched, with two missiles successfully intercepted.³³ One survivor of the attack recalled: "It was a building of a medical organization. When the first rocket hit it, glass fell from my windows.... And when the second wave came, it was so deafening that my head is still buzzing. It tore out the very outermost door, tore it right through the holes."³⁴

²⁴ Ukraine war: Russian airstrike kills over 20 people in central city of Vinnytsia, Euronews (Jul. 14, 2022), https://perma.cc/8TR4-3HCL.

²⁵ See Finding homes for more than a million displaced Ukrainians, UN NEWS (Feb. 3, 2022), https://perma.cc/F5U5-LJY2.

²⁶ The Russians fired 4 "Caliber" missiles at Vinnitsa, each weighing 1770 kg, INTERFAX-UKRAINE (Jul. 14, 2022), https://archive.ph/Bqrwe. See also George Wright, Ukraine war: 23 killed in Russian rocket attack on Vinnytsia, BBC NEWS (Jul. 14, 2022), https://archive.is/EN5Ck.

²⁷ The Russians fired 4 "Caliber" missiles at Vinnitsa, each weighing 1770 kg, INTERFAX-UKRAINE (Jul. 14, 2022), https://archive.ph/Bqrwe.

²⁸ Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/UKC8-7TW5.

³⁰ Ukraine Accuses Russia of Terrorism as Vinnytsia attack kills 23, AL JAZEERA (Jul. 14, 2022), https://perma.cc/GU2Z-YWJQ.

³¹ Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/UKC8-7TW5.

³² Ukraine Accuses Russia of Terrorism as Vinnytsia attack kills 23, ALJAZEERA (Jul. 14, 2022), https://perma.cc/GU2Z-YWIO.

³³ Reports differ as to the number of missiles that were launched and struck Vinnytsia in the July 14, 2022 attack. In an address at the Hague, President Volodymyr Zelenskyy stated that eight rockets were launched and that two hit the city center. *See id.* Reuters reports that the Ukrainian military stated that three cruise missiles struck the city. Max Hunder, *Twenty killed, dozens hurt in Russian missile strike on central Ukraine – Zelenskiy*, REUTERS (Jul. 14, 2022), https://perma.cc/5FS4-OB2M_AP News reported that four missiles were launched and two of those missiles were

https://perma.cc/5ES4-QB2M. AP News reported that four missiles were launched and two of those missiles were intercepted by Ukrainian air defenses. Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/UKC8-7TW5.

³⁴ Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/UKC8-7TW5.



Emergency services work next to a damaged building at the site of a Russian military strike in Vinnytsia on July 14, 2022. Valentyn Ogirenko/REUTERS.³⁵

President Volodymyr Zelenskyy condemned the attack, describing it as deliberate targeting of civilians and an "act of Russian terror." Governor of Vinnytsia Oblast Serhiy Borzov, speaking to the Associated Press, said: "These are quite high-precision missiles.... They knew where they were hitting." In a post on X, Ukraine's Foreign Minister Dmytro Kuleba wrote: "This is terrorism. Deliberate murder of civilians to spread fear." He also attached a photo depicting a child's body next to a strewn stroller describing the child as one of the victims of the attack. This child was later revealed to be a little girl named Liza. ³⁹

The United Nations Secretary-General, as well as the European Union foreign policy chief and EU Commissioner for Crisis Management, released statements condemning the attack.⁴⁰ The EUvsDisinfo, an online database funded by an EU task force, categorized Russia's claims that the House of Officers concert hall was a military target as "disinformation." Rather, the House of Officers was not a military object at the time of the attack and was not used as barracks. The building is described as a historical concert hall and club venue. In fact, the Ukrainian pop singer Roxolana Syrota was scheduled to perform a concert at the venue on the day of the attack.

³⁵ Russia says building struck in Ukraine's Vinnytsia was military target, REUTERS (Jul. 15, 2022), https://perma.cc/9UMS-H2F3.

³⁶ Id.; Max Hunder, Twenty killed, dozens hurt in Russian missile strike on central Ukraine – Zelenskiy, REUTERS (Jul. 14, 2022), https://perma.cc/5ES4-QB2M.

³⁷ Maria Grazia Murru & Hanna Arhirova, Russian Missiles kill at least 23 in Ukraine, wound over 100, ASSOCIATED PRESS (Jul. 14, 2022), https://perma.cc/UKC8-7TW5.

³⁸ Dmytro Kuleba (@DmytroKuleba), X (Jul. 14, 2022), https://perma.cc/VR7F-PYLU.

³⁹ Hannah Arhirova, 'Robbed of the most precious thing': Missile kills Liza, 4, AP NEWS (Jul. 15, 2022), https://perma.cc/S9C8-CDLF.

⁴⁰ Sebastian Shukla et al., Russian cruise missiles from Black Sea killed at least 23 people in attack on Vinnytsia, Ukraine says, CNN (Jul. 14, 2022), https://perma.cc/T6NG-MKRC.

⁴¹ Disinfo: The House of Officers in Vinnytsia was a temporary location for Nazis, EUVDISINFO https://perma.cc/Y7UX-8SB4 (last accessed Oct. 20, 2024).

⁴² *Id*.

 ⁴³ Olena Roshchina, Vinnytsia Officers' House survived WWII, and it will survive this war too – head of Oblast Military
 Administrator, UKRAINSKA PRAVDA (Jul. 17, 2022), https://perma.cc/2TSU-J4T6; Nadiya Klochko, A member of the singer
 Roxolana's team was killed as a result of shelling in Vinnytsia, GLAVCOM (Jul. 14, 2022), https://perma.cc/8N3A-X3PR.
 ⁴⁴ Nadiya Klochko, A member of the singer Roxolana's team was killed as a result of shelling in Vinnytsia, GLAVCOM (Jul. 14, 2022), https://perma.cc/8N3A-X3PR.



The aftermath of a deadly Russian missile attack in Vinnytsia on July 14, 2022. Efrem Lukatsky/Associated Press⁴⁵



Rescuers work at the scene of a building damaged by a deadly Russian missile attack in Vinnytsia on July 14, 2022. Efrem Lukatsky/Associated Press⁴⁶

⁴⁵ Matthew Mpoke Bigg, *At least 437 children have been killed in the war since February, Ukraine says,* N.Y. TIMES (Nov. 11, 2022), https://perma.cc/2SEN-JF75.

⁴⁶ Hanna Arhirova, *Ukrainian rescuers hunt for survivors of Vinnytsia airstrike*, ASSOCIATED PRESS (Jul. 15, 2022), https://perma.cc/PB5D-KCYD.

Case No. 4 - ATTACK ON CIVILIAN DORMITORY IN KHARKIV (AUG. 17, 2022)

At 9:30 p.m. on August 17, 2022, the Russian military shelled a civilian residential dormitory formerly occupied by people with hearing impairments in the Saltivskyi District of Kharkiv.⁴⁷ The attack on the three-story dormitory killed 19 people.⁴⁸ Of the bodies recovered, ten were identified as men, eight as women, and one was not identifiable due to the extent of the injuries.⁴⁹ In addition, 22 people were injured by the strike, including an 11-year-old child.⁵⁰ As a result of the strike, the building's structure was completely destroyed and a large-scale fire broke out.⁵¹ Rescuers spent two days searching for victims under the rubble.⁵²

Through an analysis of the missile's remnants, the State Emergency Service of Ukraine determined that an Iskander missile was used in the dormitory attack.⁵³ The head of the Regional Military Administration, Oleg Sinegubov, stated that there was "no military facility" in the dormitory, and the victims were all civilians.⁵⁴ The Kharkiv Regional Civil Defense Department estimated that more than 30 people lived in the dormitory at the time of the strike, including elderly residents, children, and people with disabilities.⁵⁵

Tamara Kramarenko, a resident of the building who was left homeless as a result of the attack, recalled: "It was night time, the whole house was full. There are many elderly people on the third floor, the middle of the house was destroyed... Four of us survived, we don't see anyone else—not uncle Borya, not aunt Anya, not Svitlana, my neighbor, not three brothers." ⁵⁶

⁴⁷ Strike on three story building in Kharkiv: search operations completed, number of victims rises to 19, UKRINFORM (Aug. 22, 2022), https://perma.cc/3YFP-PA82.

⁴⁸ Id.; Maria Malevska & Victoria Yasnopolska, Survivors in Hell: Those Injured During the Shelling of Kharkiv Dormitories Do Not Believe They Survived (Aug. 23, 2022), https://perma.cc/Q55M-9ZTF.

⁴⁹ Strike on three story building in Kharkiv: search operations completed, number of victims rises to 19, UKRINFORM (Aug. 22, 2022), https://perma.cc/3YFP-PA82; The number of victims of shelling in Kharkov towns has grown, RBC (Aug. 18, 2022), https://perma.cc/449F-EDLZ.

⁵⁰ Russia's war against Ukraine: 17 dead and over 40 wounded as a result of strikes on several districts of Kharkov and the region, BBC NEWS (Aug. 19, 2022), https://perma.cc/FT8G-9Z6A.

⁵¹ Strike on three story building in Kharkiv: search operations completed, number of victims rises to 19, UKRINFORM (Aug. 22, 2022), https://perma.cc/3YFP-PA82.

⁵² *Id*.

⁵³ Sofia Tsvetkova & Oleksandra Novosel, Fragments of a Russia Iskander missile were recovered from the rubble of a dormitory in Kharkiv (Aug. 19, 2022), https://archive.is/TLnv3.

⁵⁴ Russia's war against Ukraine: 17 dead and over 40 wounded as a result of strikes on several districts of Kharkov and the region, BBC NEWS (Aug. 19, 2022), https://perma.cc/FT8G-9Z6A.

⁵⁵ Id.; Sofia Tsvetkova, People with hearing impairments lived in the Kharkiv dormitory hit by a Russian missile on August 17, SUSPILNE MEDIA (Aug. 18, 2022), https://perma.cc/D7QE-HQWB.

⁵⁶ Sofia Tsvetkova, *People with hearing impairments lived in the Kharkiv dormitory hit by a Russian missile on August 17*, SUSPILNE MEDIA (Aug. 18, 2022), https://perma.cc/D7QE-HQWB.

Case No. 5 - ATTACK ON ENERGY INFRASTRUCTURE IN KHARKIV (SEPT. 11, 2022)

On September 11, 2022, Russian forces launched a devastating attack on Ukraine's TEC-5 power plant, located near Kharkiv, with Kh-101 missiles. This attack inflicted widespread power outages across the Kharkiv, Dnipro, Sumy, and Poltava regions of Ukraine, and resulted in the deaths of two power plant workers.⁵⁷

Kyrylo Tymoschenko, the deputy head of Ukraine's Presidential Office, stated that two cruise missiles struck the power plant, causing a massive fire that firefighters eventually managed to extinguish.⁵⁸ The Ukrainian Air Force later revealed that Russian forces had launched 11 missiles in total, with the majority intercepted and destroyed by Ukraine's air defense systems.⁵⁹

Kharkiv's TEC-5 power plant serves as the country's second largest heat and power plant. Accordingly, both Oleg Synegubov, the regional governor of Kharkiv, and Dmytro Reznichenko, the head of the Dnipropetrovsk region, reported that several communities were left without electricity or water as a result of the strike. Further, in the eastern Sumy region alone, approximately 135 towns suffered the impact of the power plant's damage. In response to the attack, Kyrylo Tymoshenko, the deputy head of Ukraine's presidential office, emphasized that "Russians want to leave [Ukrainians] without light, water and heat. Similarly, Ihor Terekhov, the mayor of Kharkiv, condemned the attack as a "mean and cynical revenge of the Russian aggressor for the successes of our army at the front.

No evidence indicates that Kharkiv's TEC-5 power plant served as a military facility. Zelenskyy denounced this attack a part of "deliberate and cynical missile strikes on critical civilian infrastructure . . . [n]ot military facilities."⁶⁵

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⁵⁷ Lorenzo Tondo & Isobel Koshiw, Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sep. 11, 2022), https://perma.cc/UQ3R-2RMJ; Slovo i Dilo, At the damaged power plant in the Kharkiv region the wreckage of the Russian Kh-101 missile was found (Sept. 12, 2022), https://archive.ph/Ci8gz; Kharkiv Mayor Says Power, Water Cut After New Round of Russian Shelling, RADIO FREE EUROPE/RADIO LIBERTY (Sept. 12, 2022), https://perma.cc/J5KG-9AEC.
⁵⁸ Lorenzo Tondo & Isobel Koshiw, Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/UQ3R-2RMJ.
⁵⁹ Id.

⁶⁰ Associated Press, Russian troops leaving behind weapons and munitions in Ukraine counteroffensive, NPR (Sept. 11, 2022), https://perma.cc/VR7D-9487.

⁶¹ Lorenzo Tondo & Isobel Koshiw, Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/UQ3R-2RMJ. In reference to Russia's attacks against critical infrastructure in Kyiv, Oleg Synegubov stated on social media: "There is no electricity or water supply in several settlements. Emergency services are working to control fires at the sites that were hit." AFP, Ukraine Officials Blame Russia for Blackouts Across East of Country, THE MOSCOW TIMES (Sept. 11, 2022), https://perma.cc/Q8XY-GF3C. Dmytro Reznichenko, the head of the Dnipropetrovsk region, similarly deemed Russian forces responsible for blackouts across the region, highlighting that "several cities and communities in the Dnipropetrovsk region are without electricity. The Russians hit energy infrastructure. They cannot accept defeat on the battlefield." Id.

⁶² Lorenzo Tondo & Isobel Koshiw, Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/UQ3R-2RMJ.

⁶⁴ Lorenzo Tondo & Isobel Koshiw, Russian strikes knock out power and water in Ukraine's Kharkiv region, THE GUARDIAN (Sept. 11, 2022), https://perma.cc/UQ3R-2RMJ.

Case No. 6 - MASS ATTACK ON CIVILIAN INFRASTRUCTURE IN KYIV (OCT. 10, 2022)

In the morning hours of October 10, 2022, Russian forces hit Kyiv and a number of other Ukrainian cities, including Dnipro, Zaporizhzhia, and Zhytomyr, with a series of missile and drone strikes. The attacks killed at least 23 civilians and injured more than 100.66 In Kyiv alone, seven people were killed and 49 were injured.⁶⁷

This barrage was one of the largest missile attacks since the beginning of the Russian fullscale invasion, primarily targeting civilian sites and critical energy infrastructure, such as power plants and substations. Ukraine's national police reported that out of 117 damaged buildings nationwide, 29 were critical infrastructure facilities, four were multi-story buildings, and 35 were private residential houses.⁶⁸ Vitaliy Klitschko, the mayor of Kyiv, reported that 45 residential buildings, three schools, a kindergarten, five medical facilities, and the building that houses the German consulate were damaged.⁶⁹ The attack resulted in major power and water shortages across Ukraine.⁷⁰

These attacks were widely condemned by the international community. 71 As the first explosions rocked Kyiv, Zelenskyy urged Ukrainians to seek shelter, stating: "They are trying to destroy us and wipe us off the face of the Earth; destroy our people who are sleeping at home in Zaporizhzhia, kill people who go to work in Dnipro and Kyiv. I beg you: do not leave shelters. Take care of yourself and your loved ones. Let's hold on and be strong."72

Ukrainian Air Force Command estimated that on October 10, Russian forces launched 83 missiles including Kh-101, Kh-555, Kalibr, Iskander, S-300, and Tornado MRLS. 73 A Bellingcat investigation confirmed the use of Kh-101, Kalibr, and Iskander missiles in these attacks.⁷⁴

One missile hit a pedestrian bridge in downtown Kviv. The moment of the strike was captured by surveillance cameras. The video shows a civilian narrowly escaping the strike.⁷⁵ A Conflict Armament Research team that visited the site after the strike found and analyzed fragments of the missile used in this attack and confirmed that it was a Russian-made Kh-101 missile, produced in 2018.⁷⁶

⁶⁶ Kyrylo Tymoshenko (@tymoshenko_kyrylo), Civilian casualties as a result of the armed aggression of the Russian Federation on 10.10.2022, TELEGRAM (Oct. 11, 2022), https://archive.ph/RLT1o.

⁶⁷ Death toll from Russian shelling on October 10 rises to 23, RFI (Oct. 11, 2022).

⁶⁹ Russia has launched massive missile strikes throughout Ukraine, BBC NEWS (Oct. 10, 2022), https://archive.ph/VL3oi.

⁷⁰ Russia rains missiles down on Ukraine's capital and other cities in retaliation for Crimea bridge blast, CBS NEWS (Oct. 10, 2022), https://archive.ph/hykrB.

⁷¹ Adam Schreck, UN, G7 decry Russian attack on Ukraine as possible war crime, ASSOCIATED PRESS (Oct. 12, 2022), https://archive.ph/J5hEn; Jordan Fabian, Biden Condemns 'Utter Brutality' of Russian Strikes on Civilians, BLOOMBERG (Oct. 10, 2022), https://archive.ph/gesht; EU condemns 'barbaric' Russian missile attacks, warns Belarus, REUTERS (Oct. 10, 2022), https://archive.ph/maQOV.

⁷² Peter Beaumont et al., Putin warns of further retaliation as Ukraine hit by massive wave of strikes, THE GUARDIAN (Oct. 10, 2022), https://perma.cc/UN9W-32FF.

⁷³ Valentina Romanenko, *The Air Force clarifies what Russia used during 10 October attack*, UKRAINSKA PRAVDA (Oct. 10, 2022), https://archive.ph/o8lx3.

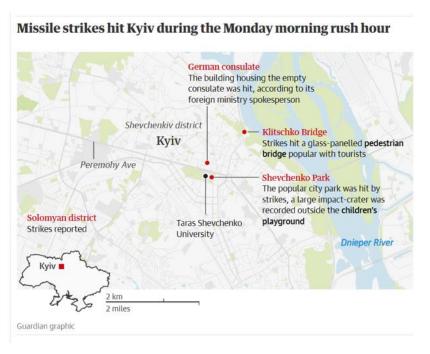
⁷⁴ Christo Grozev, The Remote Control Killers Behind Russia's Cruise Missile Strikes on Ukraine, BELLINGCAT (Oct. 24, 2022), https://archive.ph/5x5xy.

⁷⁵ Kyiv bridge: Near miss for pedestrian in missile strike, BBC NEWS (Oct. 10, 2022), https://archive.ph/F0dsW.

⁷⁶ Conflict Armament Research, Dating Newly-Produced Russian Missiles Used in Kyiv Attacks (Dec. 2022), https://archive.ph/6ZTRY.

In response to the attacks, Amnesty International's Secretary General, Agnès Callamard, stated: "This is yet another day of petrifying news from Ukraine, with Russia launching multiple strikes that hit residential areas, city centres and civilian infrastructure. . . . The ultimate goal of today's attacks is to spread terror among the entire civilian population."⁷⁷

President Vladimir Putin, addressing his security council, intimated that the missile barrage was retaliation for "terrorist attacks" on Russian territory, specifically referencing the recent attack on the Crimea bridge. "Let there be no doubt," Putin said, "if attempts at terrorist attacks continue, the response from Russia will be severe." The strikes were also viewed as retaliation for the Ukrainian attack on the Kerch Bridge, a vital supply route linking Russia to the occupied Crimean Peninsula."



The UN High Commissioner for Human Rights ("OHCHR") noted:

The location and timing of the strikes – when people were commuting to work and taking children to school – is particularly shocking. We are gravely concerned that some of the attacks appear to have targeted critical civilian infrastructure. Many civilian objects, including dozens of residential buildings and vital civilian infrastructure – including at least 12 energy facilities – were damaged or destroyed in eight regions, indicating that these strikes may have violated the principles on the conduct of hostilities under international humanitarian law.⁸¹

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⁷⁷ Amnesty International, Russian Attacks on Kyiv and Cities Across Ukraine Are an Escalation of Aggression and Apparent Violations of Laws of War (Oct. 10, 2022), https://perma.cc/EYM2-F22].

⁷⁸ Dozens of Russian missiles hit multiple Ukrainian cities, AL JAZEERA (Oct. 10, 2022), https://perma.cc/Z59G-3LQM. ⁷⁹ Id.

⁸⁰ Charlotte Higgins et al., *'This only unites us': defiance as deadly strikes bring war back to Kyiv*, THE GUARDIAN (Oct. 10, 2022), https://perma.cc/E8CE-3BMH .

⁸¹ Press Briefing Note, Ukraine: Attack on Civilians and Infrastructure, U.N. Off. of the High Comm'r for Hum. Rts. (Oct. 11, 2022), https://perma.cc/FVN7-RD5J.

Case No. 7 - ATTACK ON ENERGY INFRASTRUCTURE (THERMAL POWER PLANT) IN LADYZHYN, VINNYTSI OBLAST (OCT. 11, 2022)

On October 11, 2022, Russian forces struck energy infrastructure across six regions in western, central, and southern Ukraine using Kh-101 missiles and Shahed-136 unmanned aerial vehicles ("UAVs"). Doe of the Shahed-136 UAV strikes hit the Ladyzhyn Thermal Power Plant, located in Ladyzhyn, Vinnytsia Oblast. The first strike, carried out at approximately 7:30 a.m., caused significant damage to the power plant. A second attack occurred around 12:00 p.m., which hit emergency workers responding to the initial strike, injuring six workers. This may be characterized as a "double tap" attack. The Vinnytsia Prosecutor's Office launched an investigation.

The Ladyzhyn attack had an immediate impact on the local population. The strikes disabled critical infrastructure at the power plant, which had six power units with a capacity of 300 megawatts each. Replace 10 lower supply interruptions and water shortages persisted, with residents urged to stock up on water. Replace 10 lower supply interruptions and water shortages persisted, with residents urged to stock up on water. The Vinnytsia Oblast Commission for Technogenic and Environmental Safety declared an "emergency situation" in Ladyzhyn. Over 18,000 residents were left without proper heating during the winter months, posing significant humanitarian risk as temperatures dropped.

Although repairs were undertaken immediately, with authorities aiming to restore power to areas affected by the missile attacks within days, these efforts fell short. Ladyzhyn, in parallel with numerous Ukrainian cities, sustained continuous shelling directed at its energy infrastructure. To example, on November 24, DTEK, the energy company in charge of the Ladyzhyn plant, reported

⁸² Tetyana Vasylenko, Russia attacked the Ladyzhynska TPP in Vinnytsia Oblast with kamikaze Drones: what Is known, TCH (Oct. 11, 2022, 7:48 AM), https://archive.ph/iaAJ0; Air Force of the Armed Forces of Ukraine, 20 Cruise Missiles and 13 UAVs-Kamikaze Were Destroyed (Summarised Information for October 11), TELEGRAM (Oct. 11, 2022), https://archive.ph/EjF6J.

⁸³ International Partnership for Human Rights, Western-Made Components in Shahed-136 (Sept. 15, 2023), https://perma.cc/DA3D-7B76. The coordinates of the impact site are: 48.70680161886597, 29.22011808294714. Id. 84 Yulia Kovalishena, Sestero Travmovanykh: Armiia RF V druhe Atakuvala Ladyzhynsku TES [Six Injured: The Russian Army Attacked the Ladyzhynska TPP Again], SUSPILNE MEDIA (Oct. 11, 2022), https://perma.cc/R7F3-7U8U. See also Ladyzhynska TPP in Vinnytsia Attacked by Two Shahed-136 Drones (Oct. 11, 2022), https://perma.cc/H76L-UPAQ. 85 DTEK, FACEBOOK (Oct. 24, 2022), https://perma.cc/X3JY-XNQH.

⁸⁶ For more information about double-tap attacks, see: Mercedes Sapuppo and Shelby Magid, *Death Toll Climbs in Ukraine With Russia's 'Double-Tap' Strikes*, JUST SECURITY (Jul. 8, 2024), https://archive.ph/FTWYC; Truth Hounds, *Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine* (Dec. 17, 2024), https://archive.ph/NDMVs.

⁸⁷ Vinnytsia Regional Prosecutor's Office, *Russian Forces Attacked Ladyzhyn Thermal Power Plant in Vinnytsia Oblast with Kamikaze Drones* (Oct. 11, 2022), https://perma.cc/WZG5-EHKD.

⁸⁸ Russian Forces Attack Ladyzhynska TPP with Shahed-136 Kamikaze Drones, UKRAINSKA PRAVDA (Oct. 11, 2022), https://perma.cc/NV6K-LMNH.

⁸⁹ Vinnytsia Regional Military Administration, Restoration of Heat Supply in Ladyzhyn, Limitation of Electricity Consumption, the State of the Medical System of the Region - Key Issues of the Meeting of the Head of RMA Serhiy Borzov with the Heads of Structural Divisions (Jan. 23, 2023), https://archive.ph/qoOXa.

 $^{^{90}}$ Vinnytsia Oblast: TPP attacks create emergency situation in Ladyzhyn, UKRAINSKA PRAVDA (Nov. 28, 2022), https://archive.ph/AGXgt.

⁹¹ *Id*

⁹² Prime Minister Denys Shmyhal stated that outages on energy infrastructure affected by the missile attacks would be "restored within Monday-Tuesday." *See V innytsia Regional Military Administration: The Occupiers Attacked the TPP with Iranian Drones*, BABEL (Oct. 11, 2024), https://perma.cc/BG2T-CQ45.

⁹³ See Daniel Boffey, Lviv Braces for Cold Times as Putin Seeks to Weaponise Winter, THE GUARDIAN (Oct. 11, 2022), https://perma.cc/EN25-WS3Q. In the Lviv region, for example, electricity was restored on October 11, but a few hours later in Lviv itself, the power infrastructure was damaged again, depriving 30% of the city of access to electricity. *Id.*

that due to numerous Russian attacks on the country's energy infrastructure, heat and hot water supply were temporarily limited in the city of Ladyzhyn. Even in the midst of further attacks, heating was fully restored in Ladyzhyn by December 1. Nonetheless, the city remained vulnerable, as additional Russian attacks in January 2023 once again disrupted the heat distribution system. These repeated attacks made it difficult to maintain consistent heating services during the coldest months, severely impacting civilians' quality of life.

The attack on the Ladyzhyn power plant was part of a larger Russian offensive against Ukraine's energy infrastructure, which included missile strikes and drone attacks on energy facilities across the country. From October 10 to 20, Russian forces damaged dozens of energy infrastructure sites in 16 of Ukraine's 24 regions, including major cities such as Kyiv, Lviv, Khmelnytsky, and Kharkiv. The strikes forced Kyiv to halt electricity exports to Europe and implement energy-saving measures domestically to cope with rolling blackouts. 99

This broader campaign had severe consequences for Ukraine's energy supply, with millions affected by power outages. The head of Ukrenergo, Volodymyr Kudrytskyi, characterized this wave of energy attacks as "the largest attack on the energy system in history," and noted that "Russian military forces were assisted by Russian energy experts in this attack ... judging by the nature of the damage, it's clear they helped select the targets." Ukraine's Prime Minister Denys Shmyhal stated that Russian strikes had caused massive damage to energy facilities, disrupting electricity and heating services across the country. The Ladyzhyn attack, as part of this wave, further strained Ukraine's ability to provide basic utilities to its citizens.

Following the attacks, Putin characterized the strikes as "retaliation" for Kyiv's "terrorist actions" in targeting the Kerch Bridge weeks prior, and vowed to take a "tough and proportionate response" if Ukraine conducted additional attacks that threatened Russia's security. Other leading political and military figures spoke out following the attacks on October 11. Russia Today's ("RT") Margarita Simonyan tweeted, "[h]ere comes the response ... The Crimean bridge was that very red line from the very beginning." The Moscow-appointed *de facto* governor of Crimea, Sergei Aksyonov, referred to the strikes as "good news." Meanwhile, RT's prominent host, Anton

⁹⁴ DTEK, FACEBOOK (Oct. 11, 2024), https://perma.cc/2MQB-5G8A.

⁹⁵ Serhiy Borzov, Heat supply has been restored in Ladyzhyn, FACEBOOK (Dec. 1, 2022), https://perma.cc/XUP2-U45E.

⁹⁶ Vinnytsia Regional Military Administration, Restoration of heat supply in Ladyzhyn, limitation of electricity consumption, the state of the medical system of the region - the key issues of the meeting of the Head of RMA Serbiy Borzov with the heads of structural divisions (Jan. 23, 2023), https://archive.ph/qoOXa.

⁹⁷ Ukraine War: Western Leaders Condemn Russian Missile Attacks on Civilians, BBC NEWS (Dec. 3, 2022), https://perma.cc/2W5A-THGH.

⁹⁸ Human Rights Watch, *Ukraine: Russian Attacks on Energy Grid Threaten Civilians* (Dec. 6, 2022), https://perma.cc/23ZW-4J6P. *See also* Cabinet of Ministers of Ukraine, *Speech by Prime Minister Denys Shmyhal at the Government Meeting* (Oct. 21, 2022), https://perma.cc/QF4W-KVBM.

⁹⁹ NPC Ukrenergo, *Ukrenergo Restores Ukraine's Energy Infrastructure*, YOUTUBE (Oct. 13, 2022), https://perma.cc/Z6GJ-RYYC. *See also* NPC Ukrenergo, *Report on Ukrainian Energy System Attacks*, YOUTUBE (Oct. 14, 2022), https://perma.cc/3X6T-WR5V.

¹⁰⁰ NPC Ukrenergo, Vinnytsia Regional Military Administration: The Occupiers Attacked the TPP with Iranian Drones, YOUTUBE (Oct. 11, 2024), https://perma.cc/2A8J-CBW7.

¹⁰¹ Human Rights Watch, Ukraine: Russian Attacks on Energy Grid Threaten Civilians (Dec. 6, 2022),

https://perma.cc/23ZW-4J6P. See also Cabinet of Ministers of Ukraine, Speech by Prime Minister Denys Shmyhal at the Government Meeting (Oct. 21, 2022), https://perma.cc/QF4W-KVBM.

¹⁰² Dasha Litvinova, Russian Officials, Commentators Call for More Missile Strikes on Ukraine, PBS (Oct. 10, 2022), https://perma.cc/J3XD-5FNF.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

Krasovsky, shared a video of himself dancing on a balcony while wearing a cap featuring the "Z" symbol, used by Russian forces on military vehicles during the invasion of Ukraine. ¹⁰⁵ In another Telegram post, Krasovsky remarked that the damage to Ukraine's power infrastructure was "not enough! Not enough!" ¹⁰⁶

¹⁰⁵ *Id*.

¹⁰⁶ *Id*.

Case No. 8 - MASS ATTACK ON CIVILIAN INFRASTRUCTURE IN KYIV, KYIV OBLAST (OCT. 17, 2022)

On October 17, 2022, Russian forces launched a massive UAV attack on Kyiv, using Iranian-made Shahed-136 drones, amidst Russia's wider campaign against Ukrainian cities and infrastructure. 107 Around 28 drones were directed at Kyiv, causing significant damage to both civilian infrastructure and energy facilities, and a total of five drone strikes were recorded in Kyiv alone. 108

At 7:00 a.m., a Shahed-136 drone struck an office building in the Shevchenkivskyi District of Kyiv, igniting a fire. 109 Several residential buildings nearby were also damaged by the blast, impacting civilians living in the area. 110 At around 8:00 a.m., four more drones targeted various energy infrastructure facilities and an apartment building in Kyiv's historical downtown, causing catastrophic damage. 111 The attack resulted in five civilian deaths, including a 34-year-old pregnant woman and her husband. 112 Nineteen civilians were rescued from the rubble, with three individuals hospitalized, including two emergency workers. 113 The strike had destroyed the historical residential building beyond repair. 114

During the attack, the Ukrainian military managed to shoot down 37 out of 43 drones launched across the country on that day, with Kyiv's air defense taking down 25 drones aimed at the capital. 115 The strikes caused blackouts across multiple regions, disrupting everyday life and pushing Ukrainian authorities to call for energy-saving measures. 116 Prime Minister Denys Shmyhal emphasized that services were working to restore electricity, 117 and Ukrenergo reported significant damage to central and northern energy facilities. 118

¹⁰⁷ U.S. Dep't of State, Department Press Briefing - October 17, 2022 (Oct. 17, 2022), https://perma.cc/69S4-XE3Y.

¹⁰⁸ Natalia Balyukh, Na Kyiv zapustyly błyzko 30 droniv, 25 iz nykh zbyły ZSU – Monastyrskyi [About 30 Drones Were Launched at Kyiv, 25 of Them Shot Down by the Armed Forces – Monastyrskyil, SUSPILNE MEDIA (Oct. 17, 2022), https://perma.cc/WHM6-YWCZ.

¹⁰⁹ International Partnership for Human Rights, Western-Made Components in Shahed-136 (Sept. 15, 2023), https://perma.cc/DA3D-7B76.

¹¹⁰ Nadiya Sobenko, Rosiia vdarila raketamy po tsentru Kyieva [Russia Struck the Center of Kyiv with Missiles], SUSPILNE MEDIA (Oct. 10, 2022), https://perma.cc/AJ28-URLZ. 111 Id.

¹¹² The victims, Victoria and Bohan (both 34-years-old) were found dead after the building was struck, according to a Ukrainian official. See Isobel Koshiw, Kyiv Hit by a Series of Explosions from Drone Attack, THE GUARDIAN (Oct. 17, 2022), https://perma.cc/Z4UM-UBNZ.

¹¹³ Nadiya Sobenko, Rosiia vdarila raketamy po tsentru Kyieva [Russia Struck the Center of Kyiv with Missiles], SUSPILNE MEDIA (Oct. 10, 2022), https://perma.cc/AJ28-URLZ.

¹¹⁴ Renovation Map, FACEBOOK (Oct. 17, 2022),

https://www.facebook.com/renovation.map/posts/pfbid0cPXb417jbNKCRgC8PBfhiG5w359B9wwYTvETc9MecFrt NZpUoNhvrMwTX9FzoR6wl. The coordinates of the residential house are: 50.44176516396034, 30.496571000000003. See International Partnership for Human Rights, Western-Made Components in Shahed-136 (Sept. 15, 2023), https://perma.cc/DA3D-7B76.

¹¹⁵ Natalia Balyukh, Na Kyiv zapustyly błyzko 30 droniv, 25 iz nykh zbyły ZSU – Monastyrskyi [About 30 Drones Were Launched at Kyiv, 25 of Them Shot Down by the Armed Forces – Monastyrskyil, SUSPILNE MEDIA (Oct. 17, 2022), https://perma.cc/WHM6-YWCZ.

¹¹⁶ General Staff of the Armed Forces of Ukraine, FACEBOOK (Oct. 17, 2022), https://archive.ph/2ruNA.

¹¹⁷ Denys Shmyhal (@Denys_Smyhal), TELEGRAM (Oct. 17, 2022), https://archive.ph/vCfDU.

¹¹⁸ Ukrenergo (@Ukrenergo), TELEGRAM (Oct. 17, 2022), https://archive.ph/puLnn.

The attack occurred just days after Putin publicly stated that there would be "no need for more massive strikes" on Ukraine. ¹¹⁹ Immediately following the attack, Russian officials claimed to have hit Ukrainian military command facilities and energy systems, using long-range air and seabased weapons, and that "[a]ll designated objects were hit." ¹²⁰ Some sources also indicated that a fragment of a drone shared by the Kyiv mayor bore the marking "for Belgorod," suggesting the attack was retaliation for Ukrainian attacks on the Russian border city. ¹²¹

White House Press Secretary Karine Jean-Pierre denounced Russia's missile strikes on October 17, stating that the U.S. "strongly condemns" the assault and will hold Russia accountable for its "war crimes." She further emphasized that the attack "continues to demonstrate Putin's brutality." The Institute for the Study of War ("ISW") also reported that the October 17 drone attack on residential infrastructure in Kyiv is "consistent with the broader pattern of Russian forces prioritizing creating psychological terror effects on Ukraine over achieving tangible battlefield effects." The ISW cited U.S. military analyst Brett Friedman, who compared the payload of the Shahed-136 drone to that of conventional artillery. In essence, one drone has about the same explosive capacity as three artillery shells, although it does not create the consistent fragmentation that artillery does. Russian forces deploy Shahed-136 drones primarily to induce "psychological effects associated with targeting civilian areas instead of attempting to generate asymmetric operational effects by striking legitimate military and frontline targets in a concentrated manner." 126

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¹¹⁹ Dan Sabbagh et al., 'Kamikaze' drones hit Kyiv despite Putin's claim of no further strikes, THE GUARDIAN (Oct. 17, 2022), https://perma.cc/XBL8-X37C. See also Ukraine War: Kyiv Hit by "Kamikaze Drones", BBC NEWS (Oct. 17, 2022), https://perma.cc/4NXA-VMRQ.

¹²⁰Russia-Ukraine War News: October 17, 2022, CNN (Oct. 17, 2022), https://perma.cc/7JMQ-4L8D.

¹²¹ Elliot Smith, Russia's Economic Decline Deepens as War Drags On; Putin Says Moscow Could Pull Out of Grain Deal Again, CNBC (Nov. 3, 2022), https://perma.cc/GTT5-JPAU. See also Dan Sabbagh et al., 'Kamikaze' drones hit Kyiv despite Putin's claim of no further strikes, THE GUARDIAN (Oct. 17, 2022), https://perma.cc/XBL8-X37C.

¹²²Intense Fighting Flares in Ukraine's Donetsk Region, REUTERS (Oct. 17, 2022), https://perma.cc/Q57P-U9N2. ¹²³ Id.

¹²⁴ Institute for the Study of War, Russian Offensive Campaign Assessment, October 17, UNDERSTANDING WAR (Oct. 17, 2022), https://perma.cc/4QY2-63R4.

¹²⁵ While the drone carries 88 pounds of explosives, a standard 155-millimeter M795 artillery shell carries only 23.8 pounds.

¹²⁶ Institute for the Study of War, Russian Offensive Campaign Assessment, October 17, UNDERSTANDING WAR (Oct. 17, 2022), https://perma.cc/4QY2-63R4. See also Institute for the Study of War, Russian Offensive Campaign Assessment, October 6, UNDERSTANDING WAR (Oct. 6, 2022), https://perma.cc/P3LW-5U76.



Kyiv Mayor Vitali Klitschko speaks at a news conference next to a building damaged in a drone attack on October 17, 2022. Yashuyoshi Chiba/AFP/Getty Images¹²⁷

¹²⁷ Civilians killed as Russia launches deadly drone strikes on residential area of Kyiv, ASSOCIATED PRESS (Oct. 17, 2022), https://perma.cc/S7M5-CJT3.

Case No. 9 - ATTACK ON ENERGY INFRASTRUCTURE IN ODESA OBLAST (DEC. 10, 2022)

On December 10, 2022, Russian forces carried out an overnight attack on two energy infrastructure facilities located in the Odesa Oblast, deploying a Shahed-136 UAV, as identified by the Odesa Regional Prosecutor's Office. ¹²⁸ The UAV strike triggered a fire, which took firefighters over four hours to extinguish. ¹²⁹ The attack resulted in a complete electricity blackout in Odesa and Odesa Oblast, affecting approximately 1.5 million residents, according to Zelenskyy. ¹³⁰ Even by the following day, roughly 300,000 people remained without electricity. ¹³¹

In response to the resulting reduction in the power grid's capacity and ability to fulfill demand, local authorities imposed restrictions on energy use across the region, which extended for five days following the attack. ¹³² Per Zelenskyy's address following the attack, the repairs necessary to restore electricity were anticipated to take several days, though the full recovery of the grid could take much longer. Serhiy Bratchuk, a spokesperson for Odesa's regional administration, similarly notified Ukrainians that electricity would be restored "in the coming days" after the attack. ¹³³

Major energy companies, like DTEK Odesa Electric Grids and Ukrenergo, worked diligently to supply power to critical infrastructure facilities, including hospitals.¹³⁴ DTEK Odesa Electric Power Network also advised the Ukrainian population to conserve energy use by refraining from using high-power devices, such as irons or electric stoves, once power had been partially restored.¹³⁵ Despite these efforts, the total restoration of the network was predicted to extend for up to three months.¹³⁶

¹²⁸ Office of the Attorney General (@pgo_gov_ua), Shelling of energy infrastructure in Odesa region - an investigation has been launched, TELEGRAM (Dec. 10, 2022), https://archive.ph/SAdOp; ZN.UA (@znua_live), At night, the occupiers shelled the critical infrastructure of Odesa, TELEGRAM (Dec. 10, 2022), https://archive.ph/CL3nh.

¹²⁹ News Odessa (@our_odessa), About 4-4:30 hours have already passed from the moment of attack, but it still not possible to extinguish it, TELEGRAM (Dec. 10, 2022), https://archive.ph/IqziJ.

¹³⁰ Suspilne Odesa (@suspilneodesa), After a night strike by drones, more than one and a half million people in Odesa remain without electricity, TELEGRAM (Dec. 10, 2022), https://archive.ph/C20Yx; DTEK Odesa Electricity Networks, Power engineers of DTEK and NEC Ukrenergo are restoring the region's energy infrastructure after an enemy attack, FACEBOOK (Dec. 10, 2022), https://perma.cc/4ZEV-MD96.

¹³¹ Suspilne Media, 300,000 people in Odesa remain without electricity (Dec. 11, 2022), https://archive.ph/6n05A; Suspilne Odesa, Odesa is without electricity after the drone attack: all the sockets in the shops are in use, YOUTUBE (Dec. 11, 2022), https://archive.ph/qKvvh.

¹³² Ilona Yakymyuk, *In Odesa Oblast, electricity will continue to be turned off not according to the schedule* (Dec. 13, 2022), https://archive.ph/F2aE8.

¹³³ All consumers cut from power in Odesa due to overnight attacks by Russians, UKRAINSKA PRAVDA (Dec. 10, 2022, 9:41 AM), https://perma.cc/9BM9-B8Z7.

¹³⁴ Id.; DTEK Odesa Electricity Networks, Power engineers of DTEK and NEC Ukrenergo are restoring the region's energy infrastructure after an enemy attack, FACEBOOK (Dec. 10, 2022), https://perma.cc/4ZEV-MD96.

¹³⁵ DTEK Odesa Electricity Networks, *Power engineers of DTEK and NEC Ukrenergo are restoring the region's energy infrastructure after an enemy attack*, FACEBOOK (Dec. 10, 2022), https://perma.cc/4ZEV-MD96.

¹³⁶ Nick Starkov, Russian drones smash power network in Odesa, REUTERS (Dec. 11, 2022), https://perma.cc/FG2V-NZ6W.

Case No. 10 - ATTACK ON ENERGY INFRASTRUCTURE IN KHARKIV (DEC. 28–29, 2022)

On the night of December 28–29, 2022, approximately 1,000 civilian homes in Ukraine were left without heating following a Russian attack on critical energy infrastructure in Kharkiv. ¹³⁷ The attack was executed using a total of 13 UAVs, ¹³⁸ identified as Shahed-136 drones by the Kharkiv Regional Prosecutor's Office. ¹³⁹ Despite the Ukrainian Air Defense successfully striking down 11 of the UAVs, the remaining two struck energy targets in Kharkiv. ¹⁴⁰

Adding to the devastation, Oleg Synegubov, the Governor of Kharkiv Oblast, reported further rocket strikes in the region after 2:00 p.m. on December 29.¹⁴¹ The Kharkiv's Regional Prosecutor's Office confirmed that Russian forces repeatedly struck Kharkiv's energy infrastructure the following morning with S-300 missiles, launched from the Belgorod region of the Russian Federation.¹⁴²

This attack formed part of a broader Russian air campaign during the nights of December 28–29, which resulted in at least 30 people dead, 160 wounded, and the destruction of a number of private houses, apartment buildings, schools, and hospitals. For instance, on December 28, Russian forces shelled residential areas in Kupyansk and Kivsharivka, resulting in severe damage to civilian homes. He time, U.S. President Joe Biden characterized this as the "largest aerial assault on Ukraine" since the full-scale invasion began in February 2022. He

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¹³⁷ Oleg Synegubov, *The situation in Kharkiv region*, FACEBOOK (Dec. 29, 2022), https://perma.cc/QZ3C-AE9U; Oleg Synegubov (@synegubov), *Late yesterday evening, Kharkiv suffered a massive attack by "Shahed" kamikaze drones*, TELEGRAM (Dec. 29, 2022), https://archive.ph/anb69.

¹³⁹ General Staff of the Armed Forces of Ukraine, Operational information as of 6:00 on 29.12.2022 regarding the Russian invasion, FACEBOOK (Dec. 29, 2022), https://archive.ph/Uy1F1; Kharkiv Regional Prosecutor's Office (@prokuratura_kharkiv), The Russian military attacked Kharkiv with drones and missiles, TELEGRAM (Dec. 29, 2022), https://archive.ph/MVb8t.

¹⁴⁰ Oleg Synegubov, *The situation in Kharkiv region*, FACEBOOK (Dec. 29, 2022), https://www.facebook.com/synegubov.oleg/videos/697234561893799/?t=0; Oleg Synegubov (@synegubov), *Late yesterday evening, Kharkiv suffered a massive attack by "Shahed" kamikaze drones*, TELEGRAM (Dec. 29, 2022), https://archive.ph/anb69.

¹⁴¹ Oleg Synegubov, The situation in Kharkiv region, FACEBOOK (Dec. 29, 2022), https://perma.cc/QZ3C-AE9U.

¹⁴² Kharkiv Regional Prosecutor's Office (@prokuratura_kharkiv), *The Russian military attacked Kharkiv with drones and missiles*, TELEGRAM (Dec. 29, 2022), https://archive.ph/MVb8t.

¹⁴³ Ukraine Says At Least 30 Dead After Massive Russian Air Assault on Kyiv, Other Major Cities, RADIO FREE EUROPE/RADIO LIBERTY (last updated Dec. 29, 2023), https://perma.cc/J995-HFCU.

¹⁴⁴ Id.

¹⁴⁵ *Id*.

Case No. 11 - ATTACK ON APARTMENT BUILDINGS IN KRAMATORSK (FEB. 1, 2023)

On February 1, 2023 at 9:45 p.m., a Russian Iskander-K missile strike destroyed one apartment building and damaged nine others in Kramatorsk. He Four civilians He —including a husband and wife, and a pensioner He —were killed in the strike and 18 more were injured. Repeated strikes in the city had already caused many residents to flee or regularly shelter in cellars, which may have saved lives in the attack. He

The apartment buildings were located in the center of a residential district. "This is the centre of the city. Only civilians live here, which is why any attempts to justify this are futile at the very least," said regional governor Pavlo Kyrylenko.¹⁵¹

Natalia Khyzhniak, a resident in one of the impacted buildings, had been grooming her cat and preparing for bed when the missile struck. She sustained severe injuries from shrapnel. ¹⁵² Search and rescue operations continued through February 3 to recover the injured and the dead from the rubble. ¹⁵³



On February 2, 2023, rescuers work at a site of a residential building destroyed by a Russian missile strike in Kramatorsk. Vyacheslav Madiyevskyy/REUTERS¹⁵⁴

¹⁵² *Id*.

https://perma.cc/LA3W-Q4XQ.

¹⁴⁶ Vitalii Hnidyi, Russian missile destroys Ukrainian apartment building; at least 3 dead, REUTERS (Feb. 2, 2023), https://perma.cc/LA3W-Q4XQ.

¹⁴⁷ In Kramatorsk, a residential building was destroyed by Russian missile (Feb. 1, 2023), https://perma.cc/89P5-2QLZ. ¹⁴⁸ Vitalii Hnidyi, Russian missile destroys Ukrainian apartment building; at least 3 dead, REUTERS (Feb. 2, 2023), https://perma.cc/LA3W-Q4XQ.

¹⁴⁹ In Kramatorsk, a residential building was destroyed by Russian missile (Feb. 1, 2023), https://perma.cc/89P5-2QLZ. ¹⁵⁰ Vitalii Hnidyi, Russian missile destroys Ukrainian apartment building; at least 3 dead, REUTERS (Feb. 2, 2023), https://perma.cc/LA3W-Q4XQ.

¹⁵¹ *Id*.

¹⁵³ In Kramatorsk, a residential building was destroyed by Russian missile (Feb. 1, 2023), https://perma.cc/89P5-2QLZ. ¹⁵⁴ Vitalii Hnidyi, Russian missile destroys Ukrainian apartment building; at least 3 dead, Reuters (Feb. 2, 2023),

Case No. 12 - ATTACK ON ENERGY INFRASTRUCTURE IN SHEPETIVIKA, KHMELNYTSKYI OBLAST (FEB. 10, 2023)

On the evening of February 10, 2023, a Russian attack severely damaged a critical infrastructure facility in Shepetivka, Khmelnytskyi Oblast. According to the Air Force Command of the Ukrainian Armed Forces, the assault involved 20 Shahed-136/131 UAVs and 71 Kh-101, X-555, and Kalibr missiles, and these munitions were launched from the eastern coast of the Sea of Azov. Serhii Hamalii, the head of the Khmelnytskyi Regional Military Administration, confirmed that the energy facility was hit at approximately 4:00 a.m. The strike resulted in a fire and a two-day blackout across the region. At approximately 5:45 p.m. on February 11, the City of Shepetivka announced that power engineers were still working diligently to supply Khmelnytskyi with electricity, with Emergency Outage Schedules being implemented over the following days to facilitate the restoration process.

This attack was part of a larger series of Russian attacks on critical infrastructure on February 10. ¹⁶¹ In fact, a large-scale air alert was issued across Ukraine on the morning of February 10, beginning at approximately 8:30 a.m. ¹⁶² At that time, Ukraine's Air Force Command reported that Russian forces had launched cruise missiles from Tu-95ms bombers. ¹⁶³ Then, per Vlaery Zaluzhny, the Commander-in-Chief of the Armed Forces of Ukraine at the time, Russian Kalibr cruise missiles crossed over Moldova and Romania's airspace at approximately 10:18 a.m. ¹⁶⁴

In addition, reports by local authorities indicate that the Ukrainian Air Defense shot down four Russian Shahed 136/131 UAVs intended to strike energy facilities in Dnipropetrovsk Oblast. Attacks on critical infrastructure were also reported in Zaporizhzhia around 4:40 a.m. using S-300 missiles, which the Ukrainian Armed Forces emphasized cannot be destroyed by means of air

¹⁵⁵ Air Force of the Armed Forces of Ukraine (@kpszsu), 20 UAVs 'Shahed-136/131 were shot down, TELEGRAM (Feb. 11, 2023), https://archive.ph/eujdJ. Like Shahed-136, these missiles contain Western components. Russia uses them in its systematic attacks on civilian objects in Ukraine. Id. For more information, see International Partnership for Human Rights & Independent Anti-Corruption Commission, Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine (Feb. 2, 2023), https://perma.cc/SV2L-HD6X; 61 out of 71 missiles shot down: Air Force reports on air defence operation during Russian attack, RADIO LIBERTY (Feb. 10, 2023), https://archive.ph/orWZA.

¹⁵⁶ Air Force of the Armed Forces of Ukraine (@kpszsu), 20 UAVs 'Shahed-136/131 were shot down, TELEGRAM (Feb. 11, 2023), https://archive.ph/eujdJ.

¹⁵⁷ Russian Invaders Shelled Ukrainian Cities: All Details about Night Attacks, TCH (Feb. 10, 2023),

https://tsn.ua/en/ato/russian-invaders-shelled-ukrainian-cities-all-details-about-night-attacks-2262277.html.

¹⁵⁸ Khmelnytska ODA (@khmelnytskaODA), At night, the enemy once again attacked our country with Shahed, TELEGRAM (Feb. 10, 2023), https://archive.ph/i4oFo; Khmelnytska ODA (@khmelnytskaODA), There is a hit to an object of critical infrastructure of the Khmelnytskyi community, TELEGRAM (Feb. 10, 2023), https://archive.ph/vhBJm.

¹⁵⁹ City of Shepetivka (@shepetivka), Power engineers managed to stabilise the situation with the supply of electricity in the region, TELEGRAM (Feb. 11, 2023), https://archive.ph/EmPLf. ¹⁶⁰ Id.

¹⁶¹ Russian Invaders Shelled Ukrainian Cities: All Details about Night Attacks, TCH (Feb. 10, 2023), https://perma.cc/SZA5-DLUL.

¹⁶² 61 out of 71 missiles shot down: Air Force reports on air defence operation during Russian attack, RADIO LIBERTY (Feb. 10, 2023), https://archive.ph/orWZA; Consequences of the morning Russian air attack on 10 February: S-300, X-101, X-555, Kalibr, drones, RADIO LIBERTY (Feb. 10, 2023), https://archive.ph/LoveQ.

¹⁶³ Consequences of the morning Russian air attack on 10 February: S-300, X-101, X-555, Kalibr, drones, RADIO LIBERTY (Feb. 10, 2023), https://archive.ph/LoveQ.

¹⁶⁵ Kamikaze drone attack. Three aerial targets were shot down over Mykolaiv Oblast, CHAS.NEWS (Feb. 10, 2023), https://archive.ph/CIIBQ.

defense.¹⁶⁶ Energy Minister German Galushchenko reported that thermal and hydro power generation facilities, as well as high-voltage infrastructure, were damaged across six regions of Ukraine following this series of attacks.¹⁶⁷ Ukraine's largest private energy company, DTEK, also reported damage to four of its thermal power stations, as well as to water supplies in certain regions.¹⁶⁸

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¹⁶⁶ Russian Invaders Shelled Ukrainian Cities: All Details about Night Attacks, TCH (Feb. 10, 2023), https://perma.cc/SZA5-DLUL. Consequences of the morning Russian air attack on 10 February: S-300, X-101, X-555, Kalibr, drones, RADIO LIBERTY (Feb. 10, 2023), https://archive.ph/LoveQ.

¹⁶⁷ Olena Harmash, Russian missiles pound Ukraine's energy system, forces power outages, REUTERS (Feb. 10, 2023), https://perma.cc/3FWB-KMJG. ¹⁶⁸ Id.

Case No. 13 - LARGE-SCALE ATTACKS ON CIVILIAN OBJECTS AND ENERGY INFRASTRUCTURE IN KYIV, ZHYTOMYR, SUMY, ODESA (MAR. 8-9, 2023)

On the nights of March 8–9, 2023, Russian forces launched a large-scale assault targeting Ukrainian civilian infrastructure with a range of weapons, identified as eight Shahed-136/131 UAVs and 81 missiles. ¹⁶⁹ These included 28 Kh-101/Kh-555 air-based cruise missiles, 20 Kalibr sea-based cruise missiles, six X-22 air-based cruise missiles, six Kh-47 air-based cruise missiles, eight guided air missiles, and 14 S-300 anti-aircraft guided missiles. ¹⁷⁰ The Ukrainian Air Force, working in tandem with other units of Ukraine's Defense Forces, were able to successfully destroy 34 cruise missiles and four Shahed-136/131 UAVs, mitigating the full extent of the damage. ¹⁷¹ Reports indicate that additional UAVs were shot down by Ukrainian forces over Kyiv and Sumy oblasts. ¹⁷² Despite these efforts, these attacks caused widespread damage across Ukraine, with Zelenskyy confirming that the attacks impacted Kyiv and at least ten other regions, including Dnipropetrovsk, Zhytomyr, Kirovohrad, Kharkiv, Sumy, Odesa, and Zaporizhzhia. ¹⁷³ According to the Ministry of Energy, the primary target of the attack was energy facilities. ¹⁷⁴

Both residential buildings and critical energy infrastructure were damaged as a result of the attacks. Consequently, electricity supply in Kharkiv, Odesa, and Zhytomyr oblasts was severely limited. Ryiv, an air alert was announced on March 9, which lasted approximately seven hours. Serhii Popko, the head of the Kyiv City Military Administration, reported that the attacks injured two civilians who were struck by rocket fragments, damaged civilian vehicles, and triggered emergency outages across the capital. Meanwhile, roughly 150,000 civilians located in Zhytomyr Oblast endured prolonged outages of electricity and water throughout the evening following the attack. Vitaly Bunechko, the Governor of the Zhytomyr Oblast, announced that the region had entered into a strict power saving regime, where the use of powerful electrical appliances was

¹⁶⁹ Commander-in-Chief of the Armed Forces of Ukraine (@CinCAFU), The occupiers launched 81 rockets from various bases, TELEGRAM (Mar. 9, 2023), https://archive.ph/uWnSN. Consequences of the massive Russian shelling of Ukraine on March 9: "Happy Birthday to Taras Shevchenko", RADIO LIBERTY (Mar. 9, 2023), https://archive.ph/hmXJC; A new attack on energy facilities. The Russian Federation attacked Kyiv and 10 regions, the ZNPP managed to recover after a blackout, five people died in Zolochiv – the main thing, NEW VOICE (Mar. 9, 2023), https://archive.ph/ow60Q. ¹⁷⁰ Id.

¹⁷¹ Commander-in-Chief of the Armed Forces of Ukraine (@CinCAFU), *The occupiers launched 81 rockets from various bases*, TELEGRAM (Mar. 9, 2023), https://archive.ph/uWnSN.

¹⁷² OK Pivnich (@ok_pivnich1), The wreckage of the "Shahed" shot down by the Defense Forces of the Sivershchyna in Sumy, TELEGRAM (Mar. 9, 2023), https://archive.ph/tJRmD; Kyiv City Military Administration (@VA_Kyiv), Night air attack. Operational information, TELEGRAM (Mar. 9, 2023), https://archive.ph/wBru8.

¹⁷³ A new attack on energy facilities. The Russian Federation attacked Kyiv and 10 regions, the ZNPP managed to recover after a blackout, five people died in Zolochiv – the main thing, NEW VOICE (Mar. 9, 2023), https://archive.ph/ow60Q. ¹⁷⁴ Id

¹⁷⁵ Consequences of the massive Russian shelling of Ukraine on March 9: "Happy Birthday to Taras Shevchenko", RADIO LIBERTY (Mar. 9, 2023), https://archive.ph/hmXJC.

¹⁷⁶ A new attack on energy facilities. The Russian Federation attacked Kyiv and 10 regions, the ZNPP managed to recover after a blackout, five people died in Zolochiv – the main thing, NEW VOICE (Mar. 9, 2023), https://archive.ph/ow60Q. ¹⁷⁷ Id.

¹⁷⁸ Kyiv City Military Administration (@VA_Kyiv), Night air attack. Operational information, TELEGRAM (Mar. 9, 2023), https://archive.ph/wBru8.

¹⁷⁹ Vitaliy Bunechko (@zhytomyrskaODA), *Tonight, the enemy attacked Zhytomyr Oblast with kamikaze drones*, TELEGRAM (Mar. 9, 2023), https://archive.ph/ODcBs#selection-173.1-175.45; Vitaliy Bunechko (@zhytomyrskaODA), *Solving the issues of the fastest restoration of sustainable energy supply to the residents of the region*, TELEGRAM (Mar. 9, 2023), https://archive.ph/d6hJ5; Zhytomyr.Info, *At night, the enemy hit Zhytomyr with "Shaheds": a city without electricity and water*, YOUTUBE (Mar. 9, 2023), https://perma.cc/9EKR-RSXW.

severely limited during peak hours.¹⁸⁰ In Dnipropetrovsk Oblast, which was attacked by UAVs, missiles, and artillery file, energy infrastructure was significantly damaged.¹⁸¹ Per Serhii Lysak, the Governor of Dnipropetrovsk Oblast, in addition to the severe damage inflicted on energy infrastructure, the strikes also killed a 34-year-old man and injured both a 28-year-old woman and a 19-year-old boy.¹⁸²

Finally, the functioning of the Zaporizhzhia Nuclear Power Plant, a focus of international concern, was disrupted by the missile strikes, prompting urgent calls by the Director General of the International Atomic Energy Agency, Raphael Grossi, and Prime Minister Denys Shmyhal for the plant's protection. ¹⁸³ Ukrenergo specialists were able to restore the power over a half a day later. ¹⁸⁴

180 Id.

¹⁸¹ Serhiy Lysak (@dnipropetrovskaODA), The enemy attacked Dnipropetrovsk region with drones and missiles, TELEGRAM (Mar. 9, 2023), https://archive.ph/jUHop.

¹⁸² Id.

¹⁸³ March 9, 2023 - Russia-Ukraine news, CNN (Mar. 9. 2023), https://perma.cc/RNH5-U2CC. ¹⁸⁴ Id.

Case No. 14 - ATTACK ON ENERGY INFRASTRUCTURE AND CIVILIAN HOUSES IN NOVOMOSKOVSK (MAR. 18, 2023)

On March 18, 2023, Russian forces launched an overnight attack on Novomoskovsk, Dnipropetrovsk Oblast, deploying five Shahed-136 UAVs in a targeted strike on energy infrastructure. Two UAVs struck a Ukrainian fuel warehouse containing oil products, inflicting significant damage and igniting a massive fire. In addition, four nearby civilian homes were completely destroyed, while six others sustained significant damage. The complete is a sustained significant damage.

Yuriy Ihnat, spokesperson for the Ukrainian Air Force, indicated that the attack in Novomoskovsk was part of a larger, coordinated offensive, with Russian forces launching 16 drones across multiple regions overnight on March 17–18. ¹⁸⁸ Although Ukrainian air defense systems successfully struck down 11 of these drones, intercepting them during nighttime operations is challenging given reduced visibility. ¹⁸⁹ Per Ukraine's Air Force Command of the Armed Forces, the attack originated from the Sea of Azov and Russia's Bryansk Oblast. ¹⁹⁰ Meanwhile, some Telegram channels suggested that certain drones were launched from Belarusian territory. ¹⁹¹ On that night, critical infrastructure was also targeted in Kyiv, Zaporizhzhia, Dnipropetrovsk, and Lviv oblasts. ¹⁹²

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¹⁸⁵ Serhiy Lysak (@dnipropetrovskaODA), That night, the Russian army attacked Dnipropetrovsk region with drones, probably "Shaheds", TELEGRAM (Mar. 18, 2023), https://archive.ph/UuND7; Kateryna Andrus, On the night of 18 March, the occupiers attacked Dnipropetrovsk region with drones, NIKOPOL NEWS (Mar. 18, 2023), https://archive.ph/c7JUG; AFP, Ukraine Says Targeted by Overnight Drone Attack, The MOSCOW TIMES (Mar. 18, 2023), https://perma.cc/3NZZ-L4WY.

¹⁸⁷ *Id*.

¹⁸⁸ Institute for the Study of War, Russian Offensive Campaign Assessment, March 18, 2023, UNDERSTANDING WAR (Mar. 18, 2023), https://perma.cc/RJ6F-23H3.

¹⁸⁹ Id.

¹⁹⁰ AFP, Ukraine Says Targeted by Overnight Drone Attack, THE MOSCOW TIMES (Mar. 18, 2023), https://perma.cc/6XU8-7GR8.

¹⁹¹ Yuri Zoria, Ukraine shoots down 11 of 16 Shahed drones in Russia's last night's attack, EUROMAIDAN PRESS (Mar. 18, 2023), https://perma.cc/XH44-WPP2.

¹⁹² Institute for the Study of War, Russian Offensive Campaign Assessment, March 18, 2023, UNDERSTANDING WAR (Mar. 18, 2023), https://perma.cc/RJ6F-23H3.

Case No. 15 - ATTACK ON TWO DORMITORIES AND A SCHOOL IN RZHYSHCHIV, KYIV OBLAST (MAR. 22, 2023)

In the evening on March 22, 2023, Russian forces attacked Kyiv and Zhytomyr oblasts with 21 Shahed-136/131 UAVs, allegedly launched from the Bryansk region of Russia. ¹⁹³ In Rzhyshchiv, Kyiv Oblast, the UAVs hit a school and two adjacent dormitories at around 2:30 a.m., while inhabitants were sleeping. ¹⁹⁴ According to interviews conducted with witnesses, at least four Shahed drones struck throughout the early hours of the morning—a second just after 2:30 a.m. and a third at 3:00 a.m. ¹⁹⁵ The school had been identified as the Rzhyshchiv Vocational Lyceum, and the strike was directed at the fourth and fifth floor. ¹⁹⁶

According to reports and interviews, nine people were killed, including a 40-year-old man and an emergency ambulance driver who arrived onto the scene after the first strike.¹⁹⁷ Twenty-nine civilians were injured, twenty of whom were hospitalized.¹⁹⁸ This number included at least two children, one of whom was 11 years old.¹⁹⁹ The attack partially destroyed one of the school buildings and the two dormitories, causing a massive fire.²⁰⁰ As a result, more than 200 people had to be evacuated from the area.²⁰¹ Following the strike, the Prosecutor General's Office opened an investigation into violations of international humanitarian law ("IHL").²⁰²

Based on the International Partnership for Human Right's ("IPHR's") interviews with witnesses and survivors, there were no soldiers stationed nor any military presence in the surrounding area. Further, an engine from a Shahed drone was found hanging on the branches of a tree, along with remnants of wings bearing the inscription: "for Dzhankoi," a town in Northern Crimea. Just two days earlier, an explosion struck the town, which, according to Ukraine's Defense

¹⁹³ Vinnytsia Regional Prosecutor's Office, Attack on Ladyzhynska TPP by Russian Forces Using Kamikaze Drones, FACEBOOK (Mar. 21, 2023), https://archive.ph/PGArG. See also Details of the night attack near Kyiv. Russia hit dormitories and a school in Rzhyshchiv, three dead persons, people under the rubble, NEW VOICE (Mar. 22, 2023), https://archive.ph/zY8k5.

¹⁹⁴ Main Department of the State Emergency Service of Ukraine in Kyiv Oblast, Clearing of Debris at the Site of the Rzhyshchiv Vocational School Completed (Mar. 23, 2023), https://perma.cc/47XG-5CVW. See also Associated Press, Ukrainian Civilians Killed as Russian Artillery Strikes Hit Apartment Building, Dormitories, PBS (Mar. 23, 2023), https://perma.cc/JXV4-RUMZ.

¹⁹⁵ Iryna Balachuk, Night attack of "Shahed" on Kyiv Oblast: school dormitories in Rzhyshchiv damaged, four dead, UKRAINSKA PRAVDA (Mar. 22, 2023), https://www.pravda.com.ua/eng/news/2023/03/22/7394509/.

¹⁹⁶ Main Department of the State Emergency Service of Ukraine in Kyiv Oblast, *Clearing of Debris at the Site of the Rzhyshchiv Vocational School Completed* (Mar. 23, 2023), https://perma.cc/47XG-5CVW. The coordinates of the impact sites are: 49.965932798542696, 31.025156529844455. *Id.*

¹⁹⁷ As Rival Summits End, Russian Drones Kill 4 at Ukraine Dorm, REPUBLIC (Mar. 23, 2023), https://perma.cc/6JHM-SSA5. See also, Balachuk, Night attack of "Shahed" on Kyiv Oblast: school dormitories in Rzhyshchiv damaged, four dead.

¹⁹⁸ Id.

¹⁹⁹ Details of the night attack near Kyiv. Russia hit dormitories and a school in Rzhyshchiv, three dead persons, people under the rubble, NEW VOICE (Mar. 22, 2023) https://archive.ph/zY8k5. See also Associated Press, Ukrainian Civilians Killed as Russian Artillery Strikes Hit Apartment Building, Dormitories, PBS (Mar. 23, 2023), https://perma.cc/JXV4-RUMZ.

²⁰⁰ Main Department of the State Emergency Service of Ukraine in Kyiv Oblast, *Clearing of Debris at the Site of the Rzhyshchiv Vocational School Completed* (Mar. 23, 2023), https://perma.cc/47XG-5CVW.

²⁰¹ Yuriy Svyrydiuk & Natalia Balyukh, The Rescuers Finished Dismantling the Rubble in Rzhyshchiv: What Is Known About the Shahed Attack on Kyiv and the Kyiv Region?, (Mar. 23, 2023), https://archive.ph/Vwzu1. See also Andrii Nebytov (@andrii_nebytov), Three People Died, 7 People Were Injured as a Result of Drones Hitting a Dormitory Building in One of the Districts of Kyiv Region, TELEGRAM (Mar. 22, 2023), https://archive.ph/KMfPN.

²⁰² Russian Forces Attacked Dormitories in Rzhyshchiv, Killing Three People, NEW VOICE (Mar. 22, 2023), https://perma.cc/8XW4-3PLT.

²⁰³ IPHR interview with witnesses A7M2K4 (Mar. 22, 2024), 3ZB9L1 (Mar. 22, 2024), X8D3N7 (Mar. 26, 2024) and C6T0R5 (Mar. 29, 2024) (names anonymized to maintain confidentiality).

Ministry, destroyed Russian Kalibr cruise missiles that were being transported by rail.²⁰⁴ The strike on Rzhyshchiv also notably occurred a few days after the International Criminal Court ("ICC") issued an arrest warrant for Putin on March 17.²⁰⁵

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²⁰⁴ Michael Schwirtz, *Cruise Missiles in Crimea Signal New Phase of Ukraine War*, N.Y. TIMES (Mar. 21, 2023), https://perma.cc/B856-5SPR.

²⁰⁵ International Criminal Court, Situation in Ukraine: ICC Judges Issue Arrest Warrants Against Vladimir Vladimirovich Putin and Maria Alekseyevna Lvova-Belova (Mar. 17, 2023), https://perma.cc/3V33-9Q2N.

Case No. 16 - ATTACK AGAINST SUMY OBLAST (MAR. 24, 2023)

On the night of March 24, 2023, Russian forces attacked the settlement of Bilopillia, Sumy Oblast, ²⁰⁶ dropping multiple KAB aerial bombs from SU-35 aircrafts and conducting more than 100 strikes with grad MLRS and other artillery. Shahed drones, rockets and artillery shelling hit from several points at the same time. ²⁰⁷ A spokesman of the Ukrainian Air Force, Yuriy Ignat, reported that ten aerial bombs were launched from SU-35 jets against the Sumy region. ²⁰⁸ He explained that guided aerial bombs pose a great threat because the planes deploying them remain outside Ukraine's air defense zone, substantially impeding Ukraine's ability to shoot them down. ²⁰⁹ The bombs themselves can fly at a distance of up to 40 kilometers and are adjustable munitions weighing from 500 kilograms to 1.5 tons. ²¹⁰

Police documented the effects of the attack.²¹¹ Two civilians, a police officer, and a school security guard died in the attack.²¹² A further ten civilians were injured.²¹³ One person had their leg torn off as the result of the attack.²¹⁴ A Russian KAB-500 aerial bomb hit the Bilopillia Gymnasium ("High School") No. 4, a historic building constructed in 1885, destroying it beyond repair.²¹⁵ Approximately 80 students from grades one to four studied there.²¹⁶ The premises of the Bilopollia Higher Vocational School were also severely damaged, with almost 200 broken windows and damaged doors and classrooms.²¹⁷ These schools are only one instance of Russian attacks against

²⁰⁶ International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* (Feb. 2, 2023), https://perma.cc/SV2L-HD6X. The coordinates of the attacks were as follows: coordinates of the school (Klubna str 2 - 51.14403420840862, 34.272541589048814); coordinates of the police station (Soborna str 76 - 51.14558516282501, 34.3098281878826); approximate coordinates of Staroputyvlska street: (51.1452830871658, 34.3013137168372). *Id.*

 $^{^{207}}$ Kryvyi Rih, Kostyantynivka, Bilopillya: new attacks by shaheeds, S-300 and Su-35 with guided bombs, BBC (Mar. 24, 2023), https://perma.cc/B9DM-FHWS .

²⁰⁸ Yulia Markovskaya, *Two dead, 10 injured, buildings destroyed: what is known about the shelling of the Sumy district on March 24*, SUSPILNE MEDIA (Mar. 24, 2023), https://perma.cc/K4DE-LQ7Y.

²⁰⁹ Kryvyi Rih, Kostyantynivka, Bilopillya: new attacks by shaheeds, S-300 and Su-35 with guided bombs, BBC (Mar. 24, 2023) https://perma.cc/B9DM-FHWS.

²¹¹ Police of Sumy Oblast (@police_su_region), TELEGRAM (Mar. 24, 2024), https://perma.cc/8KHX-2WCC.

²¹² Dmytro Zhyvytskyi (@Zhyvytskyy), Sumy Oblast Military Administration, TELEGRAM (Mar. 24, 2024), https://perma.cc/FLX2-SYD5; Regional Military Administration, FACEBOOK (Mar. 24, 2023),

https://perma.cc/LWC8-XTJH; Yulia Markovskaya, Two dead, 10 injured, buildings destroyed: what is known about the shelling of the Sumy district on March 24, SUSPILNE MEDIA (Mar. 24, 2023), https://perma.cc/K4DE-LQ7Y.

²¹³ Regional Military Administration, FACEBOOK (Mar. 24, 2023), https://perma.cc/LWC8-XTJH; Police of Sumy Oblast (@police_su_region), TELEGRAM (Mar. 24, 2024), https://perma.cc/8KHX-2WCC; Yulia Markovskaya, *Two dead, 10 injured, buildings destroyed: what is known about the shelling of the Sumy district on March 24*, SUSPILNE MEDIA (Mar. 24, 2023), https://perma.cc/K4DE-LQ7Y; Suspilne Sumy (@suspilnesumy), TELEGRAM (Mar. 24, 2024), https://perma.cc/N293-QF8X.

²¹⁴ Kryvyi Rih, Kostyantynivka, Bilopillya: new attacks by shaheeds, S-300 and Su-35 with guided bombs, BBC (Mar. 24, 2023), https://perma.cc/B9DM-FHWS.

²¹⁵ Regional Military Administration, FACEBOOK (Mar. 24, 2023), https://perma.cc/LWC8-XTJH; *Bilopillya, how a town on the border with the enemy lives*, ARMYINFORM (Jul. 23, 2023), https://perma.cc/2E3W-QCCA; Suspilne Sumy (@suspilnesumy), TELEGRAM (Mar. 24, 2023), https://perma.cc/N293-QF8X.

²¹⁶ Danova Daria, Destroyed Schools in Sumy Region: The Story of 16 Educational Institutions (Jan. 14, 2024), https://perma.cc/3SQ4-T2GR.

²¹⁷ Bilopillya, how a town on the border with the enemy lives, ARMYINFORM (Jul. 23, 2023), https://perma.cc/2E3W-QCCA.

educational institutions in the Kherson and Sumy regions; at least 16 such attacks have been documented between February 2022 and January 2024. 218

The main building of the police station was also completely destroyed,²¹⁹ and several civilian houses on Staroputyvlska Street were severely damaged.²²⁰ The blast wave damaged more than 100 windows.²²¹ Gas networks were also destroyed to the extent that employees of the Bilopillia branch of Sumy natural gas service had to restore the damaged sections of the damaged gas pipelines.²²² The outside temperature in the area around this time was around 10°C.²²³

Bilopillia is located a few kilometers from Ukraine's state border with the Russian Federation. ²²⁴ Russian State media published reports about the destruction of a NATO military base and the death of several dozen soldiers; ²²⁵ however, there is no publicly available information indicating military presence at or around the impact sites. The headmaster at the school stated that there was no unit of the Ukrainian Defense Forces present at or around the school. At that time, there was one security guard in the building, who died. ²²⁶

The attack was carried out in the context of a massive assault against Sumy Oblast on the territories of four settlement communities.²²⁷ The attack, lasting for approximately one hour, was conducted using various air- and ground-launched weapons.²²⁸ The broader attack included several strikes, which injured one civilian and caused damage to a number of schools, residential houses, and farms and agriculture.²²⁹

²¹⁸ Danova Daria, Destroyed Schools in Sumy Region: The Story of 16 Educational Institutions (Jan. 14, 2024), https://perma.cc/3SQ4-T2GR.

²¹⁹ Police of Sumy Oblast (@police su region), TELEGRAM (Mar. 24, 2023), https://perma.cc/8KHX-2WCC.

²²⁰ Suspilne Sumy (@suspilnesumy), TELEGRAM (Mar. 24, 2023), https://perma.cc/HWU3-HBAR.

²²¹ Yulia Markovskaya, *Two dead, 10 injured, buildings destroyed: what is known about the shelling of the Sumy district on March 24*, SUSPILNE MEDIA (Mar. 24, 2024), https://perma.cc/K4DE-LQ7Y; *Bilopillya, how a town on the border with the enemy lives*, ARMYINFORM (Jul. 23, 2023), https://perma.cc/2E3W-QCCA.

²²² Yulia Markovskaya, *Two dead, 10 injured, buildings destroyed: what is known about the shelling of the Sumy district on March 24*, SUSPILNE MEDIA (Mar. 24, 2024), https://perma.cc/K4DE-LQ7Y.

²²³ Bilopillya Historical Weather, WORLD WEATHER ONLINE, https://perma.cc/ZUF7-MZBH (last visited Jan. 21, 2025).

²²⁴ Bilopillya, how a town on the border with the enemy lives, ARMYINFORM (Jul. 23, 2023), https://perma.cc/2E3W-QCCA.

²²⁵ See, e.g., id.

²²⁶ Id.

²²⁷ Regional Military Administration, FACEBOOK (Mar. 24, 2023), https://perma.cc/LWC8-XTJH.

²²⁸ Office of the Prosecutor General (@pgo_gov_ua), TELEGRAM (Mar. 24, 2023), https://t.me/pgo_gov_ua/10733.

²²⁹ Regional Military Administration, FACEBOOK (Mar. 24, 2023), https://perma.cc/LWC8-XTJH.

Case No. 17 - ATTACK ON MYKOLAIV (APR. 27, 2023)

Shortly after midnight on April 27, 2023, Russia launched an attack on the city of Mykolaiv.²³⁰ In a Telegram post, Zelenskyy stated that, "Russia bombarded Mykolaiv with four Kalibr missiles launched from the Black Sea," killing one person and injuring 23 others.²³¹ The attacks damaged two private homes, a five-story building, and an historical building known as the Mykolaiv Admiralty.²³² In an address on the evening of April 27, the mayor of Mykolaiv, Oleksander Senkevych, stated that the attack damaged a museum, four educational buildings, several factories, a kindergarten, 22 high-rise buildings, and 82 private homes.²³³ Governor of Mykolaiv Oblast Vitali Kim stated that firefighters put out several fires and cleared rubble caused by the missile attack.²³⁴

Video footage and photographs show that the Mykolaiv Admiralty suffered damage and caught fire. ²³⁵ The Mykolaiv Admiralty is a historical landmark located in the Mykolaiv shipyard. ²³⁶ Until recently, the shipyard was used for shipbuilding and other industrial purposes. ²³⁷

Whether the Mykolaiv Admiralty is the same museum referenced in the mayor's address remains unclear based on available reporting. If the two are not the same building, there are several nearby structures that could potentially be the museum referenced. The state archives of Mykolaiv Oblast are within half a mile of the Mykolaiv Admiralty and hold thousands of cultural objects and historical records dating back to the late 1700s. ²³⁸Additionally, the Mykolaiv Regional Museum of Local History is located less than 200 meters from the Mykolaiv Admiralty. ²³⁹ Established in 1913, the museum stored approximately 250,000 exhibits as of 2015, showcasing the history of Mykolaiv, and organizes a number of cultural activities. ²⁴⁰

According to an analysis conducted by UNESCO, 457 cultural sites in Ukraine were damaged between February 24, 2022 and October 16, 2024.²⁴¹ In the Mykolaiv Region, UNESCO determined that 11 cultural sites were damaged.²⁴² Based on an initial review of the UNESCO

²³⁰ One dead, 23 wounded in Russian missile strike on Ukraine's Mykolaiv, REUTERS (Apr. 27, 2023), https://perma.cc/HDV8-4FPB; Svetlana Klyosova & Valentina Gurova, Russian Troops Struck Mykolaiv at Night. What is Known, SUSPILNE MEDIA (Apr. 27, 2023), https://perma.cc/4YUB-XRBK; "Operational Command" South, FACEBOOK (Apr. 27, 2023), https://perma.cc/2CRW-H75A.

²³¹ One dead, 23 wounded in Russian missile strike on Ukraine's Mykolaiv, REUTERS (Apr. 27, 2023), https://perma.cc/HDV8-4FPB.

²³² Svetlana Klyosova & Valentina Gurova, Russian Troops Struck Mykolaiv at Night. What is Known, SUSPILNE MEDIA (Apr. 27, 2023), https://perma.cc/4YUB-XRBK.

²³⁴ One dead, 23 wounded in Russian missile strike on Ukraine's Mykolaiv, REUTERS (Apr. 27, 2023), https://perma.cc/HDV8-4FPB

²³⁵ GOOGLE MAPS, https://perma.cc/FJT2-SCG5 (last visited Oct. 28, 2024); News from Nikolaev (@novostiniko), TELEGRAM (Apr. 27, 2023), https://perma.cc/AQQ3-EH2D.

²³⁶ GOOGLE MAPS, https://perma.cc/46W7-PGO9 (last visited Oct. 28, 2024).

²³⁷ See State Enterprise "Mykolayiv Shipyard", LINKEDIN, https://perma.cc/Q34Y-QNWD (last accessed Oct. 28, 2024); Mykolaiv: A City Without Doors, Windows and Half of Its Citizens, RELIEFWEB (Feb. 14, 2023), https://perma.cc/5WNU-M4EQ.

²³⁸ State Archives of Mykolaiv Oblast, STATE ARCHIVES OF UKRAINE, https://perma.cc/2322-FHAE (last visited Oct. 28, 2024).

²³⁹ GOOGLE MAPS, https://perma.cc/424X-HUT4 (last accessed Oct. 28, 2024).

²⁴⁰ Mykolaiv Regional Museum of Local History, *Museum History*, https://perma.cc/6H9A-EMK4 (last visited Jan. 23, 2025).

²⁴¹ Damaged Cultural Sites in Ukraine Verified by UNESCO, UNESCO (Feb. 7, 2024), https://perma.cc/4ZB4-5QUV. ²⁴² Id.

analysis, none of these 11 sites appear to have been struck on April 27, 2023; however, it remains uncertain whether UNESCO's analysis is comprehensive.²⁴³



Firefighters work at building damaged by a Russian missile strike in Mykolaiv on April 27, 2023. Press service of the State Emergency Service of Ukraine in Mykolaiv region/Handout via REUTERS²⁴⁴

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²⁴³ UNESCO lists the following damaged sites: "Church of the Immaculate Conception of the Blessed Virgin Mary (built in 1852) – Kyselivka Turkish well monument of the 18th century – Hurivka

City Palace of Culture – Ochakiv, Palace of Culture "Korabelny" – Mykolaiv, Mykolaiv Academic Art Drama Theater – Mykolaiv, Palace of creativity of students – Mykolaiv, Former Mariinsky Gymnasium (built in 1892) – Mykolaiv, Mykolaiv Culture Center of folk art and art education (Architectural monument of local importance) – Mykolaiv, Art School of Children – Snihurivka (Mykolaiv region), "Dacha Kudryavtseva" complex (Architectural monument of local importance) – Mykolaiv (Mykolaiv region), A residential building for profit of the XIXth century (Architectural monument of local importance) – Mykolaiv." *Id.* Without familiarity with the region, as well as lack of coordinates and dates that the damage occurred, it becomes difficult to cross-reference UNESCO's analysis with reporting on the April 27 attack.

²⁴⁴ One dead, 23 wounded in Russian missile strike on Ukraine's Mykolaiv, REUTERS (Apr. 27, 2023), https://perma.cc/HDV8-4FPB.

Case No. 18 ATTACK AGAINST HLUKHIV, SUMY OBLAST (MAY 5, 2023)

Between 10:13 p.m. and 10:20 p.m. on May 5, 2023, Russian forces attacked a densely populated area of the settlement of Hlukhiv in Sumy Oblast.²⁴⁵ The attack was carried out using two KAB guided aerial bombs dropped from a SU-35 aircraft.²⁴⁶ The bombs were launched from beyond the effective range of Ukraine's Air Defense, meaning that Ukraine had little to no instruments to effectively counter the attack.²⁴⁷ Further, guided aircraft bombs lack efficient navigation, thereby posing a significant threat to civilian infrastructure and the civilian population.²⁴⁸ Crucially, there is no publicly available information indicating military presence at or around the impact sites.

Five civilians were injured in the attack, amongst them a 12-year-old girl, and four people were hospitalised. ²⁴⁹ At least three civilian houses were destroyed ²⁵⁰ and between 34 and 50 more were damaged. ²⁵¹ The attack also damaged the doors and windows of Hlukhiv School No. 5. ²⁵² It also destroyed local power lines and 30 meters of gas distribution networks, which left more than 100 households without gas. ²⁵³ As a result of the attack, Ukrainian emergency workers had to dismantle 12 damaged civilian houses and cover the roofs of four houses, as well as 79 windows from 21 houses, with temporary isolating materials. ²⁵⁴ The outside temperature in the area around this time ranged between -3°C to 12°C. ²⁵⁵

²⁴⁵ International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* (Feb. 2, 2023), https://perma.cc/SV2L-HD6X. The coordinates of the attacks are: Berehova street 40 (51.691676369296296, 33.895328850064764); Kindergarten & School No 5, Pokrovska str, 63 (51.69248522737182, 33.895674391885294). *Id.*

²⁴⁶ Sumy Regional Military Administration (@Sumy_news_ODA), TELEGRAM (May 6, 2023), https://perma.cc/UY9U-XNWL; Operational Command North (@ok_pivnich1), TELEGRAM (May 6, 2023), https://perma.cc/U2TY-4GXW; Russian aircraft struck Glukhov in Sumy region, five wounded, UKRINFORM (May 6, 2023), https://perma.cc/N4HH-M85K; Office of the Prosecutor General of Ukraine (@pgo_gov_ua), TELEGRAM (May 6, 2023), https://perma.cc/RF2R-2XWM.

²⁴⁷ *Id*.

²⁴⁸ Russia attacks Sumy Oblast with guided aerial bombs late on May 5, injuring 5, KYIV INDEPENDENT (May 6, 2023), https://perma.cc/NED7-9W2N.

²⁴⁹ Sumy Regional Military Administration (@Sumy_news_ODA), TELEGRAM (May 6, 2023), https://perma.cc/UY9U-XNWL; Suspline Sumy (@suspilnesumy), TELEGRAM (May 6, 2023), https://perma.cc/SLR2-GAVM; Russian aircraft struck Glukhov in Sumy region, five wounded, UKRINFORM (May 6, 2023), https://perma.cc/N4HH-M85K; Russia attacks Sumy Oblast with guided aerial bombs late on May 5, injuring 5, KYIV INDEPENDENT (May 6, 2023), https://perma.cc/NED7-9W2N; Office of the Prosecutor General of Ukraine (@pgo_gov_ua), TELEGRAM (May 6, 2023), https://perma.cc/UT8Y-TQPA.

²⁵⁰ Chernihiv Branch of "Gazmerezhi" (@chernihivgas), TELEGRAM (May 12, 2023), https://perma.cc/2FDM-9EBC; Operational Command North (@ok_pivnich1), TELEGRAM (May 6, 2023), https://perma.cc/U2TY-4GXW; Victoria Gramm, Two houses destroyed in airstrike on Hlukhiv, over 100 households left without gas supply, SUPILNE MEDIA (May 6, 2023), https://perma.cc/GC88-NBG6.

²⁵¹ Id.

²⁵² Sumy Regional Military Administration (@Sumy_news_ODA), TELEGRAM (May 6, 2023), https://perma.cc/UY9U-XNWL; Suspline Sumy (@suspilnesumy), TELEGRAM (May 6, 2023), https://perma.cc/SLR2-GAVM; Russian aircraft struck Glukhov in Sumy region, five wounded, UKRINFORM (May 6, 2023), https://perma.cc/N4HH-M85K; Russia attacks Sumy Oblast with guided aerial bombs late on May 5, injuring 5, KYIV INDEPENDENT (May 6, 2023), https://perma.cc/NED7-9W2N; Office of the Prosecutor General of Ukraine (@pgo_gov_ua), TELEGRAM (May 6, 2023), https://perma.cc/UT8Y-TQPA.

²⁵³ Chernihiv Branch of "Gazmerezhi" (@chernihivgas), TELEGRAM (May 12, 2023), https://perma.cc/2FDM-9EBC; Victoria Gramm, *Two houses destroyed in airstrike on Hlukhiv, over 100 households left without gas supply*, SUPILNE MEDIA (May 6, 2023), https://perma.cc/GC88-NBG6.

²⁵⁴ Victoria Gramm, *Two houses destroyed in airstrike on Hlukhiv, over 100 households left without gas supply*, SUPILNE MEDIA (May 6, 2023), https://perma.cc/GC88-NBG6.

²⁵⁵ Hlukhiv Historical Weather, WORLD WEATHER ONLINE, https://perma.cc/2FPJ-X2RX (last visited Jan. 21, 2025).



²⁵⁶ Sumy Regional Military Administration (@Sumy_news_ODA), TELEGRAM (May 6, 2023), https://perma.cc/UY9U-XNWL.

Case No. 19 - ATTACK ON HOSPITAL AND EMERGENCY MEDICAL STATION IN BERYSLAV, KHERSON OBLAST (OCT. 5, 2023)

On October 5, 2023, at around 12:40 p.m., Russian forces launched an aerial attack on the town of Beryslav in Kherson Oblast.²⁵⁷ This attack targeted the town's hospital and an emergency medical station.²⁵⁸ According to the head of Kherson Regional Military Administration, the attack was conducted with KAB bombs²⁵⁹ launched by SU-34 or SU-35 aircrafts.²⁶⁰

As a result, three medical workers were injured.²⁶¹ A 60-year-old ambulance driver suffered shrapnel injury to the head and a leg fracture.²⁶² A 39-year-old emergency paramedic received an injury, contusion, and shrapnel wound to his "left knee joint."²⁶³ A 68-year-old doctor also suffered injuries from the attack.²⁶⁴ The attack left lasting damage to the Beryslav Central District Hospital, completely destroying its fourth floor and heavily damaging the third floor.²⁶⁵ Further, two ambulances, as well as nearby apartment buildings, located approximately 250 to 300 meters from the hospital were similarly damaged.²⁶⁶

The attack on the medical center and hospital occurred just an hour after the town had been previously targeted by five Russian air strikes. ²⁶⁷ These initial attacks on Beryslav, along with other Kherson districts, were conducted with a range of weapons, including MLRS, heavy artillery, mortars, aviation, and UAVS, which targeted and damaged civilian infrastructure. ²⁶⁸ These attacks,

²⁵⁷ Office of the Prosecutor of Kherson Oblast (@phogovua), TELEGRAM (Oct. 5, 2023), https://perma.cc/87AZ-PWGQ; Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT; Martin Fornusek, Russia attacks hospital in Beryslav in Kherson Oblast, injures 2, KYIV INDEPENDENT (Oct. 5, 2023), https://perma.cc/3RY7-7HNQ.

²⁵⁸ Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT.

²⁵⁹ Monitor (@war_monitor), TELEGRAM (Oct. 5, 2023), https://perma.cc/LHL5-BXZD; Nikolaevsky Vanyok (@vanek_nikolaev), TELEGRAM (Oct. 5, 2023), https://perma.cc/B2RX-CJEM.

²⁶⁰ This assumption follows from a series of posts in a Telegram thread from the head of the Kherson Regional Military Administration. *See* Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/5NWZ-2DN7; Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/TP25-SDNV; Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT. The type of the aircraft is also confirmed by a monitoring channel. *See* Nikolaevsky Vanyok (@vanek_nikolaev), TELEGRAM (Oct. 5, 2023), https://perma.cc/B2RX-CJEM.

²⁶¹ Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT; Office of the Prosecutor General (@phogovua), TELEGRAM (Oct. 5, 2023), https://perma.cc/87AZ-PWGQ; Police of Kherson Oblast (@khersonpolice), TELEGRAM (Oct. 6, 2023), https://perma.cc/2NX9-TTRP.

²⁶² Ministry of Health of Ukraine (@mozofficial), TELEGRAM (Oct. 5, 2023), https://perma.cc/DFP4-A2VM; Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT; Office of the Prosecutor General (@phogovua), TELEGRAM (Oct. 5, 2023), https://perma.cc/87AZ-PWGQ; Xepcoнська ОДА (OBA) (@khersonskaODA), TELEGRAM (Oct. 5, 2023), https://perma.cc/TTR4-9NPF.

²⁶³ Id.; Martin Fornusek, Russia attacks hospital in Beryslav in Kherson Oblast, injures 2, KYIV INDEPENDENT (Oct. 5, 2023), https://perma.cc/3RY7-7HNQ

²⁶⁴ Police of Kherson Oblast (@khersonpolice), TELEGRAM (Oct. 6, 2023), https://perma.cc/2NX9-TTRP.

²⁶⁵ Prokudin Oleksandr (@olexandrprokudin), TELEGRAM (Oct. 5, 2023), https://perma.cc/9VBM-FFVT; Police of Kherson Oblast (@khersonpolice), TELEGRAM (Oct. 6, 2023), https://perma.cc/2NX9-TTRP; Ministry of Health of Ukraine (@mozofficial), TELEGRAM (Oct. 5, 2023), https://perma.cc/DFP4-A2VM; Martin Fornusek, Russia attacks bospital in Beryslav in Kherson Oblast, injures 2, KYIV INDEPENDENT (Oct. 5, 2023), https://perma.cc/3RY7-7HNQ; Medecins Sans Frontieres (MSF) Ukraine (@MSF_Ukraine), X (Oct. 6, 2023), https://perma.cc/K5QU-LKZJ. For a video of the strike on the hospital, see UNITED24 Media (@United24media), X (Oct. 5, 2023), https://perma.cc/K5QU-LKZJ.

²⁶⁶ Police of Kherson Oblast (@khersonpolice), TELEGRAM (Oct. 6, 2023), https://perma.cc/2NX9-TTRP.

²⁶⁷ Martin Fornusek, Russia attacks hospital in Beryslav in Kherson Oblast, injures 2, KYIV INDEPENDENT (Oct. 5, 2023), https://perma.cc/3RY7-7HNQ.

²⁶⁸ Police of the Kherson Region (@khersonpolice), TELEGRAM (Oct. 6, 2023), https://perma.cc/2NX9-TTRP.

occurring just an hour earlier, suggest a "double tap" strike in which Russian forces returned later to target the hospital and medical center, which are afforded special protection under IHL. The Beryslav District Prosecutor's Office of the Kherson region initiated a pre-trial investigation into alleged violations of the laws and customs of war (part 1 of Article 438 of the Criminal Code of Ukraine). ²⁶⁹

No publicly available information indicates the presence of Ukrainian military objects in Beryslav. Although Beryslav is located on the left bank of the Dnipro River, the right bank of which is occupied by Russian forces, no active military operations were underway towards Beryslav at the time of the attack on October 5, 2023. The location of Beryslav, particularly due to the natural barrier of the Dnipro River and the surrounding marshland separating the town from Russian-occupied Kakhovka just across the river, render it difficult for Russian forces to launch a ground offensive into Beryslav's direction.



Deep state map as of the day of the attack (October 5, 2023)²⁷⁰

According to Medecins sans Frontières Ukraine, the Beryslav Central District Hospital was the closest medical facility for tens of thousands of civilians.²⁷¹ As a result of the attack, the hospital was forced to cease functioning.²⁷² These strikes therefore also speak to a wider pattern of Russian attacks on hospitals and medical facilities. At the time of attack, in the Kherson region alone, Russian forces had completely destroyed 24 medical facilities, damaging at least 154 more,²⁷³ with over 1,000 attacks on health care facilities recorded across Ukraine since February 2022.²⁷⁴ According to the World Health Organization's ("WHO's") data from late August 2024, a total of 1,940 attacks on health care facilities have been recorded in Ukraine.²⁷⁵

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²⁶⁹ Kherson Regional Prosecutor's Office (@phogovua), TELEGRAM (Oct. 5, 2023), https://archive.is/5zY0R#selection-219.0-241.80.

²⁷⁰ DEEPSTATEMAP, https://perma.cc/S2JT-BSVW (depicting the map of Beryslav on Oct. 5, 2023).

²⁷¹ Medecins Sans Frontieres (MSF) Ukraine (@MSF_Ukraine), X (Oct. 6, 2023), https://perma.cc/K5QU-LKZJ.

²⁷² Id.; Margarita Dotensko, Після російського авіаудару лікарня у Бериславі на Херсонщині припиняє свою роботу [After Russian airstrike, hospital in Beryslav, Kherson region, ceases operations], MOCT (Oct. 7, 2023), https://perma.cc/RSS9-D9MM.

²⁷³ Ministry of Health of Ukraine (@mozofficial), TELEGRAM (Oct. 5, 2023), https://perma.cc/DFP4-A2VM.

²⁷⁴ On the Russian Federation's Ongoing Aggression Against Ukraine, U.S. MISSION TO OSCE (Oct. 19, 2023), https://perma.cc/797H-JW5K.

²⁷⁵ Grim Milestone on World Humanitarian Day: WHO Records 1,940 Attacks on Healthcare in Ukraine Since Start of Full-Scale War, UNITED NATIONS (Aug. 19, 2024), https://perma.cc/QPD3-KB7V.

The attack received widespread international condemnation. The French Ministry of Foreign Affairs condemned "in the strongest terms" the Russian strike that "seriously damaged [the] hospital in Beryslav," an act which "constitute[s] [a] war crime."²⁷⁶ It also vowed to provide support to Ukrainian courts and the "International Criminal Court to combat impunity for such crimes."²⁷⁷ U.S. Ambassador to the Organization for Security and Co-operation in Europe ("OSCE"), Michael R. Carpenter, condemned the Russian Federation's "willful and wanton disregard for civilian life and infrastructure," singling out the Beryslav attack by Russian Forces which "largely destroy[ed] its top two floors."²⁷⁸

²⁷⁶ Ministry for Europe and Foreign Affairs (France), *Condemnation of Russian Strikes on Ukrainian Civilian Targets* (Oct. 5, 2023), https://perma.cc/CPR7-T3NL.

²⁷⁸ On the Russian Federation's Ongoing Aggression Against Ukraine, U.S. MISSION TO OSCE (Oct. 19, 2023), https://perma.cc/797H-JW5K.

Case No. 20 - ATTACK AGAINST RESIDENTIAL AREA IN KHARKIV (MAR. 27, 2024)

At 3:54 p.m. on March 27, 2024, Russian forces attacked a residential area located in the Shevchenkivskyi district of Kharkiv.²⁷⁹ The attack was carried out using Unified Multi-Purpose Gliding Bombs ("UMPB D30-SN"), a new projectile used for the first time in Kharkiv on this occasion.²⁸⁰ The projectile can be launched from a distance of approximately 90 kilometers²⁸¹ and has an additional module installed with wings and control surfaces which allows for gliding towards the target and adjusting the trajectory based on data from the navigation block.²⁸² Russian guided munitions, including glide bombs, have varying levels of precision, and their accuracy is undetermined despite their navigational and manoeuvring capabilities.²⁸³ The ammunition was released from a SU-34/SU-35 aircraft.²⁸⁴

The attack reportedly consisted of two strikes: first on a school, and then between two residential apartment buildings, where many people are reported to have been walking given it was in the middle of the day. The first bomb exploded on a children's playground, blowing off facades and balconies in neighbouring buildings. According to the deputy chief of the regional police, Serhii Bolvinov, the second strike targeted a school. 288

According to Ukrainian police, the investigators, who arrived at the scene, have opened criminal proceedings under part 2 of Article 438 of the Criminal Code of Ukraine for violating the laws and customs of war.²⁸⁹

²⁷⁹ Russia attacked a residential area in Kharkiv with glide munitions (Mar. 27, 2024), https://perma.cc/DR3T-Y8WG.

²⁸⁰ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 27, 2024), https://web.archive.org/web/20240328004800/https://t.me/prokuratura_kharkiv/14866; *Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with*, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

²⁸¹ Kharkiv Regional Military Administration, «Для удару по Харкову окупанти вперше застосували босприпаси такого типу», - Олег Синсгубов [For the attack on Kharkiv, the occupiers used this type of ammunition for the first time," Oleg Sinegubov] (Mar. 27, 2024), https://perma.cc/LW74-T8GW; Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

²⁸² Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

²⁸⁴ National Police of Ukraine, *У Харкові один чоловік загинув*, 19 громадян поранені - серед них четверо дітей: поліція допомагає людям та документує наслідки авіаудару росіян [In Kharkiv, one man died, 19 citizens were injured, including four children: the police are helping people and documenting the consequences of the Russian airstrike] (Mar. 27, 2024), https://perma.cc/6SDC-YLSW; Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 27, 2024), https://web.archive.org/web/20240328004800/https://t.me/prokuratura_kharkiv/14866.

²⁸⁵ The coordinates of the attack are as follows: 50.03314236185636, 36.21789096231347. International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* (Feb. 2, 2023), https://perma.cc/SV2L-HD6X. See Valentyna Romanenko, Russians strike residential area in Kharkiv, killing 1 and wounding 19, children among them – video, UKRAINSKA PRAVDA (Mar. 27, 2024), https://perma.cc/C3HF-KJU4.

²⁸⁶ National Police of Ukraine, *У Харкові один чоловік загинув, 19 громадян поранені - серед них четверо дітей: поліція допомагає людям та документує наслідки авіаудару росіян* [In Kharkiv, one man died, 19 citizens were injured, including four children: the police are helping people and documenting the consequences of the Russian airstrike] (Mar. 27, 2024), https://perma.cc/6SDC-YLSW.

²⁸⁷ Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

²⁸⁹ National Police of Ukraine, *У Харкові один чоловік загинув, 19 громадян поранені - серед них четверо дітей: поліція допомагає людям та документує наслідки авіаудару росіян* [In Kharkiv, one man died, 19 citizens were injured, including four children: the police are helping people and documenting the consequences of the Russian airstrike] (Mar. 27, 2024), https://perma.cc/6SDC-YLSW

There is no publicly available information indicating military presence at the impact sites or within the bombs' striking range. Indeed, the Head of the National Security Service in the region, Volodymyr Tymoshko, has stated that there were no military facilities nearby.²⁹⁰

One 59-year-old civilian was killed in the attack. Another 19 civilians were injured, amongst them four children (aged three months, two years, nine years, and 13 years). Among the injured, at least two men were hospitalized, while five women received on-site medical treatment. Other reports suggest that up to 13 people were taken to the city's medical facilities. The attack damaged two five-story apartment buildings and one four-story apartment building, necessitating the evacuation of residents and their relocation to temporary housing. A school, a pre-school, and a clinical hospital for urgent and emergency care were also damaged, along with power lines.

The attack was part of a larger assault by Russia against at least 20 settlements of the Kharkiv region, causing damage to private houses, residential apartment buildings, and a kindergarten. In the village of Dvorichna, a 67-year-old man was injured, and a 12-year-old boy is reported to have died as a result of a shelling in the village of Borova.²⁹⁵

Case No. 21 - ATTACK AGAINST CIVILIAN INFRASTRUCTURE IN KHARKIV (MAY 22, 2024)

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²⁹⁰ Id.

²⁹¹ *Id.*; Kharkiv Regional Military Administration, «Для удару по Харкову окупанти вперше застосували босприпаси такого типу», - Олег Синсгубов [For the attack on Kharkiv, the occupiers used this type of ammunition for the first time," Oleg Sinegubov] (Mar. 27, 2024), https://perma.cc/LW74-T8GW.

²⁹² Kharkiv Regional Military Administration, «Для удару по Харкову окупанти вперше застосували босприпаси такого типу», - Олег Синсубов [For the attack on Kharkiv, the occupiers used this type of ammunition for the first time," Oleg Sinegubov] (Mar. 27, 2024), https://perma.cc/LW74-T8GW; Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), Telegram (Mar. 27, 2024),

https://web.archive.org/web/20240328004800/https://t.me/prokuratura_kharkiv/14866.

²⁹³ National Police of Ukraine, У Харкові один чоловік загинув, 19 громадян поранені - серед них четверо дітей: поліція допомагає людям та документує наслідки авіаудару росіян [In Kharkiv, one man died, 19 citizens were injured, including four children: the police are helping people and documenting the consequences of the Russian airstrike] (Mar. 27, 2024), https://perma.cc/6SDC-YLSW; Kharkiv Regional Military Administration, «Для удару по Харкову окупанти вперше застосували босприпаси такого типу», - Олег Синсгубов [For the attack on Kharkiv, the occupiers used this type of ammunition for the first time," Oleg Sinegubov] (Mar. 27, 2024), https://perma.cc/LW74-T8GW.

²⁹⁴ National Police of Ukraine, *У Харкові один чоловік загинув, 19 громадян поранені - серед них четверо дітей: поліція допомагає людям та документує наслідки авіаудару росіян* [In Kharkiv, one man died, 19 citizens were injured, including four children: the police are helping people and documenting the consequences of the Russian airstrike] (Mar. 27, 2024), https://perma.cc/6SDC-YLSW.

²⁹⁵ Kharkiv Regional Military Administration, «Для удару по Харкову окупанти вперше застосували босприпаси такого типу», - Олег Синсгубов [For the attack on Kharkiv, the occupiers used this type of ammunition for the first time," Oleg Sinegubov] (Mar. 27, 2024), https://perma.cc/LW74-T8GW.

On May 22, 2024, at 1:45 p.m., Russian forces attacked civilian infrastructure in the Shevchenkivskyi and Kholodnohirskyi districts of Kharkiv with two UMPD D30-SN bombs.²⁹⁶

In Shevchenkivskyi District, a UMPB D30-SN bomb landed near the entrance of a café. The blast damaged residential buildings, a car wash, civilian cars, and nearby shops.²⁹⁷ As a result of the attack, 12 civilians were injured, including a 16-year-old boy. ²⁹⁸ Four of the 12 injured civilians were hospitalized.²⁹⁹ Among them, a trolleybus driver who was near the impact site at the time of the attack was seriously injured, and his leg had to be amputated.³⁰⁰

In Kholodnohirskyi District, a UMPB D30-SN destroyed the premises of a local business.³⁰¹ A 42-year-old woman working near the site of the strike suffered an acute stress reaction. ³⁰² No publicly available information indicates the presence of Ukrainian military objectives at the impact sites or within the bombs' striking range.

The Kharkiv Oblast Prosecutor's Office announced that Russian forces launched two UMPB D30-SN bombs from Belgorod Oblast but did not specify the jet model that conducted the attack.³⁰³ On March 30, 2024, a spokesperson for the Ukrainian Air Force stated that UMPB D30 bombs are typically launched from SU-34 and SU-35 jets.³⁰⁴ On May 29, 2024, the spokesperson further stated that, in the days prior, several SU-34 and SU-35 aircraft had been flying in a "carousel" pattern and launching bombs at Kharkiv. 305 According to Ukrainian and foreign weapons experts, UMPB D30-SN bombs are most likely launched exclusively from SU-34 and SU-35 jets. 306

The use of UMPB D30-SN by Russian SU-34 jets is further corroborated by Russian sources.³⁰⁷ On the day of the attack, at 8:40 p.m., a pro-Russian blogger published a post that

²⁹⁶ Oleg Synegubov (@synegubov), TELEGRAM (Mar. 22, 2024), https://perma.cc/VJ7B-MS5M; Yanina Sokolova (@YaninaSokolova), У росії ВНБУХНУЛА ядерна ракета Сармат! ЗАВЕРШЕННЯ ВІЇННІ хочуть росіяни? Новини 610 Aninu [A Sarmat nuclear missile EXPLODED in Russia! Do the Russians want the WAR TO END? News from Yaninal, YOUTUBE (Sept. 22, 2024), https://perma.cc/Y8VS-U2YY.

²⁹⁷ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 22, 2024), https://perma.cc/VV7F-25JB.

²⁹⁸ Id.

²⁹⁹ Oleg Synegubov (@synegubov), TELEGRAM (Mar. 22, 2024), https://perma.cc/VJ7B-MS5M.

³⁰⁰ Igor Terekhov, Mayor of Kharkiv, TELEGRAM (Mar. 22, 2024), https://perma.cc/CA8G-R4FE;Anastasia Kolesnikova, Водію тролейбуса, якого поранило в Харкові, ампутували ногу: що відомо про постраждалого [Nazism is back, Zelenskyy spoke before the French parliament], 24 CHANNEL (Mar. 22, 2024), https://perma.cc/2GUL-VGQB.

³⁰¹ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 22, 2024), https://perma.cc/VV7F-25JB; Oleg Synegubov (@synegubov), TELEGRAM (Mar. 22, 2024), https://perma.cc/Z2LT-XLZL.

³⁰² Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 22, 2024), https://perma.cc/VV7F-25JB.

³⁰³ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Mar. 22, 2024), https://perma.cc/R4K7-NW9Q.

³⁰⁴ ТСН, Новини за 30 березня 2024 року | Новини України [News from March 30, 2024 | Ukrainian News], YOUTUBE (Mar. 29, 2024), https://perma.cc/UL67-DZD3.

^{305 5} Channel, IIIOO?! рОСІЯ запускає ХОЛОСТІ ЛІТАКНА чьо случілась? - Ілля ЄВЛАШ [What?! Russia launches IDLE PLANES. What happened? – Ilya Evlash], YOUTUBE (Mar. 29, 2024), https://perma.cc/KW6D-EE85. ³⁰⁶ Tyler Rogoway & Thomas Newdick, Russian Small Diameter Bomb-Like Glide Weapon Appears In Ukraine, THE WARZONE (Mar. 12, 2024), https://perma.cc/H5RA-PNBK; John Hardie, Photos offer insights on Russia's new UMPB D-30SN glide bomb, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7; Defense Express, РФ заявляє про створення тасмничого УМБП під літаки і "Торнадо-С" [Russia announces the creation of a mysterious UMBP for aircraft and "Tornado-S"], DEFENSE EXPRESS (Mar. 9, 2024), https://perma.cc/EX5F-58S2. 307 See Kirill Fedorov / War History Weapons (@warhistoryalconafter), TELEGRAM (May 22, 2024), https://perma.cc/3DJ5-8F56; Aviahub (@Aviahub34), TELEGRAM (May 22, 2024), https://perma.cc/49JX-CR38; John

included three photos of two UMPB D30-SN bombs on a SU-34 aircraft, along with a video from inside the cockpit showing the launch of what appeared to be three UMPB D30-SN bombs. The post alleged that it contains a "unique and exclusive video of the use of the newest Russian UMPB bombs" that a SU-34 aircrafts dropped on Kharkiv. The content of the blogger's post suggests a connection to the attack described. One image from the post features a UMPB D30-SN attached to a jet, with the inscription "Greetings from Belgorod! 22.05.24." As noted above, the Ukrainian Prosecutor's Office confirmed that the attack originated from Belgorod Oblast. According to open sources, this type of bomb was not used for any other attacks on May 22, making it likely that the bombs featured in the post were indeed used to attack Kharkiv on that day. Another image from the post shows another UMPB D30-SN attached to a jet with an inscription urging people to subscribe to the channel of the pro-Russian blogger, Kirill Fedorov. This suggests the blogger's connection to the military and the authenticity of his photos and videos.

This attack was part of Russia's offensive operation against Kharkiv in May 2024. ³¹³ The OHCHR reported that at least 174 civilians were killed and 690 were injured in Ukraine in May 2024. More than half of these casualties were attributed to the fighting in Kharkiv oblast. ³¹⁴

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Hardie, *Photos offer insights on Russia's new UMPB D-30SN glide bomb*, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7.

³⁰⁸ Kirill Fedorov / War History Weapons (@warhistoryalconafter), TELEGRAM (May 22, 2024), https://perma.cc/3DJ5-8F56.

³⁰⁹ Id.

³¹⁰ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (May 22, 2024), https://perma.cc/R4K7-NW9Q.

³¹¹ Institute for the Study of War, Russian Offensive Campaign Assessment, May 22, 2024, UNDERSTANDING WAR (May 22, 2024), https://perma.cc/R39Y-SPUM; Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

³¹² Kirill Fedorov / War History Weapons (@warhistoryalconafter), TELEGRAM (May 22, 2024), https://perma.cc/3DJ5-8F56.

³¹³ Ukraine in maps: Tracking the war with Russia, BBC (Nov. 19, 2024), https://www.bbc.com/news/world-europe-60506682; Сім загиблих, 16 поранених — влада про наслідки удару РФ по Харкову, РАДІО СВОБОДА [Seven dead, 16 injured — authorities on the consequences of the Russian strike on Kharkiv], RADIO LIBERTY (May 23, 2024, 1:07 PM), https://perma.cc/3HW9-XAKC.

³¹⁴ With Deadly Offensive in Kharkiv, Last Month Civilian Casualties in Ukraine Hit Highest Level Since June 2023, Deputy Relief Chief Tells Security Council, UNITED NATIONS (Jun. 7, 2024), https://perma.cc/YGW6-GF5Y; see also "The Russians have everything they want, and we fight with whatever we can." BBC report from Kharkiv region, BBC (May 22, 2024), https://perma.cc/2X5D-BBLE.

Case No. 22 - ATTACK IN KHARKIV (MAY 25, 2024)

On May 25, 2024 at 4:00 p.m., Russian forces attacked a busy Epicentr hypermarket in a densely populated residential neighborhood in Kharkiv, resulting in numerous civilian casualties and massive damage to the hypermarket.³¹⁵

Two UMPB D30-SN bombs struck the hardware and gardening departments of the hypermarket. One more unexploded UMPB D30-SN bomb of dated 07.05.24 landed 80 meters from the hypermarket. According to local authorities, up to 200 visitors were inside the hypermarket during the attack. According to the head of the National Police in Kharkiv Oblast, the constant presence of Russian reconnaissance UAVs over Kharkiv proves that the Russian forces were aware of the civilian nature of the building and the fact that civilians were inside. The head of the National Police in Kharkiv Oblast stated that a SU-34 conducted the attack with UMPB D30 bombs. D30

As a result of the attack, 19 civilians, including six women and two children, were killed, while 54 more civilians were injured.³²² Additionally, a fire caused by the strikes engulfed 13,000 square meters of the hypermarket building³²³ and took approximately 16 hours to extinguish.³²⁴ The strikes and resulting fire ultimately led to the complete destruction of the hypermarket.³²⁵

Store manager Oleksandr Lutsenko said the May 25 attack illuminates Russia's aim for Kharkiv: "Their goal is to turn it into a ghost city, to make it so that no one will stay, that there will be nothing to defend, that it will make no sense to defend the city. They want to scare people, but they will not succeed." 326

³¹⁵ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (May 25, 2024), https://perma.cc/HCW2-FBQY.

³¹⁶ MediaPort, *Росіяни бачили, що в «Епіцентрі» були цивільні* — начальник поліції Харківщини [The Russians saw that there were civilians in the "Epicenter" – the head of the Kharkiv region police], YOUTUBE (May 25, 2024), https://perma.cc/DE2E-4PRW.

³¹⁷ Anna Tsemyk & Dmytro Hrebinnyk, *UMPB: what is this aerial bomb and why did the Russians start using it? Defense Express expert explains*, SUSPILNE MEDIA (Apr. 12, 2024), https://perma.cc/J2XK-PTUY; Tyler Rogoway & Thomas Newdick, *Russian Small Diameter Bomb-Like Glide Weapon Appears in Ukraine*, THE WARZONE (Mar. 12, 2024), https://perma.cc/H5RA-PNBK; John Hardie, *Photos offer insights on Russia's new UMPB D-30SN glide bomb*, FOUNDATION

https://perma.cc/H5RA-PNBK; John Hardie, *Photos offer insights on Russia's new UMPB D-305N glide bomb*, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7; *Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with*, RBC (Mar. 29, 2024), https://perma.cc/7KEE-5R9P.

³¹⁸ Office of the Prosecutor of Kharkiv Oblast (@prokuratura_kharkiv), TELEGRAM (Jun. 5, 2024), https://perma.cc/KNS9-CSHR.

³¹⁹ Official Telegram Channel of President of Ukraine Volodymyr Zelenskyy (@V_Zelenskiy_official), TELEGRAM (Jun. 5, 2024), https://perma.cc/ERK9-B2CV.

³²⁰ MediaPort, *Росіяни бачили, що в «Епіцентрі» були цивільні* — *начальник поліції Харківщини* [The Russians saw that there were civilians in the "Epicenter" – the head of the Kharkiv region police], YOUTUBE (May 25, 2024), https://perma.cc/DE2E-4PRW. 321 *Id.*

³²² Oleg Sinegubov (@synegubov), TELEGRAM (Jun. 5, 2024), https://t.me/synegubov/9805; Christian Edwards, Russian Strike Hits Kharkiv Megastore, Causing Multiple Casualties, CNN (May 27, 2024), https://perma.cc/Q232-R6UQ.

³²³ Ihor Klymenko (@Klymenko_MVS), TELEGRAM (Jun. 5, 2024), https://perma.cc/X6C4-RFB8.

³²⁴ Epicenter K, FACEBOOK (May 25, 2024), https://perma.cc/9ECL-8Y45.

³²⁶ Associated Press, *Ukraine Uses New Airstrips to Combat Russian Glide Bombs in Kharkiv*, NPR (Jun. 20, 2024), https://perma.cc/PE8U-D5PM.

Numerous CCTV videos from inside and outside of the hypermarket show that there were no military targets present inside or near the impact site.³²⁷ The UN Humanitarian Coordinator in Ukraine strongly condemned the strike,³²⁸ and the President of the European Council, Charles Michel, described the attack as "atrocious."³²⁹

This attack was part of Russia's broader May offensive against Ukraine. Indeed, Kharkiv's mayor, Ihor Terekhov, said Russian forces attacked the city 76 times throughout the month of May 2024, which is three times the number of attacks reported in the previous month.³³⁰

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³²⁷ Where in Kharkiv (@place_kharkiv), TELEGRAM (Jun. 5, 2024), https://perma.cc/VM9W-4XD2; MediaPort, *Росіяни* бачили, що в «Епіцентрі» були цивільні — начальник поліції Харківщини [The Russians saw that there were civilians in the "Epicenter" – the head of the Kharkiv region police], YOUTUBE (May 25, 2024), https://perma.cc/DE2E-4PRW; Russia Strikes Kharkiv in Ukraine, CNN (May 25, 2024), https://perma.cc/9XQA-KHBV.

³²⁸ Russian Attack on Kharkiv Shopping Centre 'Utterly Unacceptable', UNITED NATIONS (May 25, 2024), https://perma.cc/9SRM-4VX6.

³²⁹ Maria Yemets, Zelenskyy Holds Talks with European Leaders on Russian Aggression and Future EU Integration, EUROINTEGRATION (May 26, 2024), https://perma.cc/93D6-LZ9B.

³³⁰ Joanna Kakissis, Polina Lytvynova, & Laurel Chor, *Ukraine's Kharkiv has withstood Russia's relentless strikes. Locals fear what's next*, NPR (Jun. 21, 2024), https://perma.cc/Z4QN-T6QP.

APPENDIX II: WEAPONS USED BY THE RUSSIAN ARMED FORCES IN UKRAINE

This appendix provides an overview of the key weapons systems that the Russian Armed Forces and their collaborators have used in committing the war crimes and crimes against humanity examined in this Report.

The focus is on understanding how these weapons have been employed, their technical specifications, and consequent implications for breaches of international law.

This appendix supports the Report by providing in-depth review of these weapons. The weapons examined are:

- 1) Shahed-136 Unmanned Aerial Vehicle ("UAV" or "drone");
- 2) Iskander (9K720 Iskander) Missile System;
- 3) Kalibr missiles (3M-14 Kalibr (SS-N-30A));
- 4) Tornado-S multiple rocket launchers;
- 5) Kh-101 (X-101) missiles;
- 6) UMPB D30-SN Bomb;
- 7) KAB Family of guided bombs;
- 8) S-300 missile system;
- 9) Kh-555 missiles; and
- 10) Cluster munitions.

1) Shahed-136

There are two variants of Shahed drones: the Shahed-131, a smaller model designed for medium-range operations, and the Shahed-136, a larger model intended for long-range missions. Shahed-136 weapon systems are Iranian loitering munitions developed by Shahed Aviation Industries Research Centre ("SAIRC") for ground-attack missions. Designed for single-use missions, each aircraft flies towards a designated target and detonates upon impact. 3

The Shahed-136 has become a pivotal weapon in Russia's arsenal, especially in its conflict with Ukraine. In July 2022, U.S. National Security Advisor Jake Sullivan stated that the White House believed Iran was preparing to supply Russia with hundreds of drones and train Russian military personnel in their operation. By October 2022, the U.S. National Security Council reported that a "relatively small number" of Iranian trainers and technicians were in Crimea to assist Russian forces in enhancing the drones' lethality. While the exact number of Shahed-136 units supplied to Russia remains unknown, Ukraine's intelligence services have stated that Russia ordered approximately 2,400 Shaheds from Iran.



Figure 1: The Shahed-136 Drone8

Features of the Shahed-136 munition, which has been in service since 2019, include: (1) loitering munition type; (2) platform fit for ground, on medium sized vehicles; (3) an autonomous weapon with salvo firing capability; (4) effective against stationary targets; and (5) designed for medium-to-long range ground-attack missions.⁹

¹ JANES WEAPONS: AIR-LAUNCHED YEARBOOK 3 (2024/25).

² *I*d

³ International Partnership for Human Rights, *Terror in the Details: Western-Made Components in Russia's Shahed-136 Attacks* (2023), https://perma.cc/T2CF-YU3S; *see also How Russia's 'Kamikaze' Drones Are Changing the Ukraine War*, BBC (Oct. 17, 2022), https://perma.cc/C35Y-WKND (discussing the impact of Shahed-136 drones on the Ukraine conflict, including technical features and the geopolitical consequences of Russia's reliance on Iranian drones).

³ Press Briefing by Press Secretary Karine Jean-Pierre and National Security Advisor Jake Sullivan, The White House (Jul. 12, 2022), https://perma.cc/C4TA-W8MV.

⁴ *Id*.

⁵ *Id*.

⁶ Shane Harris et al., U.S. has viewed wreckage of kamikaze drones Russia used in Ukraine, WASH. POST (Oct. 20, 2022), https://perma.cc/G5FG-87VL.

Russia Ordered 2,400 Shahed-136 Kamikaze UAVs from Iran, MILITARNYI (Oct. 16, 2022), https://perma.cc/KGD7-3S2T.

⁸ International Partnership for Human Rights, *Terror in the Details: Western-Made Components in Russia's Shahed-136 Attacks* (2023), https://perma.cc/T2CF-YU3S.

⁹ Janes Weapons: Air-Launched Yearbook 3 (2024/25).

Additional features include:

- Specifications: Length: ~2.5 meters, Wingspan: ~2.5 meters, Weight: ~200 kilograms, Payload: ~40 kilograms, Range: 540–630 kilometers. 10
- Airframe and Structure: The air vehicle ("AV") features a cylindrical fuselage with midmounted cropped double delta wings, tip-mounted fins and rudders, and side-force panels (vertical stabilizers). The nose section is rounded and estimated to contain the guidance payload. The rear of the fuselage is installed with a piston engine.¹¹
- Warhead: Equipped with an explosive payload between 40 and 50 kilograms, making it highly effective against soft, unprotected targets.¹² The explosives are in a cone-shaped charge with a copper liner and surrounded by pre-formed fragmentation.¹³
- Communication: Contains a commercial-grade digital communication chip that allows for mid-flight updates or changes to the target's location.¹⁴
- Guidance and Control: Side-force panels are deployed to stabilize the air vehicle during the terminal dive. The AV is autonomous, and the launch process is controlled by the guidance and control system ("GCS"). Each AV is cued and checked out ahead of the launch. The AV is fitted with a GNSS receiver, a device which detects and processes signals from navigation satellites, and pre-loaded GNSS waypoints are used for the navigation.¹⁵
- Powerplant: The munition is estimated to be powered by a four-cylinder piston engine (most likely a MD-550 engine) that drives a two-bladed propeller with a maximum speed of 185 kilometers per hour. The Shahed-136 has a claimed range of 2,500 kilometers but, in Ukraine, it has been predominantly used against tactical rather than strategic targets.¹⁶
- Precision: The Shahed-136 exhibits exceptional accuracy in striking its intended targets. Dr. Uzi Rubin, former Director of the Israel Missile Defense Organization, highlighted its "simplicity, combined with its almost uncanny accuracy, long range, and low cost," making it uniquely effective as a strategic standoff weapon.¹⁷ This precision suggests the Shahed-136 impacts its designated targets with minimal deviation.¹⁸ The Royal United Services Institute ("RUSI") has noted that the combination of its precision, range, and

¹⁰ *Id*.

¹¹ *Id*

¹² International Partnership for Human Rights, *Terror in the Details: Western-Made Components in Russia's Shahed-136 Attacks* 29 (2023), https://perma.cc/T2CF-YU3S.

¹³ Janes Weapons: Air-Launched Yearbook 3 (2024/25).

¹⁴ Royal United Services Institute, Russia's Iranian Made UAVs: A Technical Profile (Jan. 13, 2023), https://web.archive.org/web/20230324023542/https://rusi.org/explore-our-

research/publications/commentary/russias-iranian-made-uavs-technical-profile.

 $^{^{15}\,\}mbox{Janes}$ Weapons: Air-Launched Yearbook 3 (2024/25).

¹⁶ *Id*.

¹⁷ International Partnership for Human Rights, *Terror in the Details: Western-Made Components in Russia's Shahed-136 Attacks* 29 (2023), https://perma.cc/T2CF-YU3S.
¹⁸ *Id.* at 12.

small yet powerful warhead effectively classifies the Shahed-136 as a "propeller-driven cruise missile." ¹⁹

Originated from	Possessed by				
Iran	Iran, Russia				
Alternative names	Class				
Geran-2/Geranium-2 in Russian possession	Loitering munition				
Guidance system	Length				
GNSS, INS	3.5m				
Basing	Weight				
Rocket-assisted take-off	200 kg				
Wingspan	Range				
2.5 m	allegedly 2,500 km				
Speed	Engine				
185 km/h	MD550 / 3W motors				
Payload	In service				
≈50 kg	2019-2020				
Status					
Operational					

Figure 2: The Shahed-136 at a glance²⁰

The Shahed-136 is sometimes described as having "autonomy," defined as "the ability of a machine to execute a task, or tasks, without human input, using the interaction of computer programming with the environment." In this context, a drone launched in a "fire and forget" mode can be considered autonomous. After launch, it does not require additional human input to complete its mission, although it may still receive new GPS coordinates mid-flight. "Fire and forget" systems have been in use since the 1960s, typically with human-defined launch intent and targets, while the flight trajectory is autonomously managed by onboard computers.

The Shahed-136 operates similarly to conventional direct-attack guided munitions. This contrasts with "autonomous" loitering munitions, which can independently identify targets while hovering in a designated area for extended periods.²³

The Shahed-136 lacks the capability to autonomously identify targets and is comparable to traditional guided missile systems. The drone relies on the Global Positioning System ("GPS") or the Global Navigation Satellite System ("GLONASS") for navigation and is not believed to have the capability to target radar emissions. Its low and slow flight profile, absence of cameras, and lack of strikes on moving targets support this assessment.²⁴

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¹⁹ Uzi Rubin, Russia's Iranian Made UAVs: A Technical Profile, ROYAL UNITED SERVICES INSTITUTE (Jan. 13, 2023), https://web.archive.org/web/20230324023542/https://rusi.org/explore-our-research/publications/commentary/russias-iranian-made-uavs-technical-profile.

²⁰ International Partnership for Human Rights, *Terror in the Details: Western-Made Components in Russia's Shahed-136 Attacks* 29 (2023), https://perma.cc/T2CF-YU3S.

²¹ Vincent Boulanin & Maaike Verbruggen, *Mapping the Development of Autonomy in Weapon Systems*, STOCKHOLM INT'L PEACE RSCH. INST. (2017), https://perma.cc/BN4T-DK6W.

²² Yulia Latynina, Портрет шахида в небе Украины [Portrait of a Shahed in the Sky of Ukraine], NOVAYA GAZETA (Oct. 21, 2022), https://perma.cc/HJF4-9X55.

²³ Daniel Zampronha & Aline Albuquerque, *Cheaper Precision Weapons: An Exploratory Study about the HESA Shahed 136*, 9 ADVANCES IN AEROSPACE SCI. & TECH. 40, 45 (2024), https://perma.cc/HLX3-QQGB. ²⁴ *Id.*

There is evidence to suggest that Russia has upgraded the Iranian Shahed-136 drones to enhance their lethality and precision. Military experts indicate that these upgrades likely include:²⁵

- Improved GPS systems for better targeting accuracy;
- Enhanced communication capabilities, which allow for more reliable mid-flight updates; and
- Upgraded warheads, possibly increasing the explosive payload or optimizing it for specific target types.

In summary, the Shahed-136 drone stands out for its exceptional precision in striking designated targets. Given the Shahed-136's capabilities, any misuse—such as strikes against non-military targets—cannot be easily attributed to technical errors or mistakes.²⁶

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²⁵ Ashish Dangwal, Russia Has 'Upgraded' Iranian Shahed-136 Kamikaze Drones to Boost Its Lethality & Accuracy—Military Experts, Eurasian Times (Nov. 1, 2022), https://perma.cc/J3A3-382U; Paul Iddon, Tailor-Made Shaheds: Iranian Drones Are Being Modified to Russian Specifications, FORBES (Feb. 12, 2023), https://perma.cc/GF5L-CUU7.

²⁶ See Patrick Reevell, Iranian Drones Used by Russia to Attack Ukraine, ABC NEWS (Oct. 20, 2022), https://perma.cc/HL6S-Q87B.

2) Iskander (9K720 Iskander)

The Iskander-M²⁷ is one of Russia's most advanced²⁸ mobile short-range ballistic missile systems. It has an accuracy range of 10 to 30 meters,²⁹ making it effective for tactical strikes on small, high-value land targets.³⁰



Figure 3: Iskander-M (SS-26 Stone) short-range ballistic missile³¹

The Iskander is a surface-to-surface short-range ballistic missile capable of carrying either a nuclear or a conventional warhead. It uses inertial and optical guidance systems and has a range of up to 500 kilometers. The missile is specifically designed to overcome air defense systems through its use of supersonic speed, extreme maneuverability, and decoy deployment. The Iskander has been used for hundreds of strikes on Ukraine since the full-scale invasion, including strikes on civilian objects.³²

The Iskander is equipped with various systems for in-flight correction and self-targeting, allowing the missile to overcome missile defense systems. It employs both optical and radar decoys to confuse enemy air defenses. Additionally, the missile's flight path can be adjusted during flight, enabling it to evade interception.³³

²⁷ Military TV, Why The Iskander Missile Has Significant Importance To Russia, YOUTUBE (2023), https://perma.cc/UF9T-7MAZ (discussing the strategic value of Russia's Iskander missile system, with a focus on its role in modern warfare).

²⁸ Brandon J. Weichert, Russia's Powerful Iskander-M Missile System Is a Threat to NATO, NAT'L INTEREST (Feb. 15, 2023), https://perma.cc/48QK-ZV39.

²⁹ Iskander-M (SS-26), MISSILE DEFENSE ADVOCACY ALLIANCE, https://perma.cc/2RZP-ZL3L (last visited Feb. 7, 2025).

³⁰ SS-26 Iskander, GLOBALSECURITY.ORG, https://perma.cc/59UZ-ZCJE (last visited Feb. 7, 2025).

³¹ SS-26 Iskander, MISSILETHREAT, https://perma.cc/8TUD-QSUZ (last updated Apr. 23, 2024).

³² International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes?* Western-Made Components in Russia's War Against Ukraine 25 (Feb. 2, 2023), https://perma.cc/SV2L-HD6X.

³³ Iskander-M (SS-26), MISSILE DEFENSE ADVOCACY ALLIANCE, https://perma.cc/2RZP-ZL3L (last visited Feb. 7, 2025).

Iskander (SS-26 "Stone") at a Glance				
ORIGINATED FROM Russia	POSSESSED BY Russia, Algeria, Armenia			
ALTERNATE NAMES Stone, Tender, 9M720, 9M723, 9M723-1	CLASS Short-Range Ballistic Missile (SRBM)			
BASING Road-mobile	LENGTH 7.3m			
DIAMETER 0.92 m	LAUNCH WEIGHT 3,800-4,020 kg			
PAYLOAD 480-700 kg, 480 kg (export variant)	WARHEAD High-explosive, submunition, earth-penetrator, thermobaric			
PROPULSION Single-stage solid propellant	RANGE 400-500 km, 200 km (export variant)			
STATUS Operational	IN SERVICE 2006			
Main characteristics of Iskander missile. Source: Missile Defense Project, "9K720 Iskander (SS-26)," Missile Threat, Center for Strategic and International Studies, 27 September, 2016, last modified 2 August, 2021, https://missilethreat.csis.org/missile/ss-26-2/				

Figure 4: Iskander missile at a glance³⁴

The Russian Armed Forces have used the Iskander missile system extensively during the conflict in Ukraine. The weapon's high precision, mobility, and ability to evade missile defense systems make it a formidable weapon on the battlefield. However, the use of Iskander missiles against civilian targets in Ukraine raises serious legal issues under international humanitarian law ("IHL").

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³⁴ International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* 26 (Feb. 2, 2023), https://perma.cc/SV2L-HD6X.

3) Kalibr (3M-14 Kalibr (SS-N-30A)

The Kalibr (3M-14, SS-N-30A) is a sea-launched, land-attack cruise missile.³⁵ With an estimated range of 1,500 to 2,500 kilometers, the Kalibr is regarded as a "mainstay in the Russian Navy's ground-strike capabilities," according to the Center for Strategic and International Studies ("CSIS").³⁶

Kalibr SS-N-30A at a Glance	
ORIGINATED FROM Russia	POSSESSED BY Russia
ALTNERNATE NAMES 3M-54, Kalibur	CLASS Sea-launched Land Attack Cruise Missile
BASING Ship/submarine based	LENGTH 6.2 m
PAYLOAD 450 kg warhead: High explosive, possibly nuclear capable	PROPULSION Turbojet
RANGE 1,500-2,500 km	STATUS Operational
IN SERVICE 2015	

Figure 5: The Kalibr missile at a glance³⁷

Though often referred to as the "Kalibr cruise missile" in media, the SS-N-30A is just one component of the broader Kalibr missile family. This family includes:

- SS-N-30A (3M-14): A land-attack cruise missile;
- SS-N-27 (Sizzler): An anti-ship cruise missile; and
- 91R: An anti-submarine missile.

Each missile type can be launched from common Kalibr vertical launch system ("VLS") tubes, a staple in the Russian Navy's arsenal and essential for flexible, multi-role combat capabilities.³⁸ The Kalibr missiles employ a combination of satellite navigation, particularly GLONASS, and onboard inertial guidance systems, enabling accurate targeting of high-priority stationary ground targets.³⁹

The standard 3M14T land-attack variant carries a nearly 1,000-pound, high-explosive warhead, making it suitable for strategic strikes on critical infrastructure such as storage facilities, command posts, seaports, and airports. The Kalibr missile autonomously flies at low altitudes along preprogrammed waypoints, which helps it penetrate air defense systems. The missile's route can be updated mid-course via satellite communication, allowing for dynamic target adjustments in real-time.⁴⁰

³⁵ Id. at 29.

³⁶ Id.

³⁷ Id.

^{38 3}M-14 Kalibr (SS-N-30A), MISSILETHREAT, https://perma.cc/ZU7W-Q7M8 (last updated Apr. 23, 2024).

³⁹ Claire Parker et al., What to know about the long-range cruise missile Russia says it fired in Ukraine, WASH. POST (Mar. 24, 2022), https://perma.cc/PE8R-2P9M.

⁴⁰ Id.

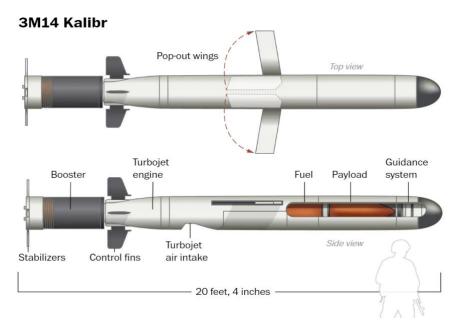


Figure 6: Characteristics and specifications of the Kalibr missile⁴¹

Russian military policy underscores the Kalibr missile's role. According to Russian doctrine, conventional precision weapons like the Kalibr are viewed as essential for deterrence on a regional and global scale, capable of targeting vital military and economic facilities.

Russia first used the Kalibr missile system operationally in October 2015, when it launched 26 missiles from naval vessels in the Caspian Sea to strike opposition forces in Syria. This attack marked a milestone in Russia's use of conventional precision weapons and demonstrated the missile's long-range capability, strategic reach, and the Navy's expanding role in power projection. This "Kalibrisation of the Russian Navy" reflects Russia's ambition to widely deploy Kalibr missiles across its naval fleet, enhancing its capability to engage targets from the sea.

Russia has frequently deployed the Kalibr in Ukraine. The Russian military employs Kalibr missiles to conduct precise, high impact strikes while minimizing the need for nuclear engagement, viewing them as strategically equivalent to conventional nuclear weapons.⁴⁴

The Kalibr missile is a non-nuclear strategic weapon in Russia's cross-domain strategy. It integrates multiple deterrence options—nuclear, conventional, and nonmilitary—allowing Russia to project power. Putin has stated that high-precision conventional weapons will "take strategic nonnuclear forces to a qualitatively new level, enabling the neutralization of any military threat to Russia."

⁴¹*Id*.

⁴² *Id*.

⁴³ Richard Connolly, *The Kalibrisation of the Russian Navy: Progress and Prospects, Changing Character of War Centre*, PEMBROKE COLLEGE OXFORD (2019), https://perma.cc/X64R-EL9Z.

⁴⁴ See Dave Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, Lawrence Livermore National Laboratory, CTR. FOR GLOBAL SECURITY RSCH 26 (Feb. 2018), https://perma.cc/Y43C-A78V.

⁴⁵ See Valeriy Akimenko, Russia and Strategic Non-Nuclear Deterrence: Capabilities, Limitations and Challenges, CHATHAM HOUSE, https://perma.cc/4JCP-2DAD (last updated Aug. 10, 2021).

⁴⁶ See Dave Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, Lawrence Livermore National Laboratory, CTR. FOR GLOBAL SECURITY RSCH 46 (Feb. 2018), https://perma.cc/Y43C-A78V.

4) Tornado-S Multiple Rocket Launchers

The Tornado-S (9K515) is a 300-millimeter multiple launch rocket system ("MLRS") equipped with GPS satellite navigation, designed to launch both guided and unguided rockets. With an estimated range of 120 kilometers, it provides high accuracy, with the latest modification of guided missiles reportedly accurate to within five to ten meters. The Tornado-S utilizes the GLONASS satellite system, enabling the simultaneous targeting of multiple, dispersed locations in a single salvo.⁴⁷

The Tornado-S is an advanced, modernized version of the Soviet BM-30 Smerch 300-millimeter MLRS. Approved for service in 2016, the first units were delivered in 2019, with additional systems deployed in November 2022. Unlike the Smerch, which could only launch unguided rockets, the Tornado-S has enhanced capabilities as a precision weapon, thanks to its guided rocket system. Equipped with GPS satellite navigation, the Tornado-S is capable of firing both guided and unguided rockets, including 9M544 and 9M549 guided rockets and a wide array of unguided variants such as 9M555K, 9M55K1, 9M55F, and 9M531.⁴⁸

The Tornado-S fires in less than 30 seconds, launching a single rocket or a full salvo. The system's deflection accuracy is reportedly between 10 to 20 meters, making its guided rockets comparable to high-precision missiles. ⁴⁹ The Tornado-S features automated equipment for launch preparation, enabling rapid and autonomous fire mission execution. This includes automated launch computations, target surveying, and navigation, which reduce fire preparation time from unprepared positions to just three minutes. ⁵⁰ Its satellite-guided firing system and antenna are mounted on the roof of the launch cabin, enhancing mobility and effectiveness. ⁵¹

Tornado S at a Glance	
ARMAMENT 12 launch tubes 300 mm caliber	ARMOR No armor protection
COUNTRY USERS Russia	VEHICLE WEIGHT ?
DESIGNER COUNTRY Russia	TRUCK SPEED 60 km/h
ACCESSORIES Computerised firing control system with GPS, GLONASS satellite navigation system, NBC protection system	TRUCK RANGE 850 km
CREW 3	DIMENSIONS Length: 12.37 m; Width: 3.1 m; Height: 3.1 m

Figure 7: The Tornado S at a glance⁵²

According to the Russian Ministry of Defense, Tornado-S MLRS units are used to conduct high-precision strikes on key enemy facilities. Guided rockets allow it to target frontline strongholds,

⁵⁰ *Id*.

⁴⁷ International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* 31 (Feb. 2, 2023), https://perma.cc/SV2L-HD6X.

⁴⁸ Russia Deploys in Ukraine Its New Tornado-S Rocket Launcher Able to Fire Guided Rocket at 120 km, ARMY RECOGNITION (Mar. 6, 2024), https://perma.cc/WT2W-7H5D.

⁴⁹ *Id*.

⁵¹ *Id*

⁵² International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* 31 (Feb. 2, 2023), https://perma.cc/SV2L-HD6X.

equipment storage sites, ammunition and fuel depots, and camouflaged command centers. ⁵³ Some reports suggest that Tornado-S systems are designed to receive and process real-time information from reconnaissance vehicles or drones autonomously, without operator interference. This autonomous functionality allows for satellite-guided input on target locations, displayed on an electronic map in the control cabin, making it highly adaptable on the battlefield. ⁵⁴

The Tornado-S MLRS represents a significant advancement in Russia's rocket artillery capabilities. Its precision, extended range, and autonomous functionality underscore its threats as a modern battlefield weapon. Given the precision of the guided rockets, strikes on non-military targets cannot be attributed to technical errors.

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⁵³ Tornado-S MRLS achieves 100% accuracy with advanced munitions – Defense Ministry, TASS (Sept. 20, 2023), https://perma.cc/C9X4-TS5G.

⁵⁴ Tornado-S: Dangerous Counterpart to HIMARS and Vilkha MRL, MILITARNYI (Oct. 10, 2023), https://perma.cc/8WGK-HKBG.

5) Kh-101 (X-101) Missiles

The conventional Kh-101 (AS-23A "Kodiak") is Russia's new-generation, precision-guided, very-long-range, stealthy cruise missiles, optimized for use by strategic bombers and aircraft. The weapon provides conventional or nuclear land-attack capability to the bomber or aircraft by using electro-optical ("EO") terrain reference guidance, and potentially terrain contour matching ("TERCOM") and digital scene mapping area correlation ("DSMAC"), and a lethal warhead.⁵⁵ Hence, it is a nuclear land-attack cruise missile.⁵⁶ Key features of Kh-101 missiles include:⁵⁷

- EO terrain-reference guidance and lethal warhead;
- Very long-range applications (up to 4,500 kilometers);
- Multiplatform launch capability; and
- Effective against high-value land targets.

The Kh-101 missile is similar in shape to the Kh-55 (AS-15), but it is larger and has two high-lift swept wings at mid-body (stowed in the lower body during carried flight) with folding clipped tip fin and tailplanes at the rear. The flat-sided missile appears to be roughly triangular in cross-section, tapering towards the rear to a rounded flat-ended tail section.⁵⁸ The engine is fitted inside the rear body, and an air inlet is located above the rear body. The missile is built largely from composite materials and has been engineered to have a very low radar cross-section ("RCS"), quoted as being 0.01 square meters.⁵⁹

The Kh-101 uses a combination of EO terrain-referenced navigation (the same as the Kh-55) for mid-course guidance and an EO-seeker with target recognition capability for terminal homing. The Kh-101 is also believed to have a GLONASS satellite navigation system for mid-course guidance.⁶⁰

According to Bellingcat's findings, the Kh-101's flight path requires customized individual pre-flight planning, including simulation of the complete flight path from the launch site to the target. Consequently, it is highly likely that the Russian attacks on critical infrastructure and civilian objects using the Kh-101 were intentional.

The Kh-101⁶² is an air-launched cruise missile with an estimated range of 2,500 to 2,800 kilometers, although the Russian military has claimed it is capable of reaching distances of up to 4,500 kilometers. It has a multi-faceted guidance system and a low flight path (flying at treetop level during the terminal stage) to avoid radars and air defense systems. The missile is equipped with the GLONASS navigation system, as well as GPS.⁶³

⁵⁷ *Id*.

⁵⁵ JANES WEAPONS: AIR-LAUNCHED YEARBOOK 273 (2024/25).

⁵⁶ *Id*.

⁵⁸ *Id*.

⁵⁹ *Id*.

⁶⁰ Id. at 274.

⁶¹ The Remote Control Killers Behind Russia's Cruise Missile Strikes on Ukraine, BELLINGCAT (Oct. 24, 2022), https://perma.cc/G3EW-HUP6.

⁶² See Defence Central, The Kh-101: Everything We Know About Russia's Best Cruise Missile, YOUTUBE (Jun. 12, 2024), https://perma.cc/E67X-W6QH.

⁶³ International Partnership for Human Rights & Independent Anti-Corruption Commission, *Enabling War Crimes? Western-Made Components in Russia's War Against Ukraine* 31 (Feb. 2, 2023), https://perma.cc/SV2L-HD6X.

The Kh-101 carries a conventional 450 kilogram warhead, and can be equipped with high-explosive, penetrating, or cluster/submunition warheads.⁶⁴

Kh-101 / Kh-102 at a Glance				
ORIGINATED FROM Russia	POSSESSED BY Russia			
CLASS Air-launched Cruise Missile (ALCM)	BASING Tu-160 Blackjack, Tu-22M3/5 Backfire C, Tu-95MS16 Bear-H, and Su-27IB			
LENGTH 7.45m	DIAMETER 0.51 m			
PAYLOAD 450 kg	WARHEAD HE, fragmentation, submunition (kh-101), 250 kt nuclear (Kh-102)			
PROPULSION Turbofan	RANGE 2,500-2,800 km			
STATUS Operational	IN SERVICE 2012			

Figure 8: Kh-101 missile at a glance⁶⁵

The Kh-101/Kh-102 cruise missile utilizes radar-absorbing materials and a low flight path to avoid radar and infrared sensors. Its stealth features reduce its radar cross-section, making detection more difficult. Its multi-faceted guidance system allows it to weave between obstacles and air defenses on the path to its target, traveling at treetop levels until impact. This ability makes the missile very hard to detect, as it can evade defense systems in real time. 66

Russia has made frequent use of this weapon since its combat debut in Syria in 2015. In the war in Ukraine, Russia has used the Kh-101 extensively.⁶⁷

66 KH-101/102, MISSILE DEFENSE ADVOCACY ALLIANCE, https://perma.cc/H4FR-5Q3A.

⁶⁴ KH-101/102, MISSILETHREAT, https://perma.cc/H2C3-G9Z3 (last updated Apr. 23, 2024).

⁶⁵ *Id*.

⁶⁷ Defeating the Kh-101, MISSILE DEFENSE ADVOCACY ALLIANCE, https://perma.cc/62AN-PFGY.

6) UMPB D30-SN

The Russian Armed Forces use high-precision UMPB D30-SN bombs⁶⁸ to target civilians and civilian objects in Ukraine. These bombs are deployed using Su-34 and Su-35 fighter jets. The use of UMPB bombs represents a significant aspect of Russia's warfare capabilities in the war.⁶⁹



Figure 9: A UMPK glide bomb strapped on a Su-34⁷⁰

The UMPB D30-SN⁷¹ is a new variant of Russian-guided bombs, reportedly used in Ukraine for the first time in March 2024.⁷² This guided bomb reportedly achieves a longer striking range, allowing Russian aircraft to attack Ukrainian border regions from within Russian territory.⁷³

A standard measure of inaccuracy is the Circular Error Probable ("CEP"), defined as the radius of a circle into which 50% of the weapons are expected to fall. Estimates of the bomb's CEP,

⁶⁸ "УМПБ" is the Russian abbreviation for уневерсальный межвидовой планирующий боеприпас, or universal multi-purpose gliding bomb.

⁶⁹ Kateryna Hodunova, Russia's primitive glide bombs are still outmatching Ukraine's air defenses, killing more civilians, KYIV INDEPENDENT (Jan. 20, 2025), https://archive.ph/mhiv5; Thomas Newdick, Russia's Small Diameter Bomb-Like Weapon Seen In Action For The First Time, THE WAR ZONE (May 23, 2024), https://archive.ph/BuIUc.; John Hardie, Photos Offer Insights on Russia's New UMPB D-30SN Glide Bomb, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7.

⁷⁰ Tyler Rogoway & Thomas Newdick, Russian Small Diameter Bomb-Like Glide Weapon Appears In Ukraine, THE WARZONE (Mar. 12, 2024), https://perma.cc/H5RA-PNBK.

⁷¹ Kateryna Hodunova, Russia's primitive glide bombs are still outmatching Ukraine's air defenses, killing more civilians, KYIV INDEPENDENT (Jan. 20, 2025), https://archive.ph/mhiv5; John Hardie, Photos Offer Insights on Russia's New UMPB D-30SN Glide Bomb, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7.

⁷² Breaking News: Ukrainian City of Kharkiv Hit by New Russian UMPB D-30 SN Guided Bombs in First Use, ARMY RECOGNITION (May 3, 2024), https://perma.cc/6C9W-VLEE; VMIIE: μο με за авіабомба та чому росіяни почали застосовувати ї? Пояснення експерта Defense Express [UMPB: what is this aerial bomb and why did the Russians start using it? Defense Express expert explains], SUSPILNE MEDIA (Apr. 12, 2024), https://perma.cc/D6Z8-XA5Z; Βδυθναὰ εἰδραὸ ρακεπα πα δολοδα: ακ δοροπαςα 3 ροςίας εκτιμα VMIIE Δ-30 CH, ακαλα зημαγιοπь Χαρκίв [A deadly hybrid of a missile and a bomb: how to deal with Russian D-30 SN UMPBs that are destroying Kharkiv], 24TV (May 30, 2024), https://perma.cc/4K6D-CSAR.

⁷³ John Hardie, Photos Offer Insights on Russia's New UMPB D-30SN Glide Bomb, FOUNDATION FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7; Cheap and Dangerous: What Are UMPB Bombs That Russia Struck Kharkiv With?, RBC-UKRAINE (Mar. 29, 2024), https://perma.cc/W355-K8XT; Tyler Rogoway & Thomas Newdick, Russian Small Diameter Bomb-Like Glide Weapon Appears in Ukraine, THE WARZONE (Mar. 12, 2024), https://perma.cc/H5RA-PNBK; Evgeniy Damantsev, Российские Су-34 оснастили новыми боеприпасами Д-30СН УМПБ [Unique capabilities of the D-30SN gliding munitions: air defense penetration to a depth of up to 300 km], VOENNOEDELO (May 27, 2024), https://perma.cc/FTU7-7T79.

or accuracy range, vary among sources. Some suggest a CEP of 5 meters, ⁷⁴ while others estimate it between 7⁷⁵ and 10 meters. ⁷⁶ The high accuracy of the UMPB D30-SN is reinforced by its specifications. The munition is based on either the FAB-250 or KAB-250 bombs, ⁷⁷ and experts highlight that it represents a substantial improvement over older series, marking a new stage in the development of guided aerial bombs. ⁷⁸

The UMPB D30-SN is equipped with a GLONASS navigation module, significantly enhancing its strike effectiveness. It features a guidance system of the Kometa type, utilizing both inertial and satellite navigation.⁷⁹

A Russian Telegram channel associated with the Air Force indicated that the UMPB is still undergoing testing. The channel explained that "UMPB" stands for "Universal Interspecific Glide Munition" or "Universal Interspecific Glide Bomb." The munition reportedly has a diameter of 30 centimeters and a warhead weighing over 100 kilograms. Following a UMPB strike, a Ukrainian official stated that the bomb contained "about 100 kilograms of explosives."

Reports suggest that UMPB D30-SN bombs may be prone to malfunction due to rushed production and low manufacturing quality. If these bombs cannot reliably hit their intended targets, they could be considered inherently indiscriminate weapons. Deploying such weapons in urban areas or regions with high concentrations of civilians and civilian objects constitutes a grave breach of IHL.⁸³ It has been suggested that the new UMPB D30-SN bombs are being tested in real combat

⁷⁴ Breaking News: Ukrainian City of Kharkiv Hit by New Russian UMPB D-30 SN Guided Bombs in First Use, ARMY RECOGNITION (May 3, 2024), https://perma.cc/6C9W-VLEE; Evgeniy Utkin, Что за новый боеприпас УМПБ Д-30СН, который уничтожил телевышку в Харькове [What is the New UMPB D-30SN Ammunition That Destroyed the TV Tower in Kharkiv?], NEWS.RU (Apr. 23, 2024), https://perma.cc/N8T7-NPYB; Новый сюрприз от российской оборонки для Украины: ВС РФ начали применять новейшие высокоточные боеприпасы УМПБ Д-30СН [A New Surprise from Russian Defense for Ukraine: Russian Armed Forces Start Using New Precision-Guided UMPB D-30SN Ammunition], DZEN.RU (Mar. 28, 2024), https://perma.cc/Y8N9-JFFH.

⁷⁵ Dmitry Nevzorov, Умный и беспощадный. Боеприпас УМПБ Д-30СН кошмарит ВСУ днем и ночью [Smart and Merciless: UMPB D-30SN Ammunition Terrifies Ukrainian Forces Day and Night], AIF.RU (May 27, 2024), https://perma.cc/J7VD-HF79.

⁷⁶ Evgeniy Damantsev, *Poccuückue Cy-34 ochacmunu nobыми боеприпасами Д-30CH УМПБ* [Russian Su-34 Aircraft Equipped with New D-30SN UMPB Ammunition], VOENNODELO (May 27, 2024), https://perma.cc/7WYE-WK73. ⁷⁷ Danylo Kramarenko & Kateryna Shkarlat, *Cheap and Dangerous: What Are UMPB Bombs That Russia Struck Kharkiv With?*, RBC-UKRAINE (Mar. 29, 2024), https://perma.cc/W355-K8XT; Tyler Rogoway & Thomas Newdick, *Russian Small Diameter Bomb-Like Glide Weapon Appears in Ukraine*, THE WARZONE (Mar. 12, 2024), https://perma.cc/H5RA-PNBK; *Breaking News: Ukrainian City of Kharkiv Hit by New Russian UMPB D-30 SN Guided Bombs in First Use*, ARMY RECOGNITION (May 3, 2024), https://perma.cc/6C9W-VLEE.

⁷⁸ John Hardie, *Photos Offer Insights on Russia's New UMPB D-30SN Glide Bomb*, FOUND. FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7; Danylo Kramarenko & Kateryna Shkarlat, *Cheap and Dangerous: What Are UMPB Bombs That Russia Struck Kharkiv With?*, RBC-UKRAINE (Mar. 29, 2024), https://perma.cc/W355-K8XT; *Breaking News: Ukrainian City of Kharkiv Hit by New Russian UMPB D-30 SN Guided Bombs in First Use*, ARMY RECOGNITION (May 3, 2024), https://perma.cc/6C9W-VLEE; Evgeniy Damantsev, *Poccuückue Cy-34 оснастили повыми боеприпасами Д-30CH УМПБ* [Russian Su-34 Aircraft Equipped with New D-30SN UMPB Ammunition], VOENNODELO (May 27, 2024), https://perma.cc/7WYE-WK73.

⁷⁹ Kateryna Hodunova, Russia's primitive glide bombs are still outmatching Ukraine's air defenses, killing more civilians, KYIV INDEPENDENT (Jan. 20, 2025), https://archive.ph/mhiv5; Thomas Newdick, Russia's Small Diameter Bomb-Like Weapon Seen In Action For The First Time, THE WAR ZONE (May 23, 2024), https://archive.ph/BuIUc.

⁸⁰ John Hardie, *Photos Offer Insights on Russia's New UMPB D-30SN Glide Bomb*, FOUND. FOR DEFENSE OF DEMOCRACIES (Jun. 5, 2024), https://perma.cc/GX27-GZP7.

⁸¹ *Id*.

⁸² *Id*.

⁸³ AP I, art. 85(3)(b).

situations in Ukraine, with Ukrainian civilians and critical infrastructure becoming victims of these "experiments." 84



Figure 10: Remnant of the UMPB bomb 85

The deployment of UMPB D30-SN represents a significant development in Russia's arsenal of precision-guided munitions. The use of these bombs against civilian populations and infrastructure in Ukraine raises serious legal concerns. The potential for malfunctions and the lack of guaranteed precision suggest that these weapons could be inherently indiscriminate.

⁸⁴ *Id*.

⁸⁵ *Id*.

7) KAB (KAБ)

Russian Armed Forces use high-precision KAB⁸⁶ to target civilians and civilian objects in Ukraine. These precision-guided munitions ("PGMs") are deployed using Su-34 and Su-35 fighter jets. The use of KAB bombs represents a significant aspect of Russia's aerial warfare capabilities in the war.⁸⁷

The KAB family includes several variants, primarily differentiated by their weight class and guidance systems. The most commonly known variants are:

- The KAB-250 series (KAB-250LG-E and KAB-250S-E) These are corrected aerial bombs, Russian new-generation unpowered PGMs that provide land-attack capability to combat aircraft by using either laser or satellite guidance systems and a lethal warhead. The accuracy range for the KAB-250 series is 3 to 5 meters. ⁸⁸
 - O Key features include: aerodynamic modular design with two seeker options; short-range applications; multiplatform launch capability with high loadout carriage for a single mission; and effective for use against ground targets.⁸⁹
 - o The KAB-250LG-E uses an AOMZ's 27NM-G gyrostabilized SAL seeker and a satellite navigation receiver. 90
 - o The KAB-250S-E is a satellite-guided variant of the base model ("LG"). Size and performance remain the same as the KAB-250LG-E. It has a complex, compact tail design and is fitted with four long-chord, short-span wings to increase its glide range. The KAB-250S-E is fitted with a GLONASS-aided inertial navigation guidance system. After release, the bomb is guided to its target by a satellite navigation system receiver and a nose-mounted seeker. The bomb can be dropped individually or in a salvos at altitudes of between 1,000 and 10,000 meters.⁹¹
- The TV-guided KAB-500 series (KAB-500Kr, KAB-500-OD, KAB-500Kr-E, and KAB-L series) These bombs are Russian new-generation unpowered PGMs that provide either land- or area-attack capability to combat aircraft by using different warhead options and TV terminal guidance. The accuracy for all KAB-500 variants ranges between 4 and 12 meters. They have conventional, simple design, short-range applications, multiform capability with high loadout carriage for a single mission, and they are effective for use against ground targets. The primary types include:
 - o KAB-500Kr: This bomb has an EO seeker. In terms of guidance, passive tracking system makes it very resistant to standard countermeasures. The weapon is also capable of attacking low-contrast and concealed targets by conducting an offset attack using another set of target co-ordinates. 94 With regard to control, once the

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⁸⁶ КАБ is the Russian abbreviation for корректируемая авиационная бомба, or guided aerial bomb.

⁸⁷ David Axe, Russia's Glide-Bombs Are 'Miracle Weapons.' And Ukraine Is Still Months Away From Fighting Back With F-16s, FORBES (Mar. 215, 2024), https://archive.ph/kZhct; Joe Inwood & Tania Kharchenko, Russia's glide bombs devastating Ukraine's cities on the cheap, BBC NEWS (May 19, 2024), https://archive.ph/lTqcW.

⁸⁸ Id.

⁸⁹ JANES WEAPONS: AIR-LAUNCHED YEARBOOK 322 (2024/25).

⁹⁰ Id.

⁹¹ Id.

⁹² CEP for KAB-500Kr, KAB-500-OD and KAB-500LG is 7 meters, and for KAB-500S (KAB-500S-E) 7-12 meters. See JANES WEAPONS: AIR-LAUNCHED YEARBOOK 326, 328 (2024/25).

 $^{^{93}}$ Janes Weapons: Air-Launched Yearbook 323 (2024/25).

⁹⁴ Id. at 324.

seeker acquired the designated target, the bomb is released from its parent aircraft and the TV homing system then guides the weapon to the target automatically. 95 The lack of dependence on any onbound or third-party designation also means that the bomb can be dropped against various targets or a target area. 96 The bomb contains 100 kilograms of armour-piercing high-explosive ("HE") filling out of a total warhead weight of 380 kilograms, which is detonated by an impact fuze with three delay modes. The KAB-500Kr can penetrate reinforced concrete structures of up to 1.5 meters thick buried at a depth of 10 meters underground and a destructive area capability of 1,500 square meters. It is credited with a target accuracy between 4 and 7 meters. The bomb is a launch-and-leave weapon designed to engage stationary targets, such as bridges, buildings, military shelters, airfield facilities, warships, and other naval vessels.97

- KAB-500-OD: This bomb is a fuel-air explosive variant of KAB-500Kr, featuring a similar design and utilizing the same TV seeker and control surfaces. 98 Once the seeker has acquired its designated target, the bomb is released from its parent aircraft, and the TV homing system then guides the weapon to the target automatically. The lack of dependence on any onboard or third-party designation system also means that salvos of KAB-500-OD bombs can be dropped against various targets or a target area. All bombs can be released in level flight or dive attacks at altitudes between 500 and 5,000 meters. The bomb contains 140 kilograms of HE (fuel-air explosive) filling in a 250-kilogram warhead, which is detonated by an instantaneous impact fuze. The warhead is designed to engage stationary targets, such as fire emplacement and people hidden in mountainous terrain.⁹⁹
- KAB-500Kr-E: This KAB type is outwardly similar to the KAB-500Kr but alternatively optimized for use against hardened targets. The bolt-on front end is a constant diameter cylindrical assembly, with four fixed-clipped triangular stabilizing fins towards the rear end (where it joins to the bomb) and a glass hemispherical nose. There is a strake running along the bottom of the bomb to the rear-end command datalink antenna. The bomb is credited with a service life of 20 flight hours and a storage life of eight years. 100 The bomb is fitted with a nose-mounted TV-guidance system with associated control surfaces fitted onto its rear end. The passive-tracking system makes it very resistant to standard countermeasures. The weapon is also capable of attacking low-contrast or concealed targets by conducting an offset attack using another set of target co-ordinates. Control Once the seeker has acquired its designated target, the bomb is released from its parent aircraft and the TV homing system then guides the weapon to the target automatically. Steering correction is made by four elevator-type control surfaces fitted onto large clipped triangular tailfins. The bomb uses four fixed clipped triangular fins located at the nose section for flight stabilization. 101
- KAB-L series (KAB-500L, KAB-500LG, and KAB-500KL): These bombs are Russian unpowered PGMs that provide land-attack capability to combat aircraft by

⁹⁶ Id.

⁹⁵ Id.

⁹⁷ Id.

⁹⁸ Id.

⁹⁹ Id.

¹⁰⁰ Id.

¹⁰¹ Id. at 325.

using laser guidance and lethal warhead. The number in the designation refers to the bomb size (in kilograms) and the additional letters signify special applications. 102 Judging from the configuration of the first-generation laser-guided bombs ("LGBs") fielded in Russia, it seems likely that the designers had access to some U.S. LGB components obtained via Vietnam. The first Russian LGB design was the 500kilogram KAB-S00L (also referred to as KAB, korrektiruyemaya aviatsionnaya bomba or correctable aircraft bomb). It was intended, initially, for use by the MiG-27K. There are a total of three models that were developed. Key features include: laser guidance; short-range applications; multiplatform launch capability with high loadout carriage for a single mission; and effective for use against ground/area targets. 103 The KAB-500L is similar to the U.S. Paveway II munitions, in which semiactive laser ("SAL") homing guidance system is fitted as a modification kit to conventional freefall bombs to provide accuracy against laser-marked targets. However, there are two major differences between the KAB-500L system and the U.S. design. Guidance control movement on the Russian bombs is achieved by control surfaces on the tail unit rather than the forward fins, but by far the most significant difference is the Russian approach to laser designation. 104 After the bomb is released, the laser error detector measures the angle below the bomb's velocity vector and the line between the bomb and the target. Target illumination is done by a designator mounted in the nose of the aircraft.¹⁰⁵ The KAB-500KL is identical in shape, size, and operation to the KAB-500L, but instead of a warhead, the center section consists of a cluster bomb container designed to carry unspecified anti-tank bomblets.¹⁰⁶ The KAB 500LG is outwardly quite different from KAB-500 deign because it lacks forward seeker assembly and associated guidance in. The deletion of the old-style seeker assembly and other design changes means that the KAB-S00LG is slightly shorter, but heavier.¹⁰⁷

The Russian KAB-1500 series – There bombs are laser- or TV-guided heavyweight PGMs. Most KAB-1500 variants have an accuracy range of 4 to 7 meters, and, for other variants, it is evaluated at 7 to 10 meters. Accordingly, the accuracy range, or CEP, of all KAB-1500 is 4 to 10 meters. Yet, a military expert of the Ukrainian Armed Forces indicated that, in practice, the accuracy range of KAB bombs turns out to be around 15 meters. ¹⁰⁸ Russia's KAB-1500 Series of bombs (KAB-1500Kr, KAB-1500L, and KAB-1500LG) are heavyweight precisionguided bombs that have no direct Western equivalent. These 1,500 kilograms weapons are longer and heavier than the largest standard U.S. bombs and come with warhead and guidance options that give operational flexibility and military utility. 109 The baseline KAB-1500L has two versions: the KAB-1500L-Pr with a concrete-piercing HE warhead and the KAB-1500L-F with a general-purpose blast warhead. 110 Key features include: laser EO

102 Id.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ Id. at 326.

¹⁰⁶ Id.

¹⁰⁸ Danylo Kramarenko & Kateryna Shkarlat, Cheap and dangerous. What are UMPB bombs that Russia struck Kharkiv with, RBC-UKRAINE (Mar. 29, 2024), https://archive.ph/ZPAtU.

¹⁰⁹ Janes Weapons: Air-Launched Yearbook 327 (2024/25).

¹¹⁰ *Id*.

guidance; short-range applications; multiplatform capability; and effective for ground-area targets.¹¹¹

specification	KAB-1500L-F	KAB-1500L-		KAB-1500LG-	VAD				
	10	Pr	F-E	Pr-E	KAB-1500LG- OD-E	KAB-1500Kr	KAB-1500Kr- Pr	KAB-1500Kr- OD	UPAB-1 500B-E
pinensions and weights								00	5005 2
1 ADOUT	10 m	4.6 m	4.28 m	4.28 m					
overall:	4.6 m			4.20 M	4.24 m	4.63 m	4.63 m	4.63 m	5.05 m
Diameter body:	580 mm	580 mm	580 mm	580 mm	580 mm	580 mm	580 mm	580 mm	400 mm
Flight									
surfaces tall span:	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin)	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin) 1.3 m	0.85 m (retracted, tail fin)	-
	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	(extended, tail fin)	
Lug	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	-
spacing:									
Weight launch:	1,560 kg	1,500 kg	1,525 kg	1,525 kg	1,450 kg	1,525 kg	1,525 kg	1,525 kg	1,525 kg
erformance							.,		
Speed									
platform launch speed:	138.9 m/s (min) 9472.2 m/s (max)	138.9 m/s (min) 472.2 m/s (max)				152.8 m/s (min) 305.5 m/s (max)	152.8 m/s (min) 305.5 m/s (max)	152.8 m/s (min) 305.5 m/s (max)	THE TELL
Range									
max:	20 km	20 km	-	-	-	-	-	-	-
Accuracy (CEP):	-	-	4 m (min) 7 m (max)	4 m (min) 7 m (max)	4 m (min) 7 m (max)	4 m (min) 7 m (max)	4 m (min) 7 m (max)	4 m (min) 7 m (max)	10 m (max)
rdnance imponents									100 100 3
Filling:	1,180 kg HE blast	1,100 kg HE penetration	1,120 kg HE warhead 440 kg (970 lb) fill	1,120 kg warhead 210 kg kinetic fill penetration concrete penetrator	1,170 kg warhead 650 kg fill fuel air explosive	1,170 kg warhead 440 kg HE fill	1,100 kg warhead 210 kg kinetic fill penetration concrete penetrator	1,170 kg warhead 650 kg fill fuel air explosive	1,010 kg
Fuze:	-	-	Contact, delay	Contact, delay	Contact	Contact, delay	Contact, delay	Contact, delay	delay
	Semi-active,	Semi-active,	Semi-active,	Semi-active, laser	Semi-active, laser	TV	TV	TV	INS, GLONASS

Figure 11: Specifications of KAB Versions

Considering the variations and the fact that the exact type of KAB bomb used in specific attacks is not always discernible from available evidence, an accuracy range of 3 to 15 meters can be adopted as a general measure for analyzing all attacks involving KAB series bombs.

KAB bombs are structurally different from conventional aircraft-carried bombs due to the presence and control of aerodynamic surfaces. They combine powerful warheads—such as explosive fragmentation, high-explosive fragmentation, penetration, and cluster munitions—with the precision guidance of air-to-ground missiles. The design of KAB bombs allows carrier aircraft to deploy them without entering the air defense zone of the target. Once released, the bombs glide towards the

¹¹¹ *Id*.

¹¹² Russian Bombs: KAB Series, GLOBALSECURITY.ORG, https://perma.cc/WP35-7D9X.

pre-programmed target, delivering a devastating blow to military positions, defense facilities, and infrastructure. 113

The Russian Armed Forces have utilized KAB guided bombs extensively in Ukraine. The combination of high accuracy and powerful warheads has enabled strikes on strategic targets from a distance, reducing the risk to Russian aircraft from Ukrainian air defenses. However, it is indicated that these weapons have also been used to target civilians and civilian infrastructure.¹¹⁴

The deployment of KAB guided bombs by the Russian Armed Forces has had a substantial impact on the dynamics of the war in Ukraine. Their precision and destructive capability make them "effective" tools for engaging various targets. The deployment of these weapons raises significant legal concerns under international humanitarian law, particularly regarding attacks on civilian areas and the principles of distinction and proportionality. Given the bombs' precision, intentional strikes against non-military targets cannot be easily attributed to technical errors.

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¹¹³ Ukraine Is Facing Threat of Russian Guided Aerial Bombs, TECHNOLOGY.ORG (Nov. 10, 2023), https://perma.cc/8LZQ-8VCW

¹¹⁴ Joe Inwood & Tania Kharchenko, Russia's glide bombs devastating Ukraine's cities on the cheap, BBC NEWS (May 19, 2024), https://archive.ph/JTqcW.

8) S-300 Missile System

The S-300 is a family of surface-to-air missiles originally developed by the Soviet Union. It was first put into operation in the late 1970s after a decade of development. There are several versions of the S-300 rocket, with different technical capabilities and ranges. The maximum range of the standard missile is 150 kilometers (93 miles), and the warheads weigh 133 to 143 kilograms, according to CSIS.¹¹⁵

S-300 missiles are intended to shoot down aircraft, drones, and incoming cruise and ballistic missiles. Full S-300 launchers include detection radars that track incoming targets. Missiles are equipped with guidance systems to automatically latch on to targets. Several individual missiles can be fired simultaneously at multiple targets. ¹¹⁶

S-300P	
ORIGINATED FROM Soviet Union	POSSESSED BY Algeria, Armenia, Azerbaijan, Belarus, Bulgaria, China, Greece, India, Iran, Kazakhstan, Russia, Slovakia, Syria, Ukraine, Venezuela, Vietnam; S-300V: Egypt, Iran, Russia, Venezuela
CLASS Surface-to-Air Missile (SAM); S-300V: SAM & Anti-ballistic missile (ABM)	BASING Mobile, ground-based
WARHEAD 133 kg (5V55) or 143 kg (48N6) high- explosive fragmentation	RANGE 25 km (minimum) to 150 km (maximum); S- 300V: 6 km (minimum) to 100 km (maximum), 40 km (ABM)
STATUS Operational	IN SERVICE 1978-Present

Figure 12: S-300 at a glance¹¹⁷

Due to its forty-year service life, the S-300P is an expansive weapons system that has employed over 20 missile variants. Currently, the system uses the 5V55K, 5V55R, and 48N6 missiles. These missiles use high-explosive fragmentation warheads triggered by proximity and impact fuses to destroy their targets. The 5V55K and 5V55R are 7.25 meters long, and the 48N6 is 7.50 meters long. All three missiles are 0.51 meters in diameter. While the missiles are similar in terms of appearance, they differ in effective ranges and intercept speeds. The 5V55K has a maximum effective range of 47 kilometers while the 5V55R and 48N6 have 75- and 150-kilometer ranges, respectively. The 5V55K and 5V55R models can hit targets which are moving up to 4,300 kilometers per hour, while the 48N6 can hit targets moving up to 10,000 kilometers per hour.

The S-300V uses 9M83 and 9M82 missiles to target ballistic warheads across a 40-kilometer radius. The 9M83 is 7.5 meters long, 0.5 meters wide, and can target aircraft at 75 kilometers. The 9M82 is 10 meters long, 0.85 meters wide, and can target aircraft at 100 kilometers. The export

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¹¹⁵ S-300, MISSILETHREAT, https://perma.cc/XLH8-5477 (last updated Jul. 6, 2021).

¹¹⁶ What is the S-300 missile that is reported to have hit Poland?, REUTERS (Nov. 16, 2022), https://perma.cc/K2W6-W9X4.

 $^{^{117}}$ \$\mathcal{S}-300\$, MISSILETHREAT, https://perma.cc/XLH8-5477 (last updated Jul. 6, 2021).

¹¹⁸ *Id*.

missile variant, the Antei 2500, is similar to the 9M82, but extends the anti-aircraft range up to 200 kilometers. All three missile variants carry 150-kilogram fragmentation warheads with inertial guidance systems and semi-active radars to find their targets. 119

Russia's use of S-300 missiles to strike land-based targets is reportedly indicative that a diminishing stockpile is forcing Russia to repurpose its surface-to-air missiles. In 2022, Russian forces struck dozens of buildings in Kyiv using these surface-to-air missile systems even though these weapons were intended for use against targets in the air. 120

¹²⁰ Maya Carlin, S-300: Russian Air Defense Missile Had Just One Mission, NAT'L INTEREST (Jan. 13, 2024), https://perma.cc/TYC2-B4M9.

9) Kh-555 Missiles

The Kh-55 (NATO designation AS-15 'Kent') is a Russian nuclear-tipped air-launched land-attack cruise missile, developed by Raduga State Machine-Building Design Bureau (part of Tactical Missiles Corporation JSC), to provide strategic/tactical attack capability for the Russian Armed Forces. Kh-555 is considered to be a land-attack cruise missile. Key features include: modular design with nuclear/conventional warhead; stand-off range strategic/tactical weapon; and multiplatform launch capability. ¹²¹



Figure 13: Kh-55¹²²

As for Kh-555 itself, the conventional Kh-555 (AS-22 Kluge) is believed to use the same airframe as the Kh-55SM, but a non-nuclear version of the baseline Kh-55 may also exist. The Kh-555 is thought to incorporate the new navigation and EO terminal seeker system of the Kh-101, although the two missiles have quite different designs. ¹²³

Owing to changes to the trim of the missile, the Kh-555 has been fitted with additional small control surfaces on its nose cone. The missile is believed to feature a new EO seeker identical to the Kh-101 missile. The missile is believed to be guided by the new navigation system in the mid-course and EO seeker in the terminal phase. The missile uses two straight rectangular wings for flight stabilization. ¹²⁴

The control system is similar to the Kh-55SM, but with additional small control surfaces on its nose cone. The missile is controlled by two tailplanes and a fin. 125

The Kh-555 can be fitted with a penetration HE or submunitions warhead, which is detonated by an impact fuze. 126

¹²¹ JANES WEAPONS: AIR-LAUNCHED YEARBOOK 267 (2024/25).

¹²² *Id*.

¹²³ Id. at 268.

¹²⁴ *Id*.

¹²⁵ Id.

¹²⁶ *Id*.

By leveraging the accuracy of advanced EO seekers and navigation aids, these missiles can deliberately strike specific objectives. When directed against civilian targets, their precision cannot be easily dismissed as an error.

10) Cluster Munitions

A cluster munition is "a conventional munition that is designed to disperse or release explosive submunitions, each weighing less than 20 kilograms." Put simply, a cluster munition is a parent munition (sometimes referred to as a "dispenser" or "container") carrying numerous smaller explosive submunitions (often called "bomblets"). These submunitions generally resemble small grenades and are equipped with tail fins or streamers to orient them for optimum dispersion and impact. 128

Cluster munitions are conventional weapons that disperse or release multiple submunitions over a wide area, which can span several hundred square meters. They can be launched from the ground or dropped from the air, and vary significantly in terms of size, shape, and means of delivery. Ground-launched cluster munitions can come in the form of mortar bombs, artillery shells, and rockets, while air-delivered cluster munitions may include bombs, rockets, and missiles released from aircraft or dispensers fixed to them. 131

Despite the variations in their design, most cluster munitions share a common operational principle. The warhead or bomb typically consists of a canister with a large cargo section densely packed with submunitions. It incorporates a fuzing system linked to an ejection mechanism, often involving small explosive charges that disperse the submunitions in flight. ¹³² In the case of fixed dispensers mounted on aircraft, small propellant charges are electrically fired to eject the submunitions from tubes or pods in rapid sequence. ¹³³ Once released, these submunitions arm themselves at a safe distance from the dispenser and then fall to the ground, often stabilized by drogue chutes that position them correctly and guide them into a near-vertical trajectory. ¹³⁴

Cluster munitions are not typically precision-guided. Most submunitions follow a ballistic trajectory determined by a combination of factors, including their initial release conditions and environmental influences such as wind. As a result, submunitions can stray far from their intended target and spread across a large area, greatly increasing the risk to civilians. When ejected at higher altitudes, or in adverse weather conditions, submunitions tend to spread over an even larger area. Some modern anti-armor cluster systems attempt to improve accuracy by using independently targeted submunitions that seek out specific vehicles, but these remain limited. Although modern guidance enhancements, such as inertial or GPS corrections to account for wind, can reduce overall error, these advanced systems are expensive, have limited data on their combat performance, and do not completely eliminate the inherent risks to civilian populations.

In addition to the CEP related to the parent munition, a further layer of inaccuracy arises from the submunitions' dispersion once they are ejected. Because they are expelled explosively,

¹²⁷ Geneva Int'l Ctr. for Humanitarian Demining & Convention on Cluster Munitions, *A Guide to Cluster Munitions*, GLOBAL CWD REPOSITORY 16 (2016), https://perma.cc/5CGK-2F8Q.

¹²⁸ Id. at 16.

¹²⁹ Id.

¹³⁰ *Id*.

¹³¹ *Id*.

¹³² *Id.* at 28.

¹³³ *Id*.

^{133 1}a.

¹³⁴ *Id*.

¹³⁵ *Id.* at 31.

¹³⁶ *Id.* at 30–1. ¹³⁷ *Id.* at 30.

¹³⁸ *Id.* at 31, 94.

often with no mechanism to finely control their dispersion, individual submunitions may be scattered widely. This problem is compounded when the submunitions descend through the air, encountering wind, turbulence, and even the blasts of other submunitions detonating nearby. 139

A significant and well-documented humanitarian concern is the large number of submunitions that fail to explode on impact. Consequently, areas subjected to cluster munition strikes become littered with tens of thousands of unexploded submunitions that are unstable and can detonate from minimal disturbance. Unexploded ordinance ("UXO") pose severe, long-term hazards to civilians and hinder reconstruction efforts, delay the return of displaced populations, and make everyday activities like farming dangerous for years or even decades after hostilities cease. 140

The fundamentally "area-based" nature of cluster munitions means that their use in or near populated areas is of particular humanitarian and legal concern. Their wide footprint and lack of precise control over individual submunitions can cause immediate civilian casualties if the weapons are deployed in cities, towns, or near critical civilian infrastructure such as hospitals or schools. Civilians returning to their homes after an attack may encounter unexploded submunitions, risking injury or death. Even improved guidance technologies do not fully mitigate these dangers. 141

The 2008 Convention on Cluster Munitions prohibits use of these weapons, mandates destruction of stockpiles, and requires clearance of contaminated areas and assistance to victims. The treaty's rationale is grounded in the indiscriminate effects of cluster munitions and the enduring harm they cause to civilian populations. However, neither Russia nor Ukraine are State Parties. 142 Under IHL, the use of weapons that cannot discriminate between combatants and civilians is strictly prohibited. Deploying cluster munitions in populated areas almost invariably contravenes this fundamental principle. Multiple reports from the United Nations, the Organization for Security and Co-operation in Europe ("OSCE"), human rights organizations, and reputable media sources indicate that Russian forces have employed cluster munitions in populated areas of Ukraine, including sites in close proximity to medical facilities and educational institutions. 143

¹³⁹ *Id.* at 30–1; Int'l Comm. of the Red Cross (ICRC), *Cluster Munitions: What are they and what is the problem?* (2010), https://perma.cc/7ULX-DRFR.

¹⁴⁰ *Id*.

¹⁴¹ *Id*.

¹⁴² Human Rights Watch, *Cluster Munition Use in Russia-Ukraine War* (May 29, 2023), https://perma.cc/5KV2-PQFF. ¹⁴³ Stephen Pomper, *U.S. Policy on Cluster Munitions and Russia's War in Ukraine*, JUST SECURITY (May 4, 2022), https://perma.cc/8YMF-DFTQ.



Figure 14: A Russian rocket carrying cluster munition that landed in the countryside 144

¹⁴⁴ Lorenzo Tondo, Russia using banned weapons to kill Ukrainian civilians, pictures suggest, The Guardian (Apr. 21, 2022), https://perma.cc/R4PB-856E.