



# OUT OF CONTROL

**MOVING TARGET  
ATTACKS IN UKRAINE  
AND THE LAW OF  
ARMED CONFLICT**

# Acknowledgements

## Authors

Silvia Ottinetti (Project Expedite Justice), Amina Morhoieva (Project Expedite Justice), Roman Koval (Truth Hounds), Vitalii Poberezhnyi (Truth Hounds), and Maria Burnett (Project Expedite Justice)

## Fieldwork

Bohdan Kosokhatko (Truth Hounds), Dmytro Afanasiev (International Partnership for Human Rights), Mariia de Reus (International Partnership for Human Rights), Maryna Mukhina (International Partnership for Human Rights), Maryna Slobodian-iuk (Truth Hounds), Olha Vovk (Truth Hounds), Roman Koval (Truth Hounds), Umka (Truth Hounds), Vladyslav Chyryk (Truth Hounds), Yaroslav Susoiev (Truth Hounds)

## Open-source monitoring

Olya Kulyk (Truth Hounds), Anhelina Rozumna (Truth Hounds)

## Proofreading in English

Maria Burnett (Project Expedite Justice)

## Visual conceptualization and design

Lera Riezanova (Truth Hounds) and Silvia Ottinetti (Project Expedite Justice)

**Truth Hounds compiled this report with the support of our donor.**

THE HOWARD G.  
**BUFFETT**  
FOUNDATION

This publication was produced with the generous support of **the Howard G. Buffett Foundation**. Its contents are the sole responsibility of Project Expedite Justice and Truth Hounds.

|                   |   |
|-------------------|---|
| EXECUTIVE SUMMARY | 4 |
| RECOMMENDATIONS   | 6 |
| METHODOLOGY       | 9 |

12

19

26

37

## **CHAPTER 1.**

### **THE ATTACK ON THE RIA LOUNGE: A DIAGNOSTIC CASE FOR MOVING TARGET ATTACKS**

|                                                  |    |
|--------------------------------------------------|----|
| 1.1 The Ria Lounge Attack in Kramatorsk          | 13 |
| 1.2 From Kramatorsk to a Moving Target Framework | 17 |
| 1.3 Conclusion                                   | 17 |

## **CHAPTER 2.**

### **ADDITIONAL INCIDENTS AND VARIATIONS WITHIN THE MOVING TARGET FRAMEWORK**

|                                            |    |
|--------------------------------------------|----|
| 2.1 The Moving Target Concept in Operation | 20 |
| 2.2 Vinnytsia, July 14, 2022               | 20 |
| 2.3 Zlatopil, July 4, 2023                 | 21 |
| 2.4 Chernihiv, August 19, 2023             | 23 |
| 2.5 Conclusion                             | 25 |

## **CHAPTER 3.**

### **LEGAL ANALYSIS OF ATTACKS ON MOVING TARGETS**

|                                                    |    |
|----------------------------------------------------|----|
| 3.1 Distinction                                    | 27 |
| 3.2 Proportionality                                | 29 |
| 3.3 Precautions in Attack                          | 31 |
| 3.4 Indiscriminate Attacks and Legal Qualification | 33 |
| 3.5 Conclusion                                     | 35 |

## **CONCLUSION**

# Executive Summary

On June 27, 2023, a Russian cruise missile struck the Ria Lounge cafe, a popular pizza restaurant in central Kramatorsk, Ukraine, killing 13 people and injuring 60. Russian forces claimed the strike had hit a temporary military command post of the 56th Motorized Infantry Brigade and killed two generals, up to 50 officers, and up to 20 foreign mercenaries. The available evidence tells a different story. The cafe was operating as an ordinary public restaurant filled with customers across two levels that day. Military personnel were temporarily present, off-duty and unarmed – some attending a birthday celebration in the basement’s private event space, and others in the above-ground restaurant alongside roughly equal numbers of civilians. Of the 13 people killed, only two were active servicemen. The basement room, which Russian forces allegedly targeted, remained essentially intact. This strike captures the central concern of this report. Russian forces used a weapon they could not recall on a target whose presence they could not verify at the time of impact, in a location where civilian harm was entirely foreseeable. Does such a strike comply with international humanitarian law?

Truth Hounds investigated the Kramatorsk attack and concluded that it constituted a war crime as an indiscriminate attack under art. 8(2)(b)(iv) of the Rome Statute. This assessment rested on several factors, including a gap of more than two hours between the informant’s last known site observation and the moment of impact. The missile’s estimated flight time of 9 to 15 minutes meant that, once launched, no verification, redirection, or recall was possible. The use of a cruise missile with an approximately 500-kilogram warhead against a temporary target in a densely populated

civilian area was itself sufficient, in Truth Hounds’ assessment, to establish the attacker’s knowledge of the likelihood of excessive civilian harm.

The fact pattern of the Kramatorsk strike is not an isolated case in Russia’s war in Ukraine. This report examines three other incidents in which Russian forces struck civilian locations on the basis of a temporary military presence, each involving a precision-guided cruise missile with a significant launch-to-impact time interval and substantial destructive effects. The report uses these incidents to show how delayed-impact attacks against temporary alleged targets – referred to as “moving target attacks” – in civilian settings raise serious concerns under existing international humanitarian law and warrant investigative scrutiny.

On July 14, 2022, three Kalibr cruise missiles struck the center of Vinnytsia, a city in central-western Ukraine in Vinnytsia Oblast; two missiles hit the House of Officers, and the third hit a nearby parking area. Twenty-nine people were killed, including five servicemen and three children; at least 154 were wounded. Russian forces claimed the strike targeted a gathering of Air Force command and foreign weapons suppliers. A working meeting had indeed been scheduled for that morning at the venue. By 9:52 a.m., warnings of missile launches from the Black Sea were already circulating across southern Ukraine. A formal air-raid alert in Vinnytsia followed at 10:12 a.m. The missiles struck at 10:41 a.m., approximately 40 to 50 minutes after launch.

On July 4, 2023, a cruise missile struck a residential area of Zlatopil in Kharkiv Oblast during

a public funeral for a serviceman of the Kraken Regiment of the Ukrainian military. Forty-two civilians were wounded, including 12 children.

The missile landed approximately 800 meters from the central square where the ceremony had been scheduled, far beyond any plausible margin of targeting error for the weapon type. By the time of the strike, the funeral gathering had already partly dispersed. Russian Telegram channels claimed the target was the Zodiak cafe; residents confirmed it had been closed for years. The Russian Ministry of Defense never issued a public statement about the target of the attack.

On August 19, 2023, a cruise missile struck the Drama Theatre in central Chernihiv in northern Ukraine, killing 7 and injuring 193. That day, civilian NGOs were hosting a defense-technology exhibition in the building. The missile, which was most likely launched from Kursk Oblast at around 11:10 a.m., hit at 11:29 a.m. It was configured with a proximity fuse, which caused it to detonate in mid-air above the building. The airburst spread lethal fragments across the open square outside, rather than concentrating the blast on people inside. All seven fatalities occurred outside.

These incidents involved different locations, alleged targets, weapons configurations, and evidentiary records, but they share a common pattern. Russian forces used precision-guided weapons with significant launch-to-impact time intervals and substantial destructive effects against temporary or time-sensitive military presence or activity in civilian environments. In each case, civilians were foreseeably present, the intended target's location could change before impact, and the attacker had no ability to verify, redirect, or cancel the strike after launch. That lack of control sits at the center of the legal analysis.

International humanitarian law requires parties to distinguish between civilians and combatants, and between civilian objects and military objectives. It prohibits attacks expected to cause excessive civilian harm in relation to the concrete and direct military advantage anticipated. It requires those who plan or decide on attacks to do everything feasible to verify targets, choose means and methods that minimize civilian harm, and cancel or suspend attacks when the legal conditions for

attack no longer exist. It also prohibits indiscriminate attacks, including attacks not directed at a specific military objective and attacks whose effects cannot be limited as required by law.

For the Kramatorsk attack, Truth Hounds concluded it was a war crime. For Vinnytsia, Zlatopil, and Chernihiv, the available evidentiary record remains insufficient to support equivalent legal conclusions at this stage; however, each raises serious concerns regarding distinction, proportionality, and precautions that warrant further investigation. In Vinnytsia, at least 29 minutes of advance warning undermined any reliable claim that the alleged target would still be present at impact. In Zlatopil, the missile either missed the alleged target by 800 meters and after the gathering had dispersed, or targeted a nearby cafe where no military gathering could be substantiated. In Chernihiv, a pre-launch warhead choice maximized harm to civilians outside the building while providing limited effectiveness against the alleged objective within it.

This report does not propose a new legal category under international humanitarian law. Rather, it uses the term “moving target attacks” to identify a recurring fact pattern that existing law should address with greater clarity and rigor. The central concern is the attacker's control. A weapon that cannot be recalled or redirected, directed at a target that may move, disperse, or lose military significance before impact, makes pre-launch verification decisive. Technical precision does not resolve that problem. A missile may hit its programmed coordinates and still raise serious legal concerns if those coordinates no longer correspond to a lawful military objective, or if the attacker failed to account for civilians foreseeably at risk.

This report analyzes the legal questions these attacks raise, identifies indicators that investigators and prosecutors should examine, and encourages military actors, legal advisers, accountability mechanisms, and monitoring bodies to treat attacks against temporary targets in civilian settings as a distinct operational problem requiring careful scrutiny. This matters not only for accountability after the fact but also for preventing future attacks in which the choice of target, timing, and weapon makes significant civilian death and injury foreseeable from the outset.

# Recommendations

## **To Ukrainian authorities:**

- Further investigate the attacks in Kramatorsk, Vinnytsia, Zlatopil, and Chernihiv for possible prosecution as war crimes, with particular attention to the targeting chain, intelligence used, weapon selection, and the launch-to-impact interval in each case.
- Prioritize, more broadly, cases involving attacks on civilian locations where the alleged military justification rested on a temporary or otherwise non-operational military presence.
- Preserve technical evidence relevant to timing and targeting, including weapon remnants, crater analysis, CCTV footage, air alert records, missile flight-path and trajectory data, launch geolocation data, and intercepted communications.
- Share relevant evidence with international partners, investigative mechanisms, and national authorities exercising universal jurisdiction.

## **To states supporting Ukraine's accountability efforts:**

- Fund forensic, geolocation, and OSINT investigations into attacks on civilian locations in Ukraine allegedly justified by temporary military presence, including technical reconstruction of launch-to-impact timelines, weapon effects, and attacker control.
- Support secure evidence preservation and training for Ukrainian and international investigators on time-sensitive targeting, civilian harm analysis, and the legal significance of target mobility.

## **To foreign governments and law enforcement agencies:**

- Investigate, including under universal jurisdiction where possible, attacks on civilian locations justified by reference to the temporary presence of military personnel.
- Ensure that legal assessments address the temporary nature of the alleged target, the foreseeability of civilian presence, and the effect of the launch-to-impact gap on attacker control, and avoid treating technical precision alone as evidence of lawfulness.
- Preserve and share evidence relevant to attacks of this kind, including open-source material, targeting-chain information, and technical assessments, and support cooperation with Ukrainian authorities and international investigative mechanisms.

## **To the United Nations (UN) and international monitoring bodies:**

- Document incidents in Ukraine in which strikes on civilian locations are justified by reference to a temporary military presence, applying consistent indicators including the character of the location, the weapon used, the launch-to-impact time interval, and post-strike justification narratives.
- Identify and report recurring patterns involving weapons with significant destructive effects or flight time used against temporary or mobile alleged targets in civilian settings.
- Encourage the Office of the High Commissioner for Human Rights (OHCHR), the International Committee of the Red Cross (ICRC), and relevant United Nations (UN) expert mechanisms to develop practical guidance

on how IHL applies to delayed-impact attacks against time-sensitive or mobile targets, including the duty to verify the continued presence of a military objective.

- Clarify in any public reporting that the presence of military personnel at a civilian location does not automatically remove civilian protection or relieve the attacker of the duty to verify, reassess, cancel, or suspend an attack.

### **To the International Criminal Court (ICC) and United Nations investigative mechanisms:**

- In examining attacks on civilian locations in Ukraine, assess whether the attacker had a reasonable basis to believe the alleged military objective would still be present at impact, and investigate the full targeting chain, including target selection, intelligence validation, weapon selection, and launch timing.
- Consider whether attacks of this kind reflect an operational practice, targeting policy, or pattern of conduct relevant to criminal responsibility.
- Investigate the full targeting chain, including target selection, intelligence validation, weapon selection, approval procedures, launch timing, battle damage assessment, and post-strike reporting.
- Evaluate the attacks under distinction, proportionality, and precautions in attack, and avoid treating technical precision alone as evidence that the attack was lawful.

### **To the International Committee of the Red Cross (ICRC):**

- Engage with the legal and operational questions raised by attacks against temporary or mobile alleged military objectives in civilian environments, as a matter that requires dedicated attention within existing IHL frameworks.
- Convene expert discussions bringing together military practitioners, legal advisers, and IHL scholars to clarify how the principles of distinction, proportionality, and precautions in attack apply to delayed-impact weapons

used against time-sensitive or mobile targets, including on the duty to verify the continued presence of a military objective where the weapon has a significant launch-to-impact interval.

- Share the findings of any such expert process through the ICRC's standard dissemination channels, including its engagement with armed forces and national IHL committees.

### **To military actors and military legal advisers:**

- Apply heightened scrutiny to any attack against a temporary or mobile target located in a civilian environment.
- Require renewed verification whenever there is a meaningful delay between target identification, launch authorization, and expected impact.
- Build clear procedures for delaying, canceling, redirecting, or reassessing an attack when the target may move, disperse, or cease to be a lawful military objective before impact.
- Refrain from proceeding when the attacker cannot maintain sufficient control over the target or the effects of the attack to comply with the principles of distinction, proportionality, and precautions in attack.
- Ensure that the choice of means and methods reflects foreseeable civilian harm in the specific circumstances, not the weapon's technical precision alone.
- Integrate delayed-impact and time-sensitive targeting scenarios into military doctrine, training, legal review, and civilian harm mitigation exercises.

### **To legal scholars, IHL experts, and research institutions:**

- Engage with moving target attacks as an analytical framework for examining existing IHL obligations.
- Use case-based research to clarify how target mobility affects the attacker's legal obligations to verify, reassess, cancel, or suspend an attack before impact, and to identify practical indicators that investigators

can use to assess the attacker's knowledge, target volatility, foreseeable civilian harm, and feasible alternatives.

### **To digital platforms and technology companies:**

- Preserve online content related to attacks on civilian locations in Ukraine, including official Russian statements, affiliated media narratives, videos, photographs, metadata, and posts by military or political actors.
- Respond promptly to lawful preservation requests from credible investigators, prosecutors, international mechanisms, and civil society documentation groups.
- Maintain secure access to removed, restricted, or de-amplified content that has potential evidentiary value for accountability, subject to privacy, safety, and due process safeguards.

# Methodology

Project Expedite Justice (PEJ) and Truth Hounds (TH) jointly prepared this report based on first-hand testimonies, desk research, open-source intelligence (OSINT), a review of existing reports and legal materials, and the analysis of publicly available Russian official statements and other sources.

## Investigative Findings

### First-Hand Testimonial Evidence

The factual account of the Kramatorsk attack in **Chapter 1** rests primarily on survivor and eye-witness testimonies, which TH gathered for an investigation into the June attack published in November 2023.<sup>1</sup> TH interviewed 22 witnesses and survivors, including ten people who were inside the Ria Lounge at the time of the strike or arrived at the scene shortly afterward. Those interviewed came from a range of backgrounds, including journalists, volunteers, paramedics, and former restaurant employees. TH collected the first accounts remotely the day after the attack, and interviewed five of the 22 witnesses in person during a field mission to Kramatorsk and Bilenke in August 2023.<sup>2</sup> All interviews were conducted in accordance with TH's documentation methodology and code of ethical practice, following the do-no-harm principle.<sup>3</sup> First-hand testimonial evidence was not available for all of the additional incidents examined in **Chapter 2**; that chapter relies primarily on the open-source materials described below. The report also draws on three witness testimonies concerning the Zl-atopil attack, collected in July 2023.

### Open-Source Research and Technical Analysis

For the Kramatorsk attack, TH analyzed satellite imagery from Planet, Maxar, and Google Earth, and used OSINT tools including Paliscope and PimEyes. TH additionally conducted technical calculations based on missile speed and distance parameters to identify the possible weapons used and establish the probable launch area. For the additional 3 incidents, TH reviewed publicly available information, including photos and videos, official statements from both parties, and related social media postings, such as on Telegram.

Where available, we reviewed Russian official statements for each incident to identify the targeting rationale claimed by Russian officials. Where no such statements were available, we reviewed posts published by Russian military and war-related Telegram channels to analyze the narratives advanced regarding the attacks and the possible reasons presented for them.

Telegram monitoring channels served as additional sources for reconstructing missile flight paths and strike timelines in near-real time, aggregating reports from regional air alert systems and, in some cases, sources with access to operational information regarding airborne threats. However, their methodologies and sourcing practices are not always transparent, and information may be edited, deleted, or updated as events develop. Accordingly, Telegram-sourced data was treated as preliminary evidence only, cross-referenced where possible, and flagged or excluded where information remained unconfirmed or was subsequently contradicted.

<sup>2</sup> Interviews were conducted in Ukrainian, Russian, and English.

## Selection of Incidents

TH selected the three cases examined in **Chapter 2** on the basis of criteria developed from the investigation into the Kramatorsk missile strike, in consultation with PEJ. This report does not intend to draw definitive legal determinations in each selected case. The selected incidents are included to illustrate a recurring pattern of attacks in Russia's war in Ukraine that warrants further scrutiny, particularly in light of the civilian casualties associated with these strikes.

We selected incidents that met the following criteria:

- **Weapon type:** The attack involved a cruise missile or another precision-guided weapon<sup>4</sup> capable of being directed at a specific target and producing significant destructive effects in the area of impact;
- **Foreseeability of civilian presence:** The strike's location was of a civilian character, situated within a civilian environment, and

the presence of civilians was foreseeable at the time of the attack;

- **Temporary military presence:** There were indications of the presence of military personnel or military assets at or in the immediate vicinity of the location that was hit, where such presence appears to have been temporary or transient and not linked to any ongoing military use of the location;
- **Significant launch-to-impact interval:** The weapon used had a launch-to-impact interval<sup>5</sup> of approximately 10 minutes or more. This report treats that interval not as a legal threshold, but as a practical indicator of a meaningful launch-to-impact gap during which a temporary or mobile

<sup>5</sup> The launch-to-impact interval estimate, which coincides with the weapon's flight time, is calculated for the purposes of this report using the formula  $t = d / v$ , where  $t$  is flight time,  $d$  is the straight-line (great-circle) distance between the approximate launch area and the point of impact, and  $v$  is the cruise speed of the weapon type. Distances were measured using the distance-measurement tool in Google Earth. Where cruise speed is expressed in meters per second, flight time in minutes is calculated as  $(d \times 1,000 / v) / 60$ ; where it is expressed in kilometres per hour, as  $(d / v) \times 60$ . These calculations are deliberately conservative and are intended as indicative lower estimates rather than precise figures. They assume a direct flight path, whereas cruise missiles in fact gain and lose altitude and may maneuver in flight, increasing both the distance travelled and the actual flight time. They also rely on nominal published cruise speeds and, in most cases, on an assumed rather than independently verified launch location. The actual flight time is therefore likely to be equal to or greater than the figure stated, which does not undermine, and if anything reinforces, the report's findings regarding the launch-to-impact interval.

## Three defining features of an attack on a moving target



\* The Russian justification criterion is optional.  
Zlatopil met it through unofficial Telegram channels only, not official Russian sources.

target may change position, disperse, or no longer be present at the anticipated time of impact;

- **Civilian casualties:** The attack resulted in civilian casualties; and
- **Russian claims of militar**

dents): Russian official sources stated that the attack targeted a military objective (in particular, the presence of Ukrainian military personnel).

Missile flight times cited in this report are drawn from two sources. Some are taken from investigative materials that the authors were unable to verify independently; others were calculated by the authors from publicly available information and should be regarded as indicative rather than definitive. In both cases, the figures are best treated as approximate.

## Methods of Legal Analysis

The legal analysis draws on Additional Protocol I to the Geneva Conventions (AP I) and desk research of relevant legal literature, reports by international bodies and civil society organizations, and applicable case law from international criminal tribunals. This includes jurisprudence from the International Criminal Tribunal for the former Yugoslavia (ICTY), the Rome Statute of the ICC and its Elements of Crimes, the ICRC Commentary on AP I, the ICRC Study on Customary International Humanitarian Law, and the report of the Independent Commission of Inquiry on the 2014 Gaza Conflict. The analysis also engages with academic scholarship on the conduct of hostilities, the use of destructive weapons in civilian areas, and the legal standards applicable to target selection and verification.

## Limitations

For the incidents examined in **Chapter 2**, the factual basis primarily rests on OSINT investigation. Unlike the Kramatorsk investigation, which drew on direct interviews with eyewitnesses and survivors, first-hand testimonies were not available for all of the additional incidents examined in this report. The analysis, therefore, relies primarily on publicly available documentation, which in some cases is incomplete or does not permit verification of all relevant factual circumstances. Where this affects the conclusions that can be drawn, it is noted in the relevant sections.

# CHAPTER 1

## THE ATTACK ON THE RIA LOUNGE: A DIAGNOSTIC CASE FOR MOVING TARGET ATTACKS

On the evening of June 27, 2023, Russian forces carried out a missile strike on the city of Kramatorsk in the Donetsk Oblast. Viktoriia Amelina, a writer, Truth Hounds documenter, and member of PEN Ukraine, was among those killed. In her memory, Truth Hounds dedicated an investigation into this attack, published in late 2023.<sup>6</sup>

This chapter summarizes the findings of that investigation. It sets out the factual circumstances of the strike, examines the narratives advanced by Russian official sources and unofficial commentators in the aftermath, and uses the Kramatorsk attack to introduce the moving target framework that structures the analysis in **Chapters 2 and 3**. Kramatorsk is the best-documented of the four incidents examined in this report and serves as the diagnostic case on which the broader analytical framework is built. The legal qualification of the attack is addressed in **Chapter 3**.

## 1.1 The Ria Lounge Attack in Kramatorsk

At 7:29 p.m. on June 27, 2023, a missile hit the Ria Lounge, a popular cafe in central Kramatorsk. A powerful explosion completely destroyed the cafe and a nearby store, and the blast wave damaged the Kramatorsk Hotel and nearby apartment buildings. The attack killed 13 people and injured 60. Immediately after the attack, the Russian Ministry of Defense stated that a high-precision strike hit the “temporary command post of the 56th Motorized Infantry Brigade.”<sup>7</sup>

Truth Hounds developed a comprehensive account of the attack based on eyewitness and survivor interviews, field documentation, OSINT analysis, satellite imagery, and technical assessments of the weapons used. The organization interviewed ten witnesses and survivors who were either inside the Ria Lounge cafe at the time of the strike or arrived shortly afterward.<sup>8</sup>

On the basis of this investigation, Truth Hounds concluded that the Russian Armed Forces carried out the attack using a 9M727/9M728/9M729 missile launched from an Iskander missile system.<sup>9</sup> This is a surface-to-surface cruise missile, which flies along a pre-programmed trajectory and can do so at extremely low altitudes, maneuver during

flight, and use electronic countermeasures to evade detection or interception.<sup>10</sup> A warhead of approximately 500 kilograms makes this weapon highly destructive.<sup>11</sup>

## Circumstances

The Ria Lounge cafe was a popular pizza restaurant located at 45A Vasyliia Stusa Street, in the densely populated central area of Kramatorsk. The establishment occupied two distinct levels. The above-ground level comprised the dining area and outdoor terrace, both of which operated as a restaurant open to the public. The basement held a separate private event room, referred to by staff as “the pub,” which was routinely booked for invite-only gatherings.

On the evening of June 27, 2023, the above-ground restaurant was open. According to eyewitness accounts collected by Truth Hounds, there were approximately 40 to 50 customers in the dining hall and on the terrace at the moment of the strike, with a roughly equal number of civilians and military personnel. The military personnel present in the above-ground area were off-duty, unarmed, with some dressed in a mix of civilian and uniform attire, and attending the venue with their civilian friends, families, or acquaintances.<sup>12</sup> None of the interviewed witnesses identified anyone in the above-ground area as a member of the command of a unit of the Armed Forces of Ukraine.

At the same time, the basement “pub” had been reserved a month in advance for a private occasion — the birthday of a Ukrainian officer. The gathering was planned in two parts, scheduled for 1:00 p.m. and 7:00 p.m., with about 20 guests attending each. The upstairs cafe remained an open public venue throughout, with no markers, equipment, vehicles, or command activity that would have indicated a military function to outside observers.

<sup>6</sup> Truth Hounds, “[The bill is on you.](#)”

<sup>9</sup> Truth Hounds identified the weapon as an Iskander-K cruise missile on the basis of an analysis of the damage to the Ria Lounge and adjacent buildings, eyewitness accounts of the missile’s flight, and a comparison of the tactical and technical characteristics of the range of missiles capable of having been used. The designations 9M727, 9M728, and 9M729 refer to variants of the Iskander-K. See Truth Hounds, “[The bill is on you.](#),” section “Type of Weapon.”

<sup>12</sup> Interviewees who had lived in Kramatorsk for some time and spent time at Ria Lounge added that in general, this coexistence of the military and civilians is characteristic of Kramatorsk, since the city was and remains located close to the frontline.

The missile struck the above-ground level of the building, destroying the dining hall and the terrace, and damaging the Kramatorsk hotel and surrounding residential buildings. The basement remained essentially intact, and there is no indication in the available evidence that individuals present there at the moment of the attack sustained serious injuries. The attack, therefore, killed or injured overwhelmingly civilians and off-duty military personnel who were above ground.

The distribution of casualties is especially significant in this case. The strike was allegedly aimed at people gathered in the basement, yet they were not the ones primarily affected by the explosion. The choice of weapon and the way the strike was carried out did not allow any real distinction between the people in the basement and anyone in any other part of the building.

The timing of the attack also supports this conclusion. The day after the strike, the Security Service of Ukraine (SBU) announced that it had arrested a person suspected of helping Russian forces target Kramatorsk on June 27, 2023. According to the SBU, the suspect's on-site observation and recording took place at approximately 5 p.m. He then left the venue and was at home when the strike occurred at around 7:30 p.m.

Truth Hounds established that the missile came from the southeast.<sup>13</sup> Air-defense activity provides a reference point for the launch timing: the air-raid alert in Kramatorsk ended at 7:14 p.m., suggesting that Ukrainian air-monitoring systems were no longer detecting any missiles in the airspace or fresh launches. This is consistent with the missile having been launched at or shortly after 7:14 p.m., placing its flight time at up to approximately 15 minutes before impact at 7:29 p.m.

Two independent considerations therefore converge to narrow the flight-time estimate. The first is the air-defense timeline, which places the upper limit at approximately 15 minutes. The second is distance. The missile most likely was launched not from occupied territory, but from Russian territory itself, from the southeast relative to Kramatorsk.<sup>14</sup> The closest point on the Ukrainian-Russian border within that sector lies approximately 140 km from the city.<sup>15</sup> The cruise missile launched from an Iskander system has a speed of approximately

250 m/s (around 900 km/h).<sup>16</sup> A flight over that distance would take a minimum of approximately nine minutes.<sup>17</sup> Taken together, these two considerations place the missile's flight time between 9 and 15 minutes.

This range should be understood as a lower estimate of the gap between launch and impact. The figure of approximately nine minutes holds only under two conservative assumptions: that the missile was launched from the nearest possible point on the border, and that it followed a direct flight path. Neither is likely to reflect what actually occurred. Cruise missiles gain and lose altitude and may maneuver in flight, increasing both the distance traveled and the actual flight time. A launch point further inside Russian territory would have the same effect. Moreover, the end of the air-raid alert at 7:14 p.m. provides the basis for the launch timing used in this report, on the assumption that Ukrainian air-monitoring systems were tracking the missile from launch. If the missile was in fact launched earlier but evaded detection, the actual flight time would exceed the upper limit of 15 minutes.

Two implications logically follow. First, between the moment the Russian forces last had direct on-site information about the venue and the moment of launch, more than two hours passed, with an added 9 to 15 minutes flight time. Second, the set of customers present at the cafe at 5:00 p.m. and 7:29 p.m. was not necessarily the same. There was no mechanism for the attacker to verify whether the same people remained gathered, and once the missile was launched, no further verification was possible, meaning the attacker could not abort, redirect, or reassess it during its flight.

<sup>13</sup> Truth Hounds, "[The bill is on you](#)," Chapter "Direction of the Strike."

<sup>14</sup> Launch from the occupied parts of Donetsk Oblast can be excluded because: a) there were no reliable reports that the Russian side deploys Iskander missile systems on the occupied territories of Ukraine; b) the deployment on Russian territory presents a much safer option, as Ukraine at that time was not authorized to strike Russian territory with long-range weapons supplied by its allies, while it was permitted to strike on the occupied territories. This was illustrated in June 2023 by a statement of AFU Air Force spokesman Yuri Ihnat, who said that Ukraine would strike Iskander systems if they were deployed on the occupied territories. See Truth Hounds, "[The bill is on you](#)," section "Estimated Sector of Missile Launch."

<sup>15</sup> The straight-line distance was measured using the distance measurement tool in Google Earth.

<sup>17</sup>  $140 \text{ km} \div 900 \text{ km/h} = 0.155 \text{ hours}$ , or approximately 9.3 minutes. For more regarding calculations see supra note 5.

## Narratives in Russian sources

In the aftermath of the attack, Russian official institutions, state-affiliated media, and pro-government commentators advanced at least two versions of events, each seeking to characterize the Ria Lounge as a legitimate military objective that day.

### 1. "Foreign mercenaries" were present and killed at the cafe.

The early posts framing the attack as a successful strike on "foreign mercenaries" appeared within roughly an hour of the strike on widely followed pro-Kremlin Telegram channels and media outlets.<sup>18</sup> Russian sources named, in particular, Alex Gallant, Arnaud De Decker, Nick Duckworth, and three Colombian nationals.<sup>19</sup> Truth Hounds examined the digital footprint of each named individual and directly interviewed Duckworth. Duckworth was a volunteer working with frontline medical brigades and the NGO Safe Passage 4 Ukraine; De Decker was a Belgian journalist who had left the cafe approximately 10 minutes before the strike; Gallant was a civilian security specialist who had left Kramatorsk several weeks before the attack. The three Colombian nationals referenced in Russian sources, writer Héctor Abad, former High Commissioner for Peace Sergio Jaramillo, and journalist Catalina Gómez, were in Kramatorsk as part of the Aguanta Ucrania awareness campaign, accompanied by Viktoriia Amelina.<sup>20</sup> None of them had any known connection to the armed forces.

Ian Tortorici, a former U.S. Marine and volunteer soldier attached to the International Legion of Ukraine's Defense Intelligence, was the only foreign national killed in the attack. He had dinner at the cafe that evening.<sup>21</sup>

### 2. The strike killed senior Ukrainian military personnel.

An official statement of the Russian Ministry of Defense shaped the second main narrative. According to this statement, the strike targeted the headquarters of the 56th Motorized Brigade of the Armed Forces of Ukraine, and killed two generals, up to 50 officers, and up to 20 foreign mercenaries.<sup>22</sup> Russian officials of the highest levels claimed that the cafe was a legitimate military objective.<sup>23</sup>

Available open sources and eyewitness accounts do not corroborate claims of heavy military losses. Eyewitnesses and survivors of the attack reported that there were up to 50 clients on the cafe's ground level at the moment of the strike.<sup>24</sup> In fact, Russia's strike killed 13 people, only two of whom were active service members: combat paramedic Artem Sukhovii of the 1st Assault Battalion of the 3rd Separate Assault Brigade, and volunteer fighter Ian Tortorici of the International Legion.<sup>25</sup>

Among the direct eyewitnesses interviewed by Truth Hounds who were able to provide informa-

<sup>20</sup> Aguanta Ucrania is a Latin American solidarity campaign created to build support for Ukraine in Latin America and raise awareness of Russia's attacks on civilians.

JUNE 27, 2023  
ATTACK ON THE RIA LOUNGE CAFE

## From last verified intelligence to impact

KRAMATORSK  
DONETSK OBLAST



OBSERVATION  
5:00 PM



Informant recorded the venue at ~5:00 PM then left. No further on-site verification was possible.

INTELLIGENCE GAP  
2+ HOURS

LAUNCH WINDOW  
7:14 PM



Alert ended, likely missile launch time.

No verification, redirection or abort was possible after launch.



IMPACT  
7:29 PM



13 KILLED  
60 INJURED

tion about the vehicles parked near the cafe, all reported seeing only civilian vehicles and a small number of pickup trucks, also used by service members for personal transport.<sup>26</sup> They did not observe any movement or concentration of military equipment in the vicinity of the strike site. Some Russian sources further claimed foreign instructors were using a “dormitory” adjacent to the cafe.<sup>27</sup> They referred to the Kramatorsk hotel, which had operated only on a limited basis since February 2022. According to its director,

the hotel prohibited personnel in military uniform from staying there in order to avoid endangering residents.<sup>28</sup>

These claims seek to justify the attack by overstating the cafe’s military significance and distorting the events. The available evidence indicates that Ria Lounge remained at all times a civilian object, operating as an ordinary commercial restaurant, in which Ukrainian military personnel had gathered temporarily for private and

JUNE 27, 2023

# Attack on the Ria Lounge Cafe



## CASUALTIES

**At time of strike** ≈ 40-50 customers above ground  
**Soldiers:** off-duty, unarmed, birthday celebration in basement

### 13 killed

11 civilians, 2 soldiers



### 60 injured

Breakdown not available



## WEAPON

Iskander missile system  
**9M727/9M728/9M729**

Warhead  
**≈500 kg**

Circular error probable  
**5-10 m**



Launch-to-impact interval  
**9-15 min\***

\* Cannot be recalled or redirected

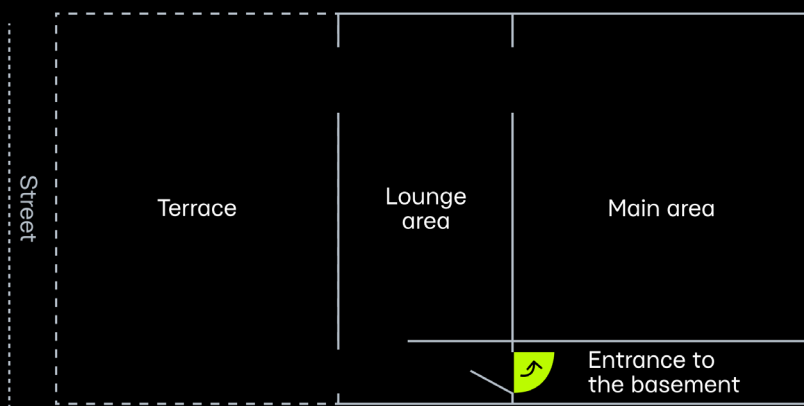


## LOCATION CHARACTER

City Center, Kramatorsk  
**Public restaurant**

Above ground, Basement  
**Two levels**

Alleged target remained intact  
**Basement undamaged**



social purposes alongside a comparable number of civilian patrons. At the same time, residents, passers-by, and other civilians continued to occupy the densely built-up city center surrounding the venue in the ordinary course of their lives.

## 1.2 From Kramatorsk to a Moving Target Framework

The attack on the Ria Lounge cafe brought together a particular combination of features that, taken individually, are common within the broader conduct of hostilities in Ukraine, but that acquire a distinct legal significance when they occur together. Such attacks typically take place at locations of civilian character situated within a civilian environment, where the presence of civilians at the time of impact and the harm to civilians are foreseeable. The military rationale for the strike rests on a connection between the location and military personnel or activity that is itself transient: limited in duration, embedded within a civilian setting, and unrelated to any ongoing military use of the site. The weapons used in such strikes produce significant area-wide destructive effects and involve a temporal gap between the decision to strike and the moment of impact. In particular, the flight time of the munition after its launch may create an interval long enough for the factual situation on the ground to change meaningfully before impact.

To examine such attacks systematically, this report introduces the concept of a moving target attack as an analytical framework. A moving target attack, for the purposes of this report, combines the following three features:

(i) **Temporary or transient military presence.**

A strike whose military rationale rests on the presence of military personnel or assets at the location, where such presence is temporary in nature;

(ii) **Civilian-character location.** A strike is carried out against a location of civilian character situated within a civilian environment, where the presence of civilians at the time of impact is foreseeable;

(iii) **Significant launch-to-impact interval.**

A strike carried out using a precision-guided weapon with a significant launch-to-impact interval and destructive effects, where the interval between the launch and strike is long enough that the situation on the ground may meaningfully change before impact.

This analytical framework brings into focus a recurring set of circumstances in Russia's attacks on Ukraine that raises questions under international humanitarian and criminal law.

Each dimension of the moving target framework presents distinct legal questions and calls attention to specific indicators. The table below connects those dimensions with the questions they raise and the indicators relevant to each. Each row identifies a factual dimension of moving target attacks, explains why it is legally significant, and sets out the indicators that help illustrate how the framework operates in practice. The same indicators informed the selection of incidents examined in this report and the legal analysis in [Chapter 3](#).

## 1.3 Conclusion

The Kramatorsk strike illustrates the central problem examined in this report. Russian forces attacked a civilian venue on the basis of a military presence that appears to have been temporary, limited, and embedded in an ordinary civilian setting. The available evidence does not support Russia's claim that the Ria Lounge functioned as a military command post. Instead, it shows that the cafe operated as a public restaurant, that civilians and off-duty military personnel occupied the venue together, and that the strike did not distinguish between those groups.

The timing of the attack carries particular legal significance. Russian forces appear to have relied on information collected more than two hours before impact, then used a missile with a further flight time of at least nine minutes. During that interval, people could enter, leave, or move within the restaurant. Once Russian forces launched the missile, they could no longer verify the target, reassess the situation, redirect the weapon, or cancel the strike.

# The moving target framework in practice

WHAT INVESTIGATORS AND LEGAL ANALYSTS SHOULD EXAMINE

## Target mobility

A lawful target may move, disperse or lose military significance before impact. The longer the flight time, the greater the risk the attacker is no longer striking a verified objective.

### Indicator:

time between target identification, authorization, launch and impact

## Civilian character of the location

Military presence does not automatically transform a civilian site into a military objective. The nature, purpose and use of the location must be assessed independently.

### Indicator:

ordinary function of the site, civilian activity, nearby homes or businesses, absence of military equipment

### CENTRAL CONCERN

## Attacker control and weapon choice

A weapon that cannot be recalled or redirected places all legal weight on the pre-launch assessment, including the staleness of intelligence at the time of launch.

### Indicator:

ability to verify, cancel or redirect after launch, age of targeting intelligence at moment of impact

## Foreseeable civilian harm

The attacker must assess expected civilian harm – not only whether a target existed, but what harm was foreseeable at the moment of the decision to strike.

### Indicator:

time of day, density of civilians, blast radius, building type, destructive effects of weapon

# CHAPTER 2

## ADDITIONAL INCIDENTS AND VARIATIONS WITHIN THE MOVING TARGET FRAMEWORK

This Chapter examines three strikes that present a very similar combination of features identified in the Kramatorsk attack: the strikes on Vinnytsia on July 14, 2022, on Zlatopil on July 4, 2023, and on Chernihiv on August 19, 2023. The cases were selected against the criteria outlined in the Methodology section.

For each incident, the Chapter provides information on the chosen weapon, the probable flight time of the munition, the nature of the target and of the location struck, and the number of casualties among civilians and military personnel.

This Chapter does not examine each incident in full detail. Instead, it sets out the key factual features of each case and identifies the recurring combination of circumstances that connects them. The factual record established here informs the legal analysis in **Chapter 3**.

## 2.1 The Moving Target Concept in Operation

The defining feature of a moving target attack is the time gap between the moment the attacker launches the strike and the moment the weapon reaches the target. In each case examined here, the alleged military rationale for the attack was the presence of military personnel at the strike site; a presence that was, by its nature, time-limited, transient, and capable of dispersing on warning. The longer the flight time of the munition, the greater the risk that the attacker is no longer striking a verified objective, but relying on an assumption that the alleged target will remain present until impact.

These cases also show that weapon choice and timing matter independently of precision. A cruise missile may strike within meters of its programmed coordinates, but if the alleged military target has moved or left that location before impact, the missile is unlikely to hit the target it was intended to strike. For example, a munition configured to detonate in the air over a populated square causes casualties across whoever is on the street, regardless of who the intended target was. That is not a property of the weapon as such. It is a property of the attacker's choices about means

and timing, made before the weapon is launched. The three cases below illustrate different variations of attacks against moving targets.

## 2.2 Vinnytsia, July 14, 2022

On July 14, 2022, at 10:41 a.m.,<sup>29</sup> three Russian cruise missiles hit the center of Vinnytsia. According to the Office of the Prosecutor General of Ukraine, the strike killed 29 people, including three children and five servicemen of the Armed Forces of Ukraine, and wounded at least 154, including 12 servicemen. It damaged 35 residential buildings, 23 commercial premises, and over 60 civilian vehicles, including municipal transport.<sup>30</sup>

The attack targeted a building known as the "60th House of Officers," located at the intersection of Kotsiubynskyi Avenue and Ivana Bevza Street.<sup>31</sup> Two missiles struck the building itself; the third hit a nearby parking area on the grounds of the "Yuvileinyi" center.<sup>32</sup> Photographs and videos taken shortly after the strike do not show any military equipment at the attack site.<sup>33</sup>

According to a Russian Ministry of Defense statement, a military gathering was reportedly at the House of Officers at that time, attended by the Ukrainian Air Force command and foreign weapons suppliers.<sup>34</sup> According to the Ukrainian criminal investigation, a working meeting between representatives of the Command of the Air Forces of the Armed Forces of Ukraine and several defense-industry firms had been scheduled to take place at the venue at 10:00, in a hybrid format, combining in-person and remote participation.<sup>35</sup>

<sup>29</sup> In the official notice of suspicion issued to Igor Vladimirovich Osipov, then-Commander of the Russian Navy's Black Sea Fleet, regarding his role in ordering this missile attack, the time of the strike is indicated as 10:41 a.m. However, the exact time of impact varies slightly across sources. During a briefing at the scene, then Minister of Internal Affairs of Ukraine Denys Monastyrskyi stated that the missiles struck at 10:43 a.m. Local Telegram channels reported explosions and impacts at approximately 10:46 a.m. For the purposes of this report, the impact time of 10:41 a.m. indicated in the notice of suspicion is used as the primary reference point, while acknowledging that other contemporaneous sources place the impact several minutes later.

<sup>31</sup> The "House of Officers" is a Soviet-era building type that served as a cultural and recreational venue for military personnel and their families, hosting concerts, lectures, performances, and public events. In post-Soviet Ukraine, many of these buildings came under civilian municipal ownership and now operate as ordinary public cultural centers, while retaining their historical name in everyday usage. By July 2022, the Vinnytsia "60th House of Officers" operated as a public concert hall and also housed children's groups, NGO offices, and retail premises. A public concert was scheduled there for the evening of July 14, 2022.

<sup>32</sup> Drone imagery from the strike site indicates that two missiles hit the building, while a third struck the parking area near the "Yuvileinyi" center.

The presence of Air Force personnel at the venue is consistent with the casualty record. As noted, the Ukrainian investigation identified five servicemen of the Armed Forces of Ukraine among those killed. The identities of four of them have been independently established through the “Pam’ya-taemo Heroiv” memorial platform,<sup>36</sup> which maintains and publishes verified information about fallen Ukrainian servicemen. All four were officers of the Air Force, in the ranks of Colonel and Lieutenant Colonel.<sup>37</sup> The fifth serviceman killed in the strike was, in all likelihood, Volodymyr Datsenko, who was at the time accompanying a friend to a medical appointment at a clinic close to the impact site.<sup>38</sup>

Russian forces carried out the attack using 3M-14 Kalibr cruise missiles, each carrying a warhead of approximately 500 kg.<sup>39</sup> According to the Ukrainian investigation, Russia launched the missiles from a small missile ship of the Russian Black Sea Fleet of the Project 21631 (“Buyan-M”) class<sup>40</sup> positioned in the Black Sea near Cape Fiolent off the southern coast of occupied Crimea.<sup>41</sup>

The available record indicates that the time gap between launch and impact was significant. Air-raid information associated with possible missile launches from the Black Sea began spreading across southern Ukraine from 9:52 a.m., and an air-raid alert sounded in Vinnytsia at 10:12 a.m., at least 29 minutes before the missiles struck.<sup>42</sup> If the launch indeed occurred around 9:52 a.m., the missile’s flight time to Vinnytsia would have been at least 49 minutes. This is consistent with the tactical-technical characteristics of the Kalibr missile, which has a cruise speed of approximately 900 km/h.<sup>43</sup> The straight-line distance from Cape Fiolent to the impact point in Vinnytsia is approximately 650 km, corresponding to a minimum flight time of around 43 minutes.<sup>44</sup> Because cruise missiles can gain or lose altitude and maneuver during flight, the actual route may have been longer than the straight-line distance. While these figures involve a degree of approximation, the indicators converge on the same broad time

range: a launch-to-impact interval of approximately 40 to 50 minutes.

The majority of those killed or wounded were civilians: residents of the surrounding neighborhood, passers-by, patients, and staff at the nearby medical clinic.<sup>45</sup> The likelihood of civilian casualties resulting from the strike was entirely foreseeable given the circumstances of the attack. The missile struck a densely populated area of Vinnytsia in the middle of a Thursday morning, an ordinary working day, during normal business hours, when civilians could reasonably be expected to be present in large numbers. Moreover, the weapon used was inherently capable of causing destruction far beyond the immediate vicinity of the intended target.

This case also raises questions, distinct from but related to the predominantly civilian character of the casualties, about the attacker’s ability to maintain control over the target during the launch-to-impact interval. The weapon selected for the strike combined a large warhead with a significant flight time, increasing both its destructive effects and the risk that the target situation would change before impact. And the participants in the alleged meeting received an air-raid alert at least 29 minutes before impact,<sup>46</sup> an interval clearly sufficient to halt and/or relocate the meeting, which evidently did not occur, as indicated by the casualties sustained among Air Force personnel.

The Vinnytsia case, therefore, illustrates that the civilian harm was unlikely to be incidental; it followed directly from the weapon, the timing, and the location chosen for the strike.

## 2.3 Zlatopil, July 4, 2023

On July 4, 2023, at approximately 1:35 p.m., a single Russian cruise missile struck the residential area of the city of Pervomaiskyi (renamed Zlatopil in 2024), in the Kharkiv Oblast.<sup>47</sup> According to the testimony of the director of the Pervomaiskyi Central District Hospital, Olha Hrimova, the strike resulted in 42 people seeking treatment at the hospital – 26 women and 16 men, including 12 children, three of them under one year of age – all civilians. No deaths were recorded as a result of the strike. A woman suffered an ocular

<sup>40</sup> Project 21631, known as the “Buyan-M” class, is a series of small Russian river-sea missile corvettes capable of launching Kalibr cruise missiles at land targets at ranges of over 1,500 km.

<sup>44</sup> The straight-line distance was measured using the distance measurement tool in Google Earth between Cape Fiolent, Crimea, and the impact location in Vinnytsia. Minimum flight time is calculated using the standard relation  $\text{time} = \text{distance} / \text{speed}$ . On that basis,  $650 \text{ km} \div 900 \text{ km/h} = 0.722 \text{ hours}$ , which corresponds to approximately 43 minutes.

shrapnel wound, the most severe injury. Doctors transferred her to Kharkiv Regional Hospital, and expected her to have a permanent disability.<sup>48</sup>

The missile detonated in the open space between residential buildings at addresses 8 and 10 in the city's 6th microdistrict, approximately 800 meters from the central square in front of the Palace of Culture, where the funeral of a serviceman of the Kraken Regiment of the Armed Forces of Ukraine, Oleh Fadieienko, had been scheduled to begin at 1:00 p.m.<sup>49</sup>

The Russian Ministry of Defense did not issue any public statement about the strike. However, a popular pro-Kremlin Telegram blogger, Boris Rozhin, who actively comments on Russia's war against Ukraine,<sup>50</sup> claimed on his Telegram channel that the strike targeted the Zodiak cafe, located some 20-30 meters from the impact point, and that the strike had targeted servicemen who were expected to gather there for a memorial meal following the funeral.<sup>51</sup>

The Zodiak cafe was located on the first floor of a nine-story residential building. Residents interviewed by Truth Hounds stated that the Zodiak cafe had been out of operation for several years, and that a memorial meal had not been planned there following the funeral.<sup>52</sup> Truth Hounds documenters visited the site shortly after the strike and were able to verify that the cafe appeared to have been closed for a considerable period of time and showed no signs of active operation as a cafe.<sup>53</sup> We also found no indication of any military gathering or military equipment at the former cafe or in its vicinity on the day of the strike.

The Fadieienko funeral was a substantial public event. By the scheduled 1:00 p.m. start time, hundreds of people had gathered in the central square, with civilians and military personnel present in roughly equal numbers; Kraken Regiment leaders attended the funeral, and organiz-

ers had publicly announced the funeral's location and time. However, at approximately 1:20 p.m., the organizers learned that the ceremony would be delayed because the deceased serviceman's body had not yet arrived. At approximately 1:25 p.m., organizers asked the mourners via the public-address system to temporarily disperse, either by leaving the square or moving indoors to the Palace of Culture, as the day was hot and sunny. About ten minutes later, when the missile struck, the central square stood almost empty, with at most a few dozen people remaining under umbrellas.<sup>54</sup>

Russian forces used a 9M727 cruise missile launched from an Iskander missile system,<sup>55</sup> which has a cruise speed of approximately 250 m/s (around 900 km/h).<sup>56</sup> No air-raid alert sounded in Zlatopil at the moment of impact, which complicates any direct inference about the missile's flight time. Two witnesses interviewed by Truth Hounds observed the missile in flight, and both reported that it was traveling from east to west, specifically from the direction of the village of Oleksiivka, to the east of the impact point.<sup>57</sup>

As previously mentioned, cruise missiles are capable of in-flight maneuver, and witnesses' observations cannot, on their own, reliably establish the missile's launch direction. The following estimate is therefore framed conservatively. The nearest Russian territory to the impact point lies in the south of Belgorod Oblast, due north of Zlatopil. Iskander launchers are typically held at no less than 30 kilometers from the border to reduce their vulnerability to detection and counter-battery fire.<sup>58</sup> On this basis, the minimum straight-line distance from the launch area to the impact point would be approximately 130 kilometers (96 km Zlatopil-to-border distance + 30 km). At the missile's cruise speed of approximately 900 km/h, a direct 130-kilometer flight corresponds to a flight time of approximately 9 minutes. The actual flight time was, in all likelihood, longer: if the missile followed the east-to-west approach described by witnesses despite a launch point to the north, it must have maneuvered in flight, lengthening its path. The launch-to-impact interval was therefore not less than approximately 10 minutes. This figure reflects only the minimum-distance scenario, assuming Russian forces launched the missile from the nearest Russian territory due north of

<sup>50</sup> As of mid-June 2026, Boris Rozhin's Telegram channel, Colonelcassad, had more than 750,000 subscribers. The channel is a widely followed source of pro-Kremlin commentary on the war against Ukraine. Independent researchers have identified it as disseminating false, misleading, and unverified information.

<sup>55</sup> Missile fragments bearing the corresponding markings were found by Truth Hounds documenters while examining the impact crater during a field mission in July 2023.

<sup>57</sup> Interview with Olha Hrimova conducted by Truth Hounds; Interview with Prv-04 conducted by Truth Hounds; The witnesses' accounts regarding the missile's direction of flight before the impact are further corroborated by an analysis of the impact crater configuration conducted by Truth Hounds documenters at the strike site.

Zlatopil. If the missile came from the direction the witnesses observed, the launch point would have been farther away, making both the flight path and the flight time longer than the minimum estimate.

The strike's outcome illustrates the inherent unpredictability of targeting time-sensitive gatherings, a problem compounded by the use of comparatively slow cruise missiles with substantial launch-to-impact intervals. These risks increase even further in densely populated urban environments, where any error in timing, targeting, or intelligence assessment is likely to expose large numbers of civilians to harm, as this attack ultimately did. Moreover, if the strike was indeed intended to target the Zodiak cafe, the fact that the establishment had reportedly been out of operation for several years suggests serious failures in target preparation and intelligence verification prior to the strike.

## 2.4 Chernihiv, August 19, 2023

On August 19, 2023, at 11:29 a.m., a Russian cruise missile hit the Taras Shevchenko Chernihiv Regional Academic Music and Drama Theatre, located on the central square of Chernihiv. The strike killed 7 people, including 1 serviceman – all had been standing outside the theatre at the moment of impact. The count of injured reached 193, including 2 servicemen.<sup>59</sup> The blast damaged

10 administrative buildings and 66 residential buildings in the center of the city.<sup>60</sup>

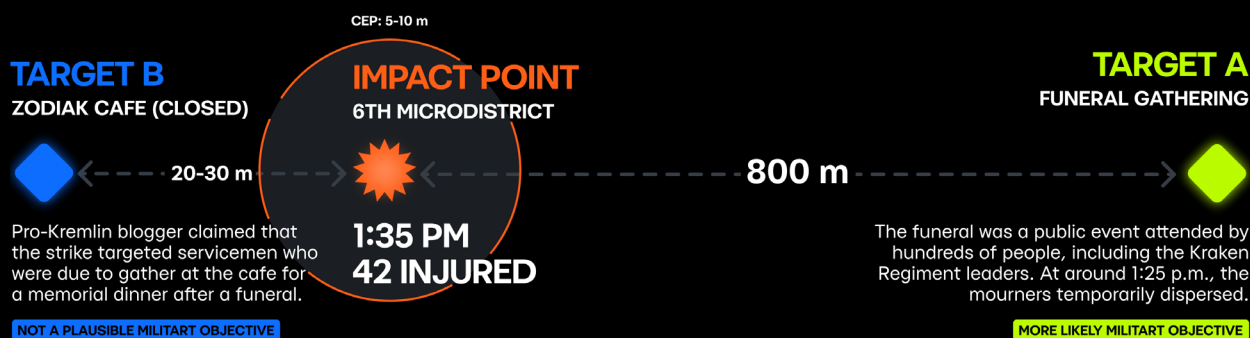
The Drama Theatre was hosting an exhibition organized by two Ukrainian civilian non-governmental organizations operating in the defense-technology sector and bringing together manufacturers and operators of military drones.<sup>61</sup> The exhibition itself was held inside the theatre building. The square outside the theatre, in the very center of Chernihiv, was open and busy with civilians, as would be expected on a Saturday morning. Moreover, the strike took place on Apple Feast of the Savior, a religious holiday during which many residents were in the city center, visiting nearby churches.

The Russian Ministry of Defense did not publicly comment on the incident. However, the Russian state news agency RIA Novosti reported that the strike had targeted "a gathering place of Ukrainian military drone specialists" that had allegedly been disguised as a festival.<sup>62</sup>

Russian forces launched a 9M727 cruise missile from an Iskander missile system.<sup>63</sup> Ukrainian air forces announced an air-raid alert in Chernihiv at 11:20 a.m., nine minutes before the impact.<sup>64</sup> According to the Ukrainian investigation, relying on radar-control data, Russian forces launched the missile no later than 11:10 a.m. from Kursk Oblast. Ukrainian radar reportedly first detected it over Sumy Oblast at 11:18 a.m., and over Cherni-

JULY 4, 2023

## Impact point and two alleged targets



hiv Oblast at 11:25 a.m., before exploding above the Drama Theatre at 11:29 a.m.<sup>65</sup> The available timeline, therefore, indicates a launch-to-impact interval of approximately 19 minutes.

The warhead configuration also matters in this case. The missile that struck the theatre had a proximity fuse, which caused it to detonate in mid-air above the building, rather than on impact. The pattern of damage to the building and available video footage of the strike confirm this conclusion. The warhead contained one-centimeter cubic metal fragments, a design commonly used to spread lethal fragments over a wide area.<sup>66</sup> In open spaces, those fragments can kill or seriously injure people several hundred meters from the center of the explosion.

The choice of such a fuse is ineffective for targeting people located inside the building, as a missile programmed for airburst detonation cannot effectively destroy reinforced buildings or kill those

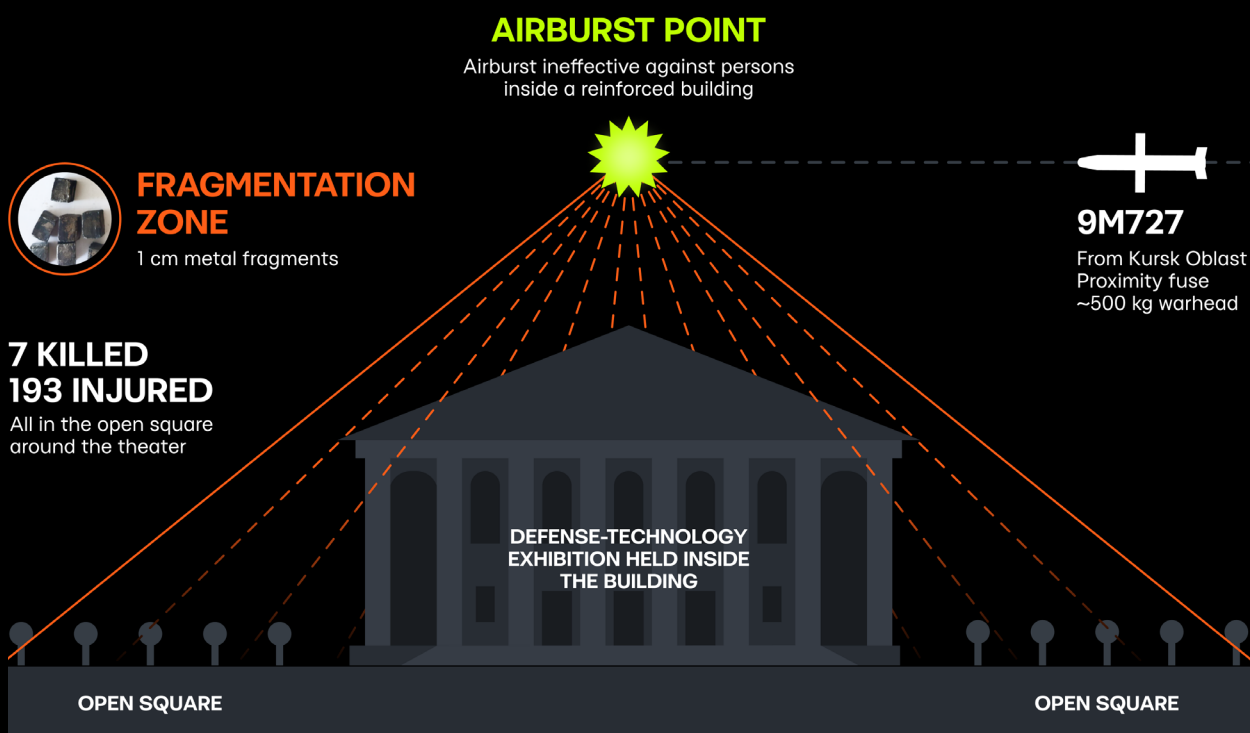
sheltering within them. Additional indication of this is the fact that all seven fatalities were outside the building at the time of the strike.

The means selected for this strike ensured that there would be many victims among civilians on the streets. Similar to the cases examined earlier in this Chapter, the attacker chose a weapon with a significant launch-to-impact interval. That gap between launch and impact allowed those inside the building to seek shelter and allowed the situation on the ground to change significantly before the weapon struck. The airburst warhead posed an additional danger. The problem was not only that Russian forces had no control over whether the target remained present at the time of the strike. By employing an airburst warhead, the attack was not confined to the activity inside the theatre. Instead, the warhead configuration projected lethal fragments into the surrounding civilian space.

AUGUST 19, 2023  
ATTACK ON THE CHERNIHIV DRAMA THEATER

CHERNIHIV  
CHERNIHIV OBLAST

## Airburst warhead configuration



## 2.5 Conclusion

The four incidents examined in this Chapter show a recurring pattern of attacks that require close legal scrutiny. In Kramatorsk, Vinnytsia, Zlatopil, and Chernihiv, Russian forces targeted temporary or time-sensitive military activity in civilian settings, using weapons with significant launch-to-impact time intervals and substantial destructive effects. The cases differ in the nature of the target: a private gathering at a public restaurant, a working meeting at a public cultural venue, a funeral gathering, and a defense-technology exhibition inside a regional theatre. Yet they converge on the same legal problem.

In each case, the target was inherently transient, time-limited in a specific location, and capable of

dispersing on warning. In each case, the weapons used carried flight times long enough that Russian forces could neither verify nor reassess the situation before impact. And in each case, the overwhelming majority of those killed or injured were civilians present in or around publicly accessible locations.

These common features raise the same questions under IHL: whether the attacker adequately assessed the likelihood that the alleged target would remain present at impact, whether foreseeable civilian harm was properly weighed against military advantage, and whether the chosen means were compatible with the legal obligation to take precautions. The next Chapter applies those rules to the pattern identified here.

## Attacks on moving targets

| <b>JULY 14, 2022</b><br><b>VINNYTSIA</b><br>CONCERT HALL                                                                                  | <b>JUNE 27, 2023</b><br><b>KRAMATORSK</b><br>RESTAURANT                                                         | <b>JULY 4, 2023</b><br><b>ZLATOPIL</b><br>CITY SQUARE                                               | <b>AUGUST 19, 2023</b><br><b>CHERNIHIV</b><br>THEATER                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>CASUALTIES</b><br><b>29 154</b><br>KILLED INJURED<br><b>Civilians:</b> 142 injured, 24 killed<br><b>Soldiers:</b> 12 injured, 5 killed | <b>CASUALTIES</b><br><b>13 60</b><br>KILLED INJURED<br><b>Civilians:</b> 11 killed<br><b>Soldiers:</b> 2 killed | <b>CASUALTIES</b><br><b>0 42</b><br>KILLED INJURED<br><b>All civilians</b><br>including 12 children | <b>CASUALTIES</b><br><b>7 193</b><br>KILLED INJURED<br><b>All civilians</b><br>All outside the building |
| <b>WEAPON &amp; FLIGHT TIME</b><br>3M-14 Kalibr<br>Buyan-M missile ship<br><b>40-50 min</b>                                               | <b>WEAPON &amp; FLIGHT TIME</b><br>9M727, 9M728, 9M729<br>Iskander missile system<br><b>9-15 min</b>            | <b>WEAPON &amp; FLIGHT TIME</b><br>9M727<br>Iskander missile system<br><b>≥10 min</b>               | <b>WEAPON &amp; FLIGHT TIME</b><br>9M727, proximity fuse<br>Iskander missile system<br><b>≈19 min</b>   |
| <b>CONTROL GAP</b><br>29 MIN ALERT TO IMPACT<br>9:52 AM 10:12 AM 10:41 AM<br>Launch Alert Impact                                          | <b>CONTROL GAP</b><br>2+ HOURS GAP<br>5:00 PM ≥7:14 PM 7:29 PM<br>Observation Launch Impact                     | <b>CONTROL GAP</b><br>NO ALERT SOUNDED<br>≈1:25 PM 1:35 PM<br>Launch Impact                         | <b>CONTROL GAP</b><br>9 MIN ALERT TO IMPACT<br>≈11:10 AM 11:20 AM 11:29 AM<br>Launch Alert Impact       |

# CHAPTER 3

## LEGAL ANALYSIS OF ATTACKS ON MOVING TARGETS

This Chapter turns from factual patterns to legal assessment. It examines how existing rules of international humanitarian law apply when the alleged military objective is temporary, the location retains a civilian character, and the attacker chooses a weapon whose effects occur only after some meaningful delay.

This analysis applies the principles of distinction, proportionality, and precautions in attack under AP I, and considers whether the conduct examined may give rise to individual criminal responsibility under the Rome Statute (RS). In this Chapter, “control” refers not to a separate legal test, but to the attacker’s ability to comply with established obligations of verification, choice of means and methods, proportionality assessment, and cancellation or suspension where the conditions for attack no longer exist. The analysis shows that a precision weapon with destructive effects and a significant launch-to-impact interval, paired with a temporary or mobile target located in a civilian environment, raises recurring legal questions under each of those principles. The legal conclusions vary across the four incidents, reflecting the differences in the legal concerns each raises and the strength of the evidence available.

### 3.1 Distinction

Under art. 52(2) AP I, an object qualifies as a military objective only where two cumulative conditions are satisfied: it must, by its nature, location, purpose, or use, make an effective contribution to military action; and its destruction, capture, or neutralization must offer a definite military advantage in the circumstances ruling at the time.<sup>67</sup> Both elements must be met. The effective contribution requirement must be assessed by reference to how the object is being used in the circumstances ruling at the time, not solely by reference to who is present within it at a given moment.<sup>68</sup> The definite military advantage requirement excludes advantages that are speculative or indeterminate.<sup>69</sup> Where doubt exists as to whether an object normally used for civilian purposes is contributing to military action, art. 52(3) AP I requires it to be presumed not to be so used.<sup>70</sup> Post-strike assertions about the military significance of a location cannot retroactively

satisfy a standard that the attacker must assess based on the information available at the time of the attack.<sup>71</sup>

An issue common to all four incidents examined in **Chapters 1** and **2** is that the justification advanced in Russian sources for each attack rested not on the location’s inherent military character but on the presence of military personnel there. That framing raises a distinct legal question. IHL regulates the targeting of persons and objects through distinct rules. Combatants may be targeted as individuals,<sup>72</sup> but whether a location qualifies as a military objective is a separate question governed by art. 52 AP I.<sup>73</sup> The presence of lawfully targetable individuals does not, without more, convert the location into a military objective. Nor does the fact that military personnel were off duty, unarmed, or present for social purposes by itself resolve whether they were targetable as individuals. The relevant question for this report is whether the temporary presence of military personnel is sufficient to transform a civilian object into a military objective. That assessment depends on the nature, function, duration, and military significance of the activity. The status of the location as an alleged military objective, therefore, requires an independent assessment under art. 52(2) AP I, taking into account the nature, purpose, location, or use of the object itself. Even if individual military personnel were targetable, the attacker still had to comply with proportionality and precautions obligations when choosing the timing, means, and method of attack.

A further consideration specific to moving target attacks is the temporal dimension of target classification. The attacker must assess the status of a target at the time of the attack.<sup>74</sup> Where the alleged military objective consists of individuals temporarily present at a location, and the weapon has a significant launch-to-impact interval, the factual basis for that classification may change between launch and impact. This, by itself, does not render the attack unlawful. Still, it is relevant to assessing the reliability of the target classification at the time of impact, as well as to the proportionality and precautionary obligations examined in the sections that follow.

## Application to the selected incidents

For Kramatorsk, this report adopts Truth Hounds' prior legal analysis.<sup>75</sup> The Ria Lounge was a commercial restaurant with no military function, operating as an ordinary civilian venue on the evening of the attack. Military personnel were present temporarily for a private social occasion, unarmed and off-duty, alongside roughly equal numbers of civilian patrons.<sup>76</sup> The basement room had been reserved in advance for a birthday celebration for an officer of one unit, though the cafe as a whole continued to operate as a publicly accessible venue throughout, with no military equipment or command activity visible to outside observers.<sup>77</sup> The Russian Ministry of Defense's post-strike claim that the target was the "temporary command post of the 56th Motorized Infantry Brigade" is not supported by the available evidence.<sup>78</sup> Truth Hounds noted that, given the concentration of military personnel on the day of the attack, Russia may have had grounds to consider some Ukrainian military personnel at the Ria Lounge targetable. It concluded, however, that the available evidence did not establish the cafe itself as a military objective.<sup>79</sup> On that basis, Truth Hounds treated the distinction question as ultimately unresolved and focused its legal qualification primarily on the indiscriminate nature of the attack, addressed in [section 3.4](#) below.

Vinnytsia presents the most difficult distinction analysis. A working meeting between Ukrainian Air Force command and defense-industry representatives was scheduled at the House of Officers on the day of the strike, and four Air Force officers were among those killed.<sup>80</sup> Unlike the gatherings in Kramatorsk and Zlatopil, this meeting appears to have had a more direct military character because it reportedly involved coordination between the Air Force command and defense-industry representatives. The object itself was a public cul-

tural venue operating as an ordinary community center, and classification as a military objective could only rest on its use at the specific moment of the attack.<sup>81</sup> Whether a single scheduled meeting of this kind meets the effective contribution requirement is a question on which legal assessment may reasonably differ. The temporal element raises more significant concerns: the air-raid alert was issued approximately 29 minutes before impact, an interval sufficient for the meeting to be suspended or relocated.<sup>82</sup> Where the military objective consists of a time-limited gathering of individuals who received a warning of the incoming strike, the anticipated military advantage is inherently unstable. If the anticipated military advantage depended on the continued presence of a time-limited meeting, the warning interval and flight time made that advantage uncertain by the time of impact. That uncertainty does not resolve the distinction analysis on its own, but it bears directly on whether Russian forces had a reliable basis to treat the venue as a military objective at the time of the attack.<sup>83</sup>

In Zlatopil, the location struck was a residential area with no military character by nature, location, or purpose. A funeral ceremony, even one attended by military personnel including unit leadership, would not by itself transform the surrounding residential area into a military objective; the presence of military personnel does not eliminate the need to assess the status of the surrounding civilian environment and the effects of the attack on it.<sup>84</sup>

Additionally, the missile struck approximately 800 meters from where the ceremony was taking place, which is far outside the weapon's expected accuracy range.<sup>85</sup> If the funeral gathering was the intended target, this raises additional questions about whether Russian forces accurately directed the strike at the alleged objective at all.

The alternative explanation advanced by a popular pro-Kremlin Telegram channel Colonelcassad, namely that the strike targeted military personnel allegedly expected to gather at the nearby Zodiak Cafe following the funeral,<sup>86</sup> raises distinct concerns. The missile struck within approximately 20 to 30 meters of the cafe, consistent with the weapon's expected accuracy, making this scenario more plausible from a targeting perspective. However, the available evidence does not support

<sup>75, 79</sup> Truth Hounds, "The bill is on you," section "Legal qualification."

<sup>76, 77</sup> See [Chapter 1](#).

<sup>81, 82</sup> [Chapter 2](#), section "Vinnytsia, July 14, 2022," "fiction."

<sup>83</sup> Art. 52(2) AP I; ICRC Commentary on AP I, para. 2024.

<sup>85</sup> The Iskander-K cruise missile system is capable of striking within 5 to 10 meters of its intended target. See Sam Cranny-Evans and Sidharth Kaushal, "The Iskander-M and Iskander-K: A Technical Profile," Royal United Services Institute, Aug. 8, 2022, <https://www.rusi.org/explore-our-research/publications/commentary/iskander-m-and-iskander-k-technical-profile>, last accessed June 2, 2026. This figure refers to the cruise missiles launched from the Iskander system generally; specific accuracy data for the 9M727 variant is not publicly available. A strike landing 800 meters from the alleged target substantially exceeds what any plausible margin of targeting imprecision for a weapon of this type could account for.

<sup>87</sup> [Chapter 2](#), section "Zlatopil, July 4, 2023."

the existence of any such planned gathering.<sup>87</sup> In any event, even if military personnel had been expected to gather at the cafe, an anticipated future gathering would not, by itself, render the cafe a military objective at the moment of the attack, particularly given that the cafe occupies the ground floor of a nine-story residential apartment building.

The Chernihiv strike raises a distinct dimension of the distinction analysis. The Drama Theatre was hosting an exhibition organized by defense-technology NGOs involving manufacturers and operators of military drones.<sup>88</sup> Whether the exhibition and its participants constituted a lawful military objective is a question this report cannot resolve with the available evidence. What the Chernihiv case does raise with particular clarity is a question about the choice of means. The missile was equipped with a proximity fuse and configured to detonate in mid-air above the theatre, maximizing fragmentation effects in the surrounding open area rather than neutralizing those inside the building.<sup>89</sup> All seven fatalities were outside the building.<sup>90</sup> An airburst configuration of this kind is difficult to reconcile with an attack directed at persons or activities inside the building. It raises the question of whether the strike was configured to maximize harm to those in the surrounding area, which is addressed in [section 3.4](#).

## 3.2 Proportionality

Art. 51(5)(b) AP I prohibits an attack where it may be expected to cause incidental loss of civilian life, injury to civilians, or damage to civilian objects that would be excessive in relation to the concrete and direct military advantage anticipated.<sup>91</sup> The proportionality rule does not prohibit civilian harm as such; it requires that such harm not be excessive relative to the military advantage the attack is expected to produce. Two elements of that assessment are particularly significant in the context of moving target attacks: the nature and reliability of the anticipated military advantage, and the foreseeability of civilian harm given the circumstances of the attack.

On the first element, the anticipated military advantage must be concrete and direct, not hypothetical or speculative.<sup>92</sup> Where the alleged military objective consists of individuals temporarily present at a location, the advantage anticipated from the attack is inherently dependent on their continued presence at the moment of impact. When the attacking party chooses a weapon with a significant launch-to-impact interval, there will be a temporal gap during which the alleged target's continued presence cannot be verified or guaranteed. The longer that gap, the greater the risk that the advantage anticipated at the moment of launch will have diminished or disappeared entirely by the time the weapon arrives. Where the anticipated advantage depends on the continued presence of individuals at a particular location, the attacker must account for the risk that the advantage will diminish or disappear before impact. The greater that risk, the weaker the anticipated military advantage becomes for proportionality purposes.

On the second element, the attacker must assess the foreseeability of civilian harm against the actual circumstances of the attack, including the character of the location, the time of day, the density of civilian presence, and the destructive effects of the weapon chosen.<sup>93</sup> In each of the incidents examined, the locations struck were civilian in character and situated within populated urban environments. Given the nature of the locations and the timing of the strikes, Russian forces could reasonably expect civilians to be present at or near those locations. The weapons used were capable of causing significant destruction beyond the immediate point of impact. That foreseeable civilian harm had to be weighed against the anticipated military advantage, including the possibility that the alleged target might no longer be present by the time of impact.

### Application to the selected incidents

For Kramatorsk, the anticipated military advantage of the strike was the neutralization of military personnel present at the Ria Lounge. The available evidence indicates that those personnel were off-duty and present for a private social occasion with no operational significance.<sup>94</sup> The anticipated military advantage appears limited because the available evidence does not

<sup>88, 90</sup> Chapter 2, section "Chernihiv, August 19, 2023."

<sup>94</sup> Truth Hounds, "The bill is on you," section "Legitimate Military Targets."

indicate that those personnel were engaged in any military function at the venue. The available evidence does not show that their presence at the venue had operational significance, or that striking them would have degraded a specific military capability. Against that limited anticipated advantage must be weighed the foreseeable civilian harm of launching a cruise missile with a warhead of approximately 500 kilograms into a densely populated area of a large city during the evening service at a busy restaurant.<sup>95</sup> The presence of substantial numbers of civilians at the venue and in the surrounding area was entirely foreseeable. There are, therefore, serious grounds to question whether the expected civilian harm was proportionate to the anticipated military advantage.

Vinnytsia presents the strongest proportionality concerns among the incidents examined. First, the anticipated military advantage, while more substantial than in Kramatorsk, given the meeting's operational character, was highly time-sensitive. Warnings about missile launches from the Black Sea had been circulating since approximately 9:52 a.m., and a formal air-raid alert in Vinnytsia was issued at 10:12 a.m., approximately 29 minutes before impact.<sup>96</sup> The missile's total flight time of approximately 40-50 minutes appears sufficient for the situation on the ground to change and for the attack's targets to suspend or conclude the meeting before the missiles arrived. Where the anticipated military advantage depended on the continued presence of a time-sensitive meeting, the warning period and flight time increased the risk that the expected advantage would diminish or disappear before impact. That uncertainty had to form part of the proportionality assessment.<sup>97</sup> Second, the civilian harm caused by the strike was extensive and entirely foreseeable. The missiles struck the center of Vinnytsia at approximately 10:41 a.m. on an ordinary Thursday morning, hitting a densely populated urban area during normal business hours. The strike killed 29 people, including five servicemen, and injured over 150, including 12 servicemen.<sup>98</sup> In the Vinnytsia case, therefore, the anticipated military advantage was uncertain, while the civilian harm was substan-

tial and fully foreseeable. On that basis, serious concerns arise under art. 51(5)(b) AP I, even if the available evidence does not permit a definitive legal conclusion.

For Zlatopil, the difficulty of identifying the intended military objective challenges the proportionality assessment. The missile struck 800 meters from the funeral gathering, and all reported casualties were civilians.<sup>99</sup> If the intended target was the funeral gathering at the central square, the missile struck 800 meters away, failing to reach any military objective at all, making it difficult to identify any anticipated military advantage against which to weigh the foreseeable civilian harm. If the intended target was the Zodiak cafe, the missile struck with expected accuracy, but the available evidence indicates the cafe had been closed for years with no signs of current military use. In that scenario, the anticipated military advantage of striking a location with no apparent military function is difficult to characterize as concrete and direct within the meaning of art. 51(5)(b) AP I. In either scenario, the use of a cruise missile in a residential area during a large public gathering, with entirely foreseeable civilian harm, raises serious proportionality concerns that the results of the strike confirm. The proportionality concerns in Zlatopil, therefore, overlap significantly with the precautions analysis addressed in the following section.

For Chernihiv, the uncertainty about the status of the target discussed in [section 3.1](#) complicates the proportionality analysis. If the exhibition and its participants are accepted for the purposes of analysis as constituting a military objective of some kind, the attacker must still weigh the anticipated military advantage against the foreseeable civilian harm. The missile was programmed to detonate above the theatre, maximizing fragmentation effects across the surrounding open area.<sup>100</sup> That configuration predictably exposed civilians present in the city center square to lethal fragmentation, while offering limited effectiveness against those inside the building where the exhibition was being held. The strike killed seven people and injured at least 193, all casualties resulting from fragmentation in the open area surrounding the theatre.<sup>101</sup> Therefore, the choice of means significantly amplified the foreseeable civilian harm beyond what would have resulted

<sup>95</sup> Chapter 1, section "The Attack on the RIA Lounge: A Diagnostic Case for Moving Target Attacks."

<sup>99</sup> Chapter 2, section "Zlatopil, July 4, 2023."

<sup>101</sup> Chapter 2, section "Chernihiv, August 19, 2023."

from a contact detonation directed at the building itself. In contrast, there was no increase in the strike's military effectiveness. That disproportion between the means chosen and the harm produced raises concerns about compliance with art. 51(5)(b) AP I, independently of the uncertainty about the target's status.

### 3.3 Precautions in Attack

Article 57 AP I imposes a set of affirmative obligations on those who plan or decide upon attacks. Those obligations require, among other things, that those who plan or decide upon attacks do everything feasible to verify that the intended target is a military objective;<sup>102</sup> that they take feasible precautions in the choice of means and methods of attack with a view to avoiding or minimizing incidental civilian harm;<sup>103</sup> that they refrain from an attack that may be expected to cause excessive incidental civilian harm;<sup>104</sup> and that they cancel or suspend an attack if it becomes apparent that the target is not a military objective or that the attack would be disproportionate.<sup>105</sup> The standard of feasibility requires that the attacker take precautions where practicable, having regard to all circumstances ruling at the time, including military considerations.<sup>106</sup> That said, feasibility is assessed against what was actually possible in the circumstances, not against what would have been convenient for the attacker.

In the context of moving target attacks, the precautions obligation takes on particular significance for two reasons. First, in cases where the alleged military objective consists of individuals temporarily present at a location, the duty to verify that the target is a military objective requires not only confirming that those individuals were present at some point before the launch, but also assessing whether they are likely to remain present at the moment of impact.<sup>107</sup> Outdated intelligence about a temporary target can complicate compliance with the verification obligation. Second, choosing a weapon with a significant launch-to-impact interval and destructive effects has direct implications for the attacker's ability

to verify the target and limits the effects of the strike.<sup>108</sup> Where a weapon cannot be redirected or recalled after launch, the attacker must satisfy the precautions obligation principally through pre-launch verification, weapon selection, timing, and assessment of expected civilian harm.<sup>109</sup> The longer the flight time, the greater the risk that the factual situation on the ground will change between launch and impact in ways the attacker cannot monitor or correct.

The obligation to cancel or suspend an attack has limited application to cruise missiles. Once launched, a cruise missile generally cannot be recalled or redirected.<sup>110</sup> This constraint intensifies the pre-launch duties of verification and assessment. If an attacker chooses a weapon that cannot be recalled, the importance of thorough pre-launch verification of the target's continued presence and expected civilian harm increases correspondingly.<sup>111</sup>

#### Application to the selected incidents

For Kramatorsk, the precautions analysis is particularly significant in light of the timing established in the TH investigation. The last known on-site observation by the Russian informant took place at approximately 5:00 p.m. The launch most likely occurred between 7:14 p.m. and approximately 7:20 p.m., meaning Russian forces based the attack on intelligence that was already over two hours old at the time of launch. The missile's flight time of between 9 and 15 minutes added a further interval during which, even if updated information had been available, no corrective action was possible: the missile could not be recalled or redirected after launch. The set of individuals present at the venue at 5:00 p.m. was not necessarily the same as those present at impact, and there was no mechanism for the attacker to verify their continued presence after the informant left. Once Russia launched the missile, no further verification, redirection, or recall was possible.<sup>112</sup> Because Russian forces could not verify, redirect, or recall the missile after launch, compliance with art. 57(2)(a)(i) AP I depended on the adequacy of their pre-launch verification. The more difficult question is whether the pre-launch verification was sufficient. That the intelligence underlying the attack was already more than two hours old at the moment of impact raises serious doubts

<sup>110</sup> This is a technical observation about the operational characteristics of cruise missiles of the type used in the incidents examined.

about whether the pre-launch verification met the standard required by art. 57(2)(a)(i) AP I.

The choice of means also raises concerns under the principle of precautions. A cruise missile with a warhead of approximately 500 kilograms, directed at a temporary gathering of individuals in a densely populated urban area, created an obvious risk of extensive incidental civilian harm.<sup>113</sup> That risk required careful consideration of whether other feasible means or methods could have reduced civilian harm, or whether the attack should have been refrained from altogether. Where the alleged military objective consisted of individuals temporarily present in a civilian venue alongside civilian patrons, the weapon's destructive characteristics raise the question of whether feasible alternatives existed that would have caused less incidental harm. Where no such alternatives were available, the question arises whether the attack should have been foregone entirely.

For Vinnytsia, the precautions concerns are of a different character but are in some respects more acute. Warnings about missile launches from the Black Sea had been circulating since approximately 9:52 a.m., and a formal air-raid alert in Vinnytsia was issued at 10:12 a.m., giving a total warning of at least 29 minutes before impact.<sup>114</sup> That interval was not only sufficient for civilians to seek shelter, but it was also sufficient for the alleged military objective, a meeting of military and defense-industry personnel, to be suspended or relocated. The precautions obligation requires that the attacker assess whether the target will remain present at the moment of impact.<sup>115</sup>

An attacker who launches a weapon with a flight time of 40 to 50 minutes against a temporary gathering must account for the serious possibility that the target will no longer be present at impact. This is particularly so where the individuals concerned had received 29 minutes' warning before the missile arrived. The verification obligation under art. 57(2)(a)(i) AP I requires more than confirming, where feasible, the target's presence

at the moment of launch. It requires a realistic assessment of whether that presence will continue through the weapon's flight time.

For Zlatopil, the precautions concerns overlap significantly with the targeting uncertainty discussed in [sections 3.1 and 3.2](#). If the intended target was the funeral gathering at the central square, the missile struck 800 meters away, significantly further than the weapon's expected margin of error.<sup>116</sup> If the intended target was the Zodiak cafe, the available evidence indicates that it had not been operational for years, which raises fundamental questions about the adequacy of target intelligence and verification before the attack.<sup>117</sup> It is also relevant that the gathering had partly dispersed before the strike, as the ceremony had been temporarily paused and mourners had been asked to move indoors or leave the square, further undermining the reliability of any pre-launch assessment of the target's continued presence. In either case, Russian forces appear to have conducted the pre-launch assessment based on inaccurate or insufficient information. The verification obligation under art. 57(2)(a)(i) AP I requires those who plan or decide upon an attack to do everything feasible to verify the target's military character and its location.<sup>118</sup> The available evidence raises serious doubts about whether Russian forces met that standard.

For Chernihiv, the precautions analysis focuses primarily on the choice of means. According to the Ukrainian investigation, the missile was launched no later than 11:10 a.m. from Kursk Oblast and struck the Drama Theatre at 11:29 a.m., giving a launch-to-impact interval of approximately 19 minutes.<sup>119</sup> As established in the factual account, Russian forces configured the missile with a proximity fuse to detonate in mid-air above the theatre.<sup>120</sup> That configuration appears to have resulted from a pre-launch choice. It spread fragmentation effects across the open area surrounding the theatre while offering limited effectiveness against those inside the building. The exhibition was being held inside the theatre, not in the open area outside. If the intended objective was the exhibition and its participants, the airburst configuration was poorly suited to engaging them effectively while being well suited to causing widespread harm to civilians in the surrounding square. Article 57(2)(a)(ii) AP I

<sup>113</sup> [Chapter 1](#), section "The Attack on the Rïa Lounge: A Diagnostic Case for Moving Target Attacks."

<sup>114</sup> [Chapter 2](#), section "Vinnytsia, July 14, 2022."

<sup>116, 117</sup> [Chapter 2](#), section "Zlatopil, July 4, 2023."

<sup>119</sup> [Zusko Notice of Suspicion](#), *supra* note 63; [Chapter 2](#), section "Chernihiv, 19 August 2023."

requires that the attacker take precautions in the choice of means with a view to avoiding or minimizing incidental civilian harm.<sup>121</sup> The choice of an airburst configuration in these circumstances raises serious questions about whether Russian forces met that obligation. The strike took place on a Saturday morning during a public holiday, when the city center was predictably busy with civilians.<sup>122</sup> The combination of that context and the airburst configuration raises serious questions about whether Russian forces adequately accounted for the foreseeable civilian harm in the pre-launch assessment.

### 3.4 Indiscriminate Attacks and Legal Qualification

Art. 51(4) AP I prohibits indiscriminate attacks. The provision covers three categories: attacks not directed at a specific military objective; attacks employing methods or means of combat that cannot be directed at a specific military objective; and attacks employing methods or means of combat whose effects cannot be limited as required by AP I.<sup>123</sup> The first category covers attacks that are not directed at a specific military objective, including cases where the attacker fails to identify or direct the attack at a lawful target.<sup>124</sup> The second addresses situations where the method or means used is incapable of being aimed at a specific military objective, regardless of the attacker's intent. The third addresses situations where the means used, even if technically capable of being directed at a target, produce effects that cannot be limited as required by AP I.<sup>125</sup> Together, these categories reflect the principle that the attacker must respect distinction not only at the level of target selection but also at the level of execution: an attack that begins with a lawful target may still be indiscriminate if the means or methods chosen make it impossible to confine its effects to that target.<sup>126</sup>

Article 51(5)(b) AP I also treats as indiscriminate attacks expected to cause civilian harm excessive in relation to the anticipated military advantage, the disproportionate attack prohibition addressed in [section 3.2](#).<sup>127</sup> Although Article 51 AP I treats disproportionate attacks as a subset of indiscriminate attacks, the two notions are generally

understood to derive from different legal principles. Indiscriminate attacks primarily concern the principle of distinction, whereas disproportionate attacks primarily concern the principle of proportionality. The relationship between the two concepts has generated considerable debate in the literature and has not always been sharply delineated in judicial practice, including in the ICTY's *Galić* case.<sup>128</sup> This report does not seek to resolve the conceptual boundaries between these notions. Rather, it acknowledges the tension inherent in the structure of Article 51 AP I and proceeds on the basis that, in practice, the same attack may in some circumstances be assessed through both legal frameworks.

The ICTY's case law has given content to the prohibition on indiscriminate attacks beyond its treaty text. In *Galić*, the Trial Chamber confirmed that the prohibition is not limited to attacks deliberately aimed at civilians; it extends to attacks carried out without adequate regard for whether they will strike military objectives or civilians indifferently.<sup>129</sup> In *Martić*, the Trial Chamber held that the use of means of combat incapable of distinguishing between military objectives and civilians in the circumstances of their use constitutes an indiscriminate attack.<sup>130</sup>

These prohibitions may also give rise to individual criminal responsibility under international criminal law. Article 8(2)(b)(iv) RS criminalizes intentionally launching an attack in the knowledge that it will cause incidental loss of civilian life, injury to civilians, or damage to civilian objects clearly excessive in relation to the concrete and direct overall military advantage anticipated.<sup>131</sup> This provision incorporates a criminalized form of the proportionality standard but adds a subjective element: the perpetrator must intentionally launch the attack with knowledge that the expected incidental civilian harm would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.<sup>132</sup> That knowledge does not have to be proven through direct evidence; it may be inferred from the circumstances of the attack, including the character of the location, the weapon used, and the information available to the attacker at the time.<sup>133</sup> The ICC Elements of Crimes require assessment on the basis of the information available to the perpetrator at the time of the decision to launch the attack, while

recognizing that the proportionality assessment involves a value judgment.<sup>134</sup> That knowledge may be inferred from circumstantial evidence, but the standard remains one of knowledge, not mere negligence. Arts. 8(2)(b)(i) and 8(2)(b)(ii) RS separately criminalize intentionally directing attacks against the civilian population and against civilian objects, respectively.<sup>135</sup> Those provisions may become relevant where the evidence shows that the attack was intentionally directed against civilians or civilian objects, including where the alleged military objective did not exist or had ceased to exist and the attacker knew or intended that result.

The use of a precision-guided weapon does not, on its own, answer the legal question. What matters is not only whether the weapon was technically capable of hitting a specific target. A further important question is whether, in the circumstances of the attack, the attacker could meaningfully direct the chosen weapon at the alleged military objective in a way that distinguished it from the surrounding civilian population and objects.<sup>136</sup> The UN Commission of Inquiry on the 2014 Gaza Conflict concluded that the use of weapons with a wide impact area in densely populated areas is likely to violate the prohibition of indiscriminate attacks, regardless of their technical precision.<sup>137</sup> In moving target scenarios, that question turns on the relationship between the weapon's flight time, the temporary character of the alleged target, and the attacker's ability to control who the weapons will strike at the moment of impact. A weapon launched at coordinates associated with a military objective may arrive at a location that no longer corresponds to any military objective at all. When that happens, the weapon's technical precision offers no legal justification: the coordinates themselves had ceased to be meaningful before the weapon arrived.

Central to this analysis is the question of control over the target. If the attacker has no means of verifying the target's continued presence after launch, no ability to redirect or recall the weapon, and no way of reassessing the civilian situation at the point of impact during flight, the attack depends increasingly on an assumption that the alleged military objective will remain present, rather than on information the attacker can verify or update before impact.<sup>138</sup> The longer the flight

time, the more that assumption is tested by the passing of time and the inherent mobility of the target. The rationale behind the prohibition on indiscriminate attacks, as the ICRC Commentary on art. 51 AP I explains, is to address precisely those situations where the attacker has no assurance that the effects of the strike will fall on the military objective rather than on civilians.<sup>139</sup> In such circumstances, the mental element under art. 8(2)(b)(iv) RS may be inferred from circumstantial evidence, including the attacker's knowledge of the weapon's characteristics, the civilian character of the location, the foreseeable civilian presence, and the temporary nature of the alleged target. Whether that evidence satisfies the mental element would depend on whether it shows that the attacker knew the expected incidental civilian harm would be clearly excessive in relation to the anticipated military advantage.<sup>140</sup>

## Application to the selected incidents

For Kramatorsk, Truth Hounds previously concluded that the attack constituted a war crime in the form of an indiscriminate attack.<sup>141</sup> This report adopts that conclusion and analyzes the attack under Article 51 AP I and Article 8(2)(b)(iv) of the Rome Statute.

Truth Hounds acknowledged that the concentration of military personnel at the Ria Lounge on the day of the attack may have given Russia grounds to consider some Ukrainian military personnel at the venue targetable, but concluded that the available evidence did not establish the cafe itself as a military objective.<sup>142</sup> The legal qualification rested on the interaction between the weapon's wide, destructive effects and the circumstances of its use: Russian forces launched a cruise missile with a significant launch-to-impact interval – between 9 and 15 minutes – against a temporary target in a civilian venue, without the ability to verify, redirect, or recall the weapon after launch.<sup>143</sup> On those facts, Truth Hounds concluded that the attack was indiscriminate in nature, and that the use of a cruise missile in those circumstances itself demonstrated that the attacker was aware of the potential for excessive harm and did not take measures to avoid it, satisfying the awareness element under art. 8(2)(b)(iv) RS.<sup>144</sup>

For Vinnytsia, Chernihiv, and Zlatopil, this report does not make equivalent legal qualifications. The evidentiary record for those incidents does not support the definitive conclusions reached by Truth Hounds following a full field investigation into Kramatorsk. Yet, each incident raises serious concerns under the indiscriminate attack framework that warrant further investigation and legal assessment.

In Vinnytsia, the combination of a flight time of 40 to 50 minutes, a temporary and time-sensitive alleged target, and an air-raid alert issued at least 29 minutes before impact raises the question of whether the attack could meaningfully be directed at the alleged military objective at the moment of impact.<sup>145</sup> If the meeting had been suspended or relocated following the alert, which the available evidence neither confirms nor excludes, the missiles struck a location that no longer corresponded to any military objective. In those circumstances, the attack would fall within art. 51(4)(a) AP I regardless of the technical precision of the weapons used.<sup>146</sup> The same circumstances may also be relevant to any assessment of the mental element under art. 8(2)(b)(iv) RS. Russian forces launched three cruise missiles with a flight time of 40 to 50 minutes against a temporary gathering whose participants had received at least 29 minutes of warning. In those circumstances, it is possible to infer that Russian forces knew substantial civilian harm was likely, given the predictable scale of harm from striking a densely populated city center on an ordinary weekday morning. That inference is relevant to art. 8(2)(b)(iv), but it is not by itself sufficient. Whether the circumstances establish the required knowledge that the expected civilian harm would be clearly excessive in relation to the anticipated military advantage would require further evidence.<sup>147</sup>

In Zlatopil, the indiscriminate attack concerns arise primarily from the difficulty of identifying the intended military objective. The missile struck approximately 800 meters from the funeral gathering, far outside the weapon's expected accuracy range if the funeral gathering was the intended target, and approximately 20 to 30 meters from the Zodiak cafe if that was the intended target. In either scenario, the missile hit a residential area where all casualties were civilians.<sup>148</sup> It is also relevant that by the time of the strike, the

gathering had partly dispersed: the ceremony had been temporarily paused, and mourners had been asked to move indoors or leave the square, meaning that even if the strike had been accurately directed, the alleged military objective may no longer have been present at the intended location.<sup>149</sup> Whether the result reflects a targeting error, faulty intelligence, or some other failure in the targeting process cannot be determined on the available evidence. Each of those possibilities raises distinct and serious concerns under the prohibition on indiscriminate attacks, and each warrants investigation.

In Chernihiv, the indiscriminate attack analysis connects directly to the choice of means discussed in [sections 3.1](#) and [3.3](#). The airburst warhead configuration spread fragmentation effects across the open area surrounding the theatre rather than concentrated on the alleged objective inside the building.<sup>150</sup> All seven fatalities were outside the building, and at least 193 people were injured, the majority in the open area outside.<sup>151</sup> A weapon configured in this way, used in a city center on a busy Saturday morning during a public holiday, raises serious concerns under art. 51(4)(c) AP I, the prohibition on attacks employing means whose effects cannot be limited as required.<sup>152</sup> The deliberate choice of an airburst configuration is also relevant to the mental element under art. 8(2)(b)(iv) RS: it may support the inference that those responsible knew that the strike would cause significant harm to civilians in the surrounding area.<sup>153</sup> Whether that satisfies art. 8(2)(b)(iv) RS depends on whether the evidence also shows knowledge that such harm would be clearly excessive in relation to the anticipated military advantage.

## 3.5 Conclusion

The analysis in this chapter shows that the incidents examined in this report can be assessed within existing IHL rules. The relevant questions are not whether moving target attacks form a separate legal category, but whether Russian forces complied with established obligations of distinction, proportionality, precautions in attack, and the prohibition of indiscriminate attacks when they used delayed-impact weapons against temporary alleged targets in civilian environments.

In each case presented here, Russian forces carried out an attack using a precision-guided weapon against an alleged military objective consisting of individuals temporarily present in a civilian environment. In each case, the weapon's significant flight time created a gap between the decision to strike and the moment of impact during which the factual situation on the ground could have changed in ways the attacker could neither monitor nor correct. And in each case, the civilian harm that resulted was both substantial and foreseeable.

For Kramatorsk, this report adopts the conclusion already reached by Truth Hounds: the attack constituted a war crime in the form of an indiscriminate attack. That conclusion should not preclude alternative or cumulative legal characterization. On the available facts, justice actors should also consider whether the same conduct may be charged or pleaded as an attack directed against a civilian object or civilians, or as a clearly exces-

sive attack, depending on the evidence available to the prosecuting authority. For Vinnytsia, Zlatozil, and Chernihiv, the evidentiary record available to the authors of this report does not permit equivalent findings, but the concerns identified warrant further investigation by authorities with access to a fuller evidentiary record.

Across the four incidents, the recurring legal concern is control. Where the alleged military objective consists of individuals temporarily present in a civilian setting, and the attacker uses a weapon that cannot be redirected or recalled after launch, the legality of the attack depends heavily on the reliability of pre-launch verification, the choice of means and methods, and the assessment of foreseeable civilian harm. Technical precision does not resolve those questions. A weapon may hit its programmed coordinates and still raise serious legal concerns if the attacker lacked a reliable basis to believe that a lawful military objective would remain present at impact.

## The launch-to-impact gap as a legal problem



# Conclusion

This report examines a specific and recurring scenario in Russia's conduct of hostilities in Ukraine: strikes that use precision-guided cruise missiles against alleged military objectives that are temporary in nature, in civilian environments, and dependent on the continued presence of individuals whose presence cannot be verified at the moment of impact. We selected the four incidents examined – Kramatorsk, Vinnytsia, Zlatopil, and Chernihiv – because they share that combination of features. They are presented as brief case studies to illustrate this legal problem in different ways and support conclusions about specific incidents, with varying degrees of certainty. The ultimate concern is civilian protection: ensuring that target selection, timing, and weapon choice do not make civilian death foreseeable before a missile is even launched.

The report's primary analytical contribution is the application of existing rules of international law to a factual scenario that has received limited attention in legal scholarship and accountability mechanisms. The principles of distinction, proportionality, and precautions in attack are well established in international law. What this analysis shows is that applying these rules is particularly imperative in precisely the circumstances that moving target attacks present: a weapon that cannot be recalled, a target that may not persist, and a civilian environment where harm is foreseeable from the moment of launch. That combination creates a situation in which existing legal obligations apply in full and in which the consequences of non-compliance are severe and predictable.

The accountability implications of this analysis deserve attention beyond the four incidents examined. Investigating and prosecuting attacks

of this kind is challenging; the targeting chain for a cruise missile strike, from intelligence collection through target selection, weapon choice, launch authorization, and post-strike assessment, involves multiple individuals and layers of decision-making, much of which is not visible in open-source materials. Establishing individual criminal responsibility requires access to communications, orders, targeting packages, and internal assessments that only authorities with coercive investigative powers can likely obtain. The Ukrainian Office of the Prosecutor General and national authorities exercising universal jurisdiction are well placed to pursue such evidence.

The report points to a gap in existing legal guidance. The application of distinction, proportionality, and precautions to attacks against temporary or mobile targets in civilian environments has received limited treatment in legal scholarship and no systematic attention from international bodies. The ICRC can address that gap through expert discussions bringing together military practitioners, legal advisers, and IHL scholars. Clearer guidance on how existing obligations apply in this context would benefit not only accountability efforts but also the development of targeting doctrine among armed forces that take their IHL obligations seriously.

One question this report raises but cannot answer is whether the four incidents reflect a series of Russian forces' targeting failures or a consistent operational approach to striking temporary, alleged military objectives in civilian environments in Russia's war in Ukraine. Whether recurrences reflect policy, practice, or coincidence is a question that requires further investigation.

Russia's conduct in the incidents examined in this report warrants serious and sustained attention from investigators, prosecutors, and accountability mechanisms, as does the broader operational practice they may reflect. The evidence and analysis presented here are offered as a contribution to that effort.

# Sources & footnotes

- 1 Truth Hounds, "The bill is on you. Identification of the unit responsible for the missile attack on Kramatorsk and Bilenke on 27 June 2023", Nov 8, 2023, <https://truth-hounds.org/en/cases/the-bill-is-on-you-identification-of-the-unit-responsible-for-the-missile-attack-on-kramatorsk-and-bilenke-on-the-27-june-2023/>, last accessed Jun. 2, 2026 (Truth Hounds, "The bill is on you").
- 2 Interviews were conducted in Ukrainian, Russian, and English.
- 3 Truth Hounds, "Documentation Methodology," May 22, 2014, <https://truth-hounds.org/document/methodology/>, last accessed Jun. 2, 2026; Truth Hounds, "Code of Ethics for Documenters," May 23, 2023, <https://truth-hounds.org/en/document/code/>, last accessed Jun. 2, 2026.
- 4 See Fabian Hoffmann, "Cruise Missiles 101" in Cruise Missile Proliferation: Trends, Strategic Implications, and Counterproliferation, European Leadership Network, 2021, at 5-13, <http://www.jstor.org/stable/resrep29682.5>, last accessed Apr. 20, 2026. See also "Defense Primer: U.S. Precision-Guided Munitions," Congress.gov, Library of Congress, <https://www.congress.gov/crs-product/IF11353>, last accessed Apr. 20, 2026.
- 5 The launch-to-impact interval estimate, which coincides with the weapon's flight time, is calculated for the purposes of this report using the formula  $t = d / v$ , where  $t$  is flight time,  $d$  is the straight-line (great-circle) distance between the approximate launch area and the point of impact, and  $v$  is the cruise speed of the weapon type. Distances were measured using the distance-measurement tool in Google Earth. Where cruise speed is expressed in meters per second, flight time in minutes is calculated as  $(d \times 1,000 / v) / 60$ ; where it is expressed in kilometres per hour, as  $(d / v) \times 60$ . These calculations are deliberately conservative and are intended as indicative lower estimates rather than precise figures. They assume a direct flight path, whereas cruise missiles in fact gain and lose altitude and may maneuver in flight, increasing both the distance travelled and the actual flight time. They also rely on nominal published cruise speeds and, in most cases, on an assumed rather than independently verified launch location. The actual flight time is therefore likely to be equal to or greater than the figure stated, which does not undermine, and if anything reinforces, the report's findings regarding the launch-to-impact interval.
- 6 Truth Hounds, "The bill is on you."
- 7 "Summary of the Ministry of Defense of the Russian Federation on the progress of the special military operation (as of June 29, 2023)," Department of Information and Mass Communications of the Ministry of Defense of the Russian Federation, June 29, 2023, <https://archive.ph/tawKn#selection-1241.0-1244.0>, last accessed June 2, 2026.
- 8 Truth Hounds, "The bill is on you."
- 9 Truth Hounds identified the weapon as an Iskander-K cruise missile on the basis of an analysis of the damage to the Ria Lounge and adjacent buildings, eyewitness accounts of the missile's flight, and a comparison of the tactical and technical characteristics of the range of missiles capable of having been used. The designations 9M727, 9M728, and 9M729 refer to variants of the Iskander-K. See Truth Hounds, "The bill is on you," section "Type of Weapon."
- 10 Truth Hounds, "Iskander-M vs Iskander-K," Truth Hounds Analytical Notes, Dec. 15, 2023, <https://truth-hounds.org/cases/iskander-m-vs-iskander-k/>, last accessed June 2, 2026.
- 11 "Iskander-M vs Iskander-K," Truth Hounds Analytical Notes, Dec. 15, 2023, <https://truth-hounds.org/cases/iskander-m-vs-iskander-k/>, last accessed June 2, 2026.
- 12 Interviewees who had lived in Kramatorsk for some time and spent time at Ria Lounge added that in general, this coexistence of the military and civilians is characteristic of Kramatorsk, since the city was and remains located close to the frontline.
- 13 Truth Hounds, "The bill is on you," Chapter "Direction of the Strike."
- 14 Launch from the occupied parts of Donetsk Oblast can be excluded because: a) there were no reliable reports that the Russian side deploys Iskander missile systems on the occupied territories of Ukraine; b) the deployment on Russian territory presents a much safer option, as Ukraine at that time was not authorized to strike Russian territory with long-range weapons supplied by its allies, while it was permitted to strike on the occupied territories. This was illustrated in June 2023 by a statement of AFU Air Force spokesman Yuriy Ilnat, who said that Ukraine would strike Iskander systems if they were deployed on the occupied territories. See Truth Hounds, "The bill is on you," section "Estimated Sector of Missile Launch."
- 15 The straight-line distance was measured using the distance measurement tool in Google Earth.
- 16 "Искандер-К дальность: реальные возможности крылатых ракет комплекса" ["Iskander-K Range: The Real Capabilities of the System's Cruise Missiles"], Vash Visnyk, April 24, 2026, <https://visnyk-nanu.org.ua/iskander-k-dalnist-realni-mozhlyvosti-krylyatyh-raket-kompleksu/>, last accessed June 5, 2026; "Пакети Искандер-К: характеристики та особливості небезпечного озброєння" ["Iskander-K Missiles: Characteristics and Features of a Dangerous Weapon"], Fakty ICTV, August 30, 2025, <https://fakty.com.ua/ua/ukraine/20250830-rakety-iskander-k-harakterystyky-ta-osoblyvosti-nebezpechnogo-ozbroynnyia/>, last accessed June 5, 2026; "Iskander-M vs Iskander-K", Truth Hounds Analytical Notes, Dec. 15, 2023, <https://truth-hounds.org/cases/iskander-m-vs-iskander-k/>, last accessed June 2, 2026.
- 17  $140 \text{ km} \div 900 \text{ km/h} = 0.155 \text{ hours}$ , or approximately 9.3 minutes. For more regarding calculations see supra note 5.
- 18 Truth Hounds, "Iskander-M vs Iskander-K," Truth Hounds Analytical Notes, Dec. 15, 2023, <https://truth-hounds.org/cases/iskander-m-vs-iskander-k/>, last accessed June 2, 2026; See e.g. "О ракетном ударе ВС РФ по Краматорску" ["Regarding the Russian Armed Forces' missile strike on Kramatorsk"], Colonelcassad, Telegram post, Jun 28, 2023, [https://t.me/boris\\_rozhin/90655](https://t.me/boris_rozhin/90655); "Россия нанесла удар по месту дислокации иностранных наемников в Краматорске" ["Russia struck a base of foreign mercenaries in Kramatorsk"], News Front, Jun 28, 2023, <https://web.archive.org/web/20230629115518/https://news-front.info/2023/06/28/rossija-nanesla-udar-po-mestu-dislokacii-inostrannyh-naemnikov-v-kramatorske/>, last accessed June 2, 2026; "Иностранных наемников уничтожили в кафе Краматорска одним ударом" ["Foreign mercenaries were eliminated in a single strike at a cafe in Kramatorsk"], Channel 360 and Mikhail Onuvrienko, Rutube, Jun 28, 2023, <https://rutube.ru/video/21ee807842dd04ad43c5c74173fef42a/>, last accessed June 2, 2026.
- 19 Ibid.
- 20 Aguanta Ucrania is a Latin American solidarity campaign created to build support for Ukraine in Latin America and raise awareness of Russia's attacks on civilians. European Commission Audiovisual Service, "Aguanta Ucrania," <https://audiovisual.ec.europa.eu/en/media/video/I-245987>, accessed May 31, 2026; International Women's Media Foundation, "They Tried to Rally South America Behind Ukraine. They Nearly Got Killed," July 28, 2023, <https://www.iwmf.org/reporting/they-tried-to-rally-south-america-behind-ukraine-they-nearly-got-killed>, last accessed May 31, 2026.
- 21 "Ukrainian Wedding Towel in American Volunteer's Coffin: Why Californian Ian Chose to Fight for Ukraine." Hromadske International. <https://hromadske.ua/en/war/242787-ukrainian-wedding-towel-in-american-volunteers-coffin-why-californian-ian-chose-to-fight-for-ukraine>, last accessed Jun. 2, 2026.
- 22 Ibid; see also "Иностранных наемников уничтожили в кафе Краматорска одним ударом" ["Foreign mercenaries were eliminated in a single strike at a cafe in Kramatorsk"], Channel 360 and Mikhail Onuvrienko, Rutube, Jun 28, 2023, <https://rutube.ru/video/21ee807842dd04ad43c5c74173fef42a/>, last accessed June 2, 2026; "Summary of the Ministry of Defense of the Russian Federation on the progress of the special military operation (as of June 29, 2023)," Department of Information and Mass Communications of the Ministry of Defense of the Russian Federation, June 29, 2023, <https://archive.ph/tawKn#selection-1241.0-1244.0>, last accessed June 2, 2026.
- 23 Ibid; see also "Песков заверил, что РФ наносит удары только по военной инфраструктуре Киева" ["Peskov assured that Russia is targeting only Kyiv's military infrastructure"], Parliamentary Gazette, Jun 28, 2023, <https://www.pnp.ru/politics/peskov-zaveril-cto-rf-nanosit-udary-tolko-po-voennoy-infrastrukture-kiyeva.html>, last accessed June 2, 2026; "В МИД России сожалеют о ранении трёх граждан Колумбии в Краматорске" ["The Russian Foreign Ministry regrets the injury of three Colombian citizens in Kramatorsk"], Parliamentary Gazette, June 29, 2023, <https://www.pnp.ru/politics/v-mid-rossii-sozhaleyut-o-ranenii-trekh-grazhdan-kolumbi-v-kramatorske.html?ysclid=ijhg03pr5p880450843>, last accessed June 2, 2026.
- 24 Witnesses Kr-022; Kr-011.
- 25 "Їх вбила Росія: хто загинув внаслідок ракетного удару по пizzerії у Краматорську" ["Russia killed them: who died in the missile strike on a pizzeria in Kramatorsk"], Kramatorsk Post, June 29, 2023, [https://www.kramatorskpost.com/yix-vbila-rosiya-xto-zaginuv-vnaslidok-raketnogo-udaru-po-piceriyi-u-kramatorsku\\_85503](https://www.kramatorskpost.com/yix-vbila-rosiya-xto-zaginuv-vnaslidok-raketnogo-udaru-po-piceriyi-u-kramatorsku_85503), last accessed June 5, 2026; "I recently had the honor to welcome home and stand guard for a fellow U.S. Marine veteran/ Ukrainian volunteer Ian Tortorici...," @doc\_wolf03, Instagram, July 31, 2023, <https://www.instagram.com/p/CvYVEhRvs0E/>, last accessed June 5, 2026.
- 26 Witness Kr-003; Witness Kr-008; Witness Kr-010; Witness Kr-011; Witness Kr-015;

- Witness Kr-016.
- 27 “Господи Іисуси, ми здесь всегда обедали!!!” [“Lord Jesus, We Always Had Lunch Here!!!”], Pozdnyakov 3.0, Telegram post, June 28, 2023, <https://t.me/c/1732054517/20533>, last accessed July 3, 2023; At the time of writing, the post is not publicly accessible and can only be viewed by members of the channel. A screenshot of the post is available in the section “Russian Propaganda Narratives and Debunking” of the Truth Hounds investigation “The bill is on you.”
- 28 Witness Kr-004.
- 29 In the official notice of suspicion issued to Igor Vladimirovich Osipov, then-Commander of the Russian Navy's Black Sea Fleet, regarding his role in ordering this missile attack, the time of the strike is indicated as 10:41 a.m. However, the exact time of impact varies slightly across sources. During a briefing at the scene, then Minister of Internal Affairs of Ukraine Denys Monastyrskiy stated that the missiles struck at 10:43 a.m. Local Telegram channels reported explosions and impacts at approximately 10:46 a.m. For the purposes of this report, the impact time of 10:41 a.m. indicated in the notice of suspicion is used as the primary reference point, while acknowledging that other contemporaneous sources place the impact several minutes later. See Notice of suspicion issued to Osipov Igor Vladimirovich on July 8, 2023, on the basis of materials from criminal proceeding No. 2202202000000128 of July 14, 2022, by Mykhailo Valeriiovych Ostapchuk, Deputy Head of the Investigative Department of the Security Service of Ukraine in Vinnytsia Oblast, Lieutenant Colonel of Justice, <https://gp.gov.ua/ua/posts/povidomlennya-pro-pidozru-osipov-iv>, last accessed June 2, 2026 (“Notice of suspicion issued to Osipov Igor Vladimirovich on July 8, 2023”); “РАКЕТНИЙ УДАР ПО ВІННИЦІ | Брифінг з місця трагедії” [“MISSILE STRIKE ON VINNYTSIA | Briefing from the Site of the Tragedy”], YouTube, July 14, 2022, last accessed June 4, 2026; “Щойно в Вінниці пролунало 3 потужних вибухів” [“Three Powerful Explosions Have Just Been Heard in Vinnytsia”], Vinnytsia Real, Telegram post, July 14, 2022, <https://t.me/vinnytsiareal/2689>, last accessed June 4, 2026; “У Вінниці чуно звуки вибухів” [“Sounds of Explosions Can Be Heard in Vinnytsia”], Suspline Vinnytsia, Telegram post, July 14, 2022, [https://t.me/suspline\\_vinnytsia/10396](https://t.me/suspline_vinnytsia/10396), last accessed June 4, 2026.
- 30 Osipov Notice of Suspicion, supra note 29.
- 31 The “House of Officers” is a Soviet-era building type that served as a cultural and recreational venue for military personnel and their families, hosting concerts, lectures, performances, and public events. In post-Soviet Ukraine, many of these buildings came under civilian municipal ownership and now operate as ordinary public cultural centers, while retaining their historical name in everyday usage. By July 2022, the Vinnytsia “60th House of Officers” operated as a public concert hall and also housed children's groups, NGO offices, and retail premises. A public concert was scheduled there for the evening of July 14, 2022;
- 32 Osipov Notice of Suspicion, supra note 29; Drone imagery from the strike site indicates that two missiles hit the building, while a third struck the parking area near the “Yuvileinyi” center. See e.g. “Квітти, сльози і пошукова операція: центр Вінниці після обстрілу, який забрав десятки життів (фоторепортаж)” [“Flowers, Tears, and a Search Operation: Central Vinnytsia After the Strike That Claimed Dozens of Lives (Photo Report)”], Radio Svoboda, July 14, 2022, <https://www.radiovoboda.org/a/photo-vinnytsia-pislya-obstrilu/31945579.html>, last accessed June 4, 2026.
- 33 See e.g. “Відео з трагедії у м. Вінниця” [“Video of Tragedy in the City of Vinnytsia”], State Emergency Service of Ukraine (SES), Telegram post, July 14, 2022, [https://t.me/dsns\\_telegram/8285](https://t.me/dsns_telegram/8285), last accessed June 4, 2026; “Від вибитих вікон до знищених вісент будівель. Як виглядають заклади після обстрілу” [“From Blown-Out Windows to Buildings Destroyed to the Ground: What Local Establishments Look Like After the Strike”], 20 Khvylyn Vinnytsia, July 15, 2022, <https://vn.20minut.ua/Podii/vid-vibitih-vikon-ta-znischenih-vschent-budivel-yak-viglyadayut-zaklad-11633851.html>, last accessed June 4, 2026; “Вінниця після ракетних ударів. Фоторепортаж” [“Vinnytsia After the Missile Strikes: Photo Report”], Suspline, July 17, 2022, <https://suspline.media/261267-vinnica-pisla-raketnih-udariv-fotoreportaz/>, last accessed June 4, 2026; “Квітти, сльози і пошукова операція: центр Вінниці після обстрілу, який забрав десятки життів (фоторепортаж)” [“Flowers, Tears, and a Search Operation: Central Vinnytsia After the Strike That Claimed Dozens of Lives (Photo Report)”], Radio Svoboda, July 14, 2022, <https://www.radiovoboda.org/a/photo-vinnytsia-pislya-obstrilu/31945579.html>, last accessed June 4, 2026.
- 34 “Сводка Министерства обороны Российской Федерации о ходе проведения специальной военной операции на территории Украины (15.07.2022 г.)” [“Summary from the Ministry of Defense of the Russian Federation on the progress of the special military operation in Ukraine (July 15, 2022)”], Russian Ministry of Defense, July 15, 2022, [https://t.me/mod\\_russia/17685](https://t.me/mod_russia/17685), last accessed June 2, 2026; “Минобороны РФ сообщило об уничтожении представителей поставщиков вооружения на Украину” [“The Russian Ministry of Defense reported the elimination of representatives of arms suppliers to Ukraine”], Газета.Ru, July 15, 2022, <https://www.gazeta.ru/army/news/2022/07/15/18132944.shtml>, last accessed June 2, 2026.
- 35 Osipov Notice of Suspicion, supra note 29.
- 36 “Pam'yataemo Heroiv” memorial platform, <https://heroes.vmr.gov.ua/>, last accessed June 2, 2026.
- 37 Serhiy Oleksiyovych Zagrevskiy, “Pam'yataemo Heroiv” memorial platform, <https://heroes.vmr.gov.ua/soldier/1105>, last accessed June 2, 2026; Dmytro Hryhorovych Burdyko, “Pam'yataemo Heroiv” memorial platform, <https://heroes.vmr.gov.ua/soldier/1042>, last accessed June 2, 2026; Oleg Pylypovych Makarchuk, “Pam'yataemo Heroiv” memorial platform, <https://heroes.vmr.gov.ua/soldier/1192>, last accessed June 2, 2026; Kostiantyn Hryhorovych Puzirenko, “Pam'yataemo Heroiv” memorial platform, <https://heroes.vmr.gov.ua/soldier/1261>, last accessed June 2, 2026.
- 38 “Був волонтером та добровольцем: серед загиблих у Вінниці після ракетного обстрілу — Володимир Дащенко” [“He was a volunteer and serviceman: among those killed in Vinnytsia after the missile strike was Volodymyr Datsenko”], Suspline Vinnytsia, July 15, 2024 <https://suspline.media/vinnytsia/260929-buv-volonterom-ta-dobrovolcem-sered-zagiblih-u-vinnici-pisla-raketnogo-obstrilu-volodimir-docenko/>, last accessed June 2, 2026.
- 39 Osipov Notice of Suspicion, supra note 29.
- 40 Project 21631, known as the “Buyan-M” class, is a series of small Russian river-sea missile corvettes capable of launching Kalibr cruise missiles at land targets at ranges of over 1,500 km. See: “Project 21631 Buyan-M Corvette,” GlobalSecurity.org, <https://www.globalsecurity.org/military/world/russia/21631.htm>, last accessed Jun. 2, 2026.
- 41 Osipov Notice of Suspicion, supra note 29.
- 42 Air Alert UA, Telegram post, July 14, 2022, [https://t.me/air\\_alert\\_ua/17657](https://t.me/air_alert_ua/17657), last accessed May 15, 2026; War Monitor, Telegram post, July 14, 2022, [https://t.me/war\\_monitor/997](https://t.me/war_monitor/997), last accessed May 15, 2026; Air Alert UA, Telegram post, July 14, 2022, [https://t.me/air\\_alert\\_ua/17671](https://t.me/air_alert_ua/17671), last accessed May 15, 2026.
- 43 Kalibr Cruise Missile, The Defense Watch, <https://thedefensewatch.com/product/kalibr-cruise-missile/>, last accessed June 2, 2026.
- 44 The straight-line distance was measured using the distance measurement tool in Google Earth between Cape Fiolent, Crimea, and the impact location in Vinnytsia. Minimum flight time is calculated using the standard relation time = distance / speed. On that basis, 650 km ÷ 900 km/h = 0.722 hours, which corresponds to approximately 43 minutes.
- 45 “Трое дітей та 20 дорослих: що відомо про загиблих внаслідок ракетного обстрілу Вінниці” [“Three Children and 20 Adults: What Is Known About Those Killed in the Missile Strike on Vinnytsia”], Suspline Vinnytsia, July 14, 2022, <https://suspline.media/vinnytsia/260666-3-ditej-ta-20-doroslih-so-vidomo-pro-zagiblih-vnaslidok-raketnogo-obstrilu-vinnici/>, last accessed June 4, 2026.
- 46 Air Alert UA, Telegram post, July 14, 2022, [https://t.me/air\\_alert\\_ua/17657](https://t.me/air_alert_ua/17657), last accessed May 15, 2026; War Monitor, Telegram post, July 14, 2022, [https://t.me/war\\_monitor/997](https://t.me/war_monitor/997), last accessed May 15, 2026; Air Alert UA, Telegram post, July 14, 2022, [https://t.me/air\\_alert\\_ua/17671](https://t.me/air_alert_ua/17671), last accessed May 15, 2026.
- 47 “В результаті обстрілу міста Первомайський поранено 31 людину, у тому числі 10 дітей” [“As a result of the shelling of the city of Pervomaïskiy, 31 people were injured, including 10 children”], The Kharkiv Regional Police, [https://t.me/police\\_kh\\_region/18804](https://t.me/police_kh_region/18804), last accessed June 2, 2026.
- 48 Interview with Olha Hirimova conducted by Truth Hounds.
- 49 “Був жорстоким до ворогів та опорою для побратимів: на Харківщині прощатимуться із захисником Олегом Фадєєнком” [“He was ruthless toward the enemy and a pillar of support for his comrades: Kharkiv region bids farewell to defender Oleh Fadienko”], Suspline Kharkiv, July 2, 2023, <https://suspline.media/kharkiv/520117-buv-zorstokim-do-vorogiv-ta-oporou-dla-pobratimiv-na-harkivsinii-prosatimutsia-zi-zahisnikom-olegom-fadeenkom/>, last accessed June 2, 2026.
- 50 As of mid-June 2026, Boris Rozhin's Telegram channel, Colonelcassad, had more than 750,000 subscribers. The channel is a widely followed source of pro-Kremlin commentary on the war against Ukraine. Independent researchers have identified it as disseminating false, misleading, and unverified information. See e.g.: NATO Strategic Communications Centre of Excellence, War on All Fronts: How the Kremlin's Media Ecosystem Broadcasts the War in Ukraine, Appendix 7, “List of Dedicated Telegram Channels Participating in Russian Information Warfare,” p. 108, Riga: NATO Strategic Communications Centre of Excellence, 2023.
- 51 Boris Rozhin, Telegram post, March 14, 2024, [https://t.me/boris\\_rozhin/91256](https://t.me/boris_rozhin/91256), last accessed May 30, 2026.
- 52 Interview with Prv-01 conducted by Truth Hounds.
- 53 Truth Hounds, “The bill is on you,” section “Pattern.”
- 54 Interview with Prv-01 conducted by Truth Hounds.
- 55 Missile fragments bearing the corresponding markings were found by Truth Hounds documenters while examining the impact crater during a field mission in July 2023.
- 56 “Truth Hounds present the investigation ‘The bill is on you.’ Identification of the unit responsible for the missile attack on Kramatorsk and Bilenke on 27 June 2023”, Truth Hounds, Nov 8, 2023, <https://truth-hounds.org/en/cases/truth-hounds-present-the-investigation-the-bill-is-on-you-identification-of-the-unit-responsible-for-the-missile-attack-on-kramatorsk-and-bilenke-on-27-june-2023/>, last accessed June 2, 2026; War & Sanctions, “9M727 Cruise Missile from the Iskander-K Missile System,” Defence Intelligence of Ukraine, <https://war-sanctions.gur.gov.ua/en/page-iskander-k>, last accessed May 25, 2026; Sam Cranny-Evans and Sidharth Kaushal, “The Iskander-M and Iskander-K: A Technical Profile,” Royal United Services Institute, August 8, 2022, <https://www.rusi.org/explore-our-research/publications/commentary/iskander-m-and-iskander-k-technical-profile>, last accessed June 2, 2026.
- 57 Interview with Olha Hirimova conducted by Truth Hounds; Interview with Prv-04 conducted by Truth Hounds; The witnesses' accounts regarding the missile's direction of flight before the impact are further corroborated by an analysis of the impact crater configuration conducted by Truth Hounds documenters at the strike site. A more detailed explanation of the approach used in such analyses can be found in the following material: “Iskander-M vs Iskander-K”, Truth Hounds, Dec. 15, 2023, <https://truth-hounds.org/cases/iskander-m-vs-iskander-k/>, last accessed June 2, 2026.
- 58 Truth Hounds, “The bill is on you,” section “Type of Weapon.”
- 59 “Ракетний удар по центру Чернігова: про загиблих, винних і відповідальних” [“Missile Strike on the Center of Chernihiv: On the Victims, Those Responsible, and Those Accountable”], Suspline News, April 19, 2024, <https://suspline.media/728169-raketnij-udar-po-centru-chernigova-pro-zagiblih-vinnih-i-vidpovidalnih-suspline-rozsliduvanna/>, last accessed June 2, 2026.
- 60 “Кількість постраждалих від обстрілу Чернігова зросла до 156 — ОП” [“Number of People Injured in the Shelling of Chernihiv Rises to 156, President's Office Says”], Ukrinform, August 20, 2023, <https://www.ukrinform.ua/rubric-regions/3750828-kilkist-postrazdalih-vid-obstrilu-chernigova-zroslo-do-156-op.html>, last accessed June 4, 2026.

- 61 "Люти Пташки летять у Чернівів" ["The Angry Birds Are Flying to Chernihiv"], Victory\_drones, Instagram, August, 12, 2023, <https://www.instagram.com/p/Cv2lKE6t6MH/>, last accessed June 2, 2026; "Російський теракт на Спаса. Що відомо про тих, кого вбила і поранила ракета РФ у Чернірові" ["Russian terrorist attack on Spas. What is known about those killed and wounded by the Russian missile in Chernihiv"], Ukrainska Pravda, Life, August 21, 2023, <https://life.pravda.com.ua/society/2023/08/21/256053>, last accessed June 2, 2026.
- 62 "Удар по Чернигову пришелся на место сбора военных специалистов ВСУ по боевым дронам..." ["The Strike on Chernihiv Targeted a Gathering of Ukrainian Military Drone Specialists"], RIA Novosti, Telegram post, August 19, 2023, [https://t.me/rian\\_ru/212607](https://t.me/rian_ru/212607), last accessed June 4, 2026.
- 63 Notice of Suspicion issued to Zusko Mikhail Stepanovich, March 18, 2025, criminal proceeding No. 22023270000000152, <https://www.gp.gov.ua/posts/povidomlennya-pro-pidozru-zusku-ms-ukr-ros>, last accessed May 15, 2026.
- 64 Air Raid Alert Map of Ukraine, <https://alerts.in.ua/>, last accessed June 2, 2026.
- 65 Zusko Notice of Suspicion, *supra* note 63.
- 66 Truth Hounds, Missile Attack on the Chernihiv Regional Drama Theatre Building, <https://truth-hounds.org/en/cases/missile-attack-on-the-chernihiv-regional-drama-theatre-building/>, last accessed June 2, 2026.
- 67 Art. 52(2) AP I.
- 68 ICRC Commentary on AP I, para. 2020 (nature criterion); para. 2022 (use criterion).
- 69 ICRC Commentary on AP I, para. 2024; Solf, "Article 52," in Bothe, Partsch, and Solf (eds.), *New Rules for Victims of Armed Conflicts* (Martinus Nijhoff, 1982), at 367; Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd ed., CUP 2016), at 86.
- 70 Art. 52(3) AP I; ICRC Commentary on AP I, paras 2029-2038.
- 71 ICTY, *The Prosecutor v. Galic*, IT-98-29-T, Judgment, Trial Chamber I, 5 Dec. 2003, para. 51; ICTY, *The Prosecutor v. Strugar*, IT-01-42-T, Judgment, Trial Chamber II, 31 Jan. 2005, para. 295; ICRC Commentary on AP I, para 2024.
- 72 Arts. 43, 48 AP I; ICRC, *Customary International Humanitarian Law* (Jean-Marie Henckaerts and Louise Doswald-Beck eds., Cambridge University Press, 2005), <https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/customary-international-humanitarian-law-i-icrc-eng.pdf>, last accessed June 2, 2026, Rules 1, 6.
- 73 Art. 52 AP I.
- 74 Art. 52(2) AP I; ICTY, *The Prosecutor v. Galic*, para. 51; *The Prosecutor v. Strugar*, para 295.
- 75 Truth Hounds, "The bill is on you," section "Legal qualification."
- 76 See Chapter 1.
- 77 See Chapter 1.
- 78 Russian Ministry of Defense, Summary of the Ministry of Defense of the Russian Federation on the Progress of the Special Military Operation (as of June 29, 2023), <https://archive.ph/tawKn#selection-1241.0-1244.0>, last accessed June 2, 2026.
- 79 Truth Hounds, "The bill is on you," section "Legal qualification."
- 80 Osipov Notice of Suspicion, *supra* note 29; Chapter 2, section "Vinnytsia, July 14, 2022."
- 81 Chapter 2, section "Vinnytsia, July 14, 2022."
- 82 Chapter 2, section "Vinnytsia, July 14, 2022."
- 83 Art. 52(2) AP I; ICRC Commentary on AP I, para. 2024.
- 84 ICRC Commentary on AP I, para. 2021; Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd ed., CUP 2016), at 97.
- 85 The Iskander-K cruise missile system is capable of striking within 5 to 10 meters of its intended target. See Sam Cranny-Evans and Sidharth Kaushal, "The Iskander-M and Iskander-K: A Technical Profile," Royal United Services Institute, Aug. 8, 2022, <https://www.rusi.org/explore-our-research/publications/commentary/iskander-m-and-iskander-k-technical-profile>, last accessed June 2, 2026. This figure refers to the cruise missiles launched from the Iskander system generally; specific accuracy data for the 9M727 variant is not publicly available. A strike landing 800 meters from the alleged target substantially exceeds what any plausible margin of targeting imprecision for a weapon of this type could account for.
- 86 Boris Rozhin, Telegram post, March 14, 2024, [https://t.me/boris\\_rozhin/91256](https://t.me/boris_rozhin/91256), last accessed May 30, 2026.
- 87 Chapter 2, section "Zlatopil, July 4, 2023."
- 88 Chapter 2, section "Chernihiv, August 19, 2023."
- 89 Truth Hounds, Missile Attack on the Chernihiv Regional Drama Theatre Building, <https://truth-hounds.org/en/cases/missile-attack-on-the-chernihiv-regional-drama-theatre-building/>, last accessed May 15, 2026.
- 90 Chapter 2, section "Chernihiv, August 19, 2023."
- 91 Art. 51(5)(b) AP I; ICRC Commentary on AP I, para 1976. See also art. 57(2)(a)(iii) AP I, which imposes an equivalent obligation on those planning or deciding on attacks discussed in the next section.
- 92 ICRC Commentary on AP I, para. 2209, 2213; ICRC, *International Rules Governing Military Operations*, [https://www.icrc.org/sites/default/files/topic/file\\_plus\\_list/0431-handbook\\_on\\_international\\_rules\\_governing\\_military\\_operations.pdf](https://www.icrc.org/sites/default/files/topic/file_plus_list/0431-handbook_on_international_rules_governing_military_operations.pdf); ICTY, *The Prosecutor v. Galic*, IT-98-29-T, Judgment, Trial Chamber I, 5 Dec. 2003, para. 58.
- 93 ICRC Commentary on AP I, para. 2213; UN Human Rights Council, Independent Commission of Inquiry on the 2014 Gaza Conflict, Report of the Independent Commission of Inquiry on the 2014 Gaza Conflict, A/HRC/29/CRP.4, Jun. 24, 2015 (Gaza Commission Report), para. 226.
- 94 Truth Hounds, "The bill is on you," section "Legitimate Military Targets."
- 95 Chapter 1, section "The Attack on the RIA Lounge: A Diagnostic Case for Moving Target Attacks."
- 96 Chapter 2, section "Vinnytsia, July 14, 2022."
- 97 ICRC Commentary on AP I, para. 2209, 2213; ICRC, *International Rules Governing Military Operations*, [https://www.icrc.org/sites/default/files/topic/file\\_plus\\_list/0431-handbook\\_on\\_international\\_rules\\_governing\\_military\\_operations.pdf](https://www.icrc.org/sites/default/files/topic/file_plus_list/0431-handbook_on_international_rules_governing_military_operations.pdf), last accessed June 2, 2026; ICTY, *The Prosecutor v. Galic*, IT-98-29-T, Judgment, Trial Chamber I, 5 Dec. 2003, para. 58.
- 98 Osipov Notice of Suspicion, *supra* note 29.
- 99 Chapter 2, section "Zlatopil, July 4, 2023."
- 100 Truth Hounds, Missile Attack on the Chernihiv Regional Drama Theatre Building, <https://truth-hounds.org/en/cases/missile-attack-on-the-chernihiv-regional-drama-theatre-building/>, last accessed May 15, 2026; Chapter 2, section "Chernihiv, August 19, 2023."
- 101 Chapter 2, section "Chernihiv, August 19, 2023."
- 102 Art. 57(2)(a)(i) AP I.
- 103 Art. 57(2)(a)(ii) AP I.
- 104 Art. 57(2)(a)(iii) AP I.
- 105 Art. 57(2)(b) AP I.
- 106 ICRC Commentary on AP I, para. 2198; ICRC CIHL <https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/customary-international-humanitarian-law-i-icrc-eng.pdf>, last accessed June 2, 2026, Rule 15.
- 107 ICRC Commentary on AP I, art. 57, para. 2198; William H. Boothby, *The Law of Targeting* (Oxford University Press, 2012), at 127, 152.
- 108 Article 57(2)(a)(iii) AP I requires feasible precautions in the choice of means and methods of attack. Where a weapon cannot be recalled or redirected after launch, the launch decision is the last meaningful point for verification, reassessment, or suspension of the attack. See AP I, art. 57(2)(a)(ii); ICRC Commentary on AP I, art. 57, paras. 2198, 2200-2202; Jean-François Quéguiner, "Precautions under the Law Governing the Conduct of Hostilities," *International Review of the Red Cross*, Vol. 88, No. 864, 2006, at 797-799; William H. Boothby, *The Law of Targeting* (Oxford University Press, 2012), at 285, 341; Michael N. Schmitt and Jeffrey S. Thurnher, "Out of the Loop: Autonomous Weapon Systems and the Law of Armed Conflict," *Harvard National Security Journal*, Vol. 4, 2013, at 268.
- 109 William H. Boothby, *The Law of Targeting* (Oxford University Press, 2012), at 341.
- 110 This is a technical observation about the operational characteristics of cruise missiles of the type used in the incidents examined.
- 111 ICRC Commentary on AP I, para. 2198; Jean-François Quéguiner, "Precautions under the Law Governing the Conduct of Hostilities," *International Review of the Red Cross*, Vol. 88, No. 864, Dec. 2006, [https://international-review.icrc.org/sites/default/files/irrc\\_864\\_5\\_0.pdf](https://international-review.icrc.org/sites/default/files/irrc_864_5_0.pdf), at 797.
- 112 Truth Hounds, "The bill is on you."
- 113 Chapter 1, section "The Attack on the RIA Lounge: A Diagnostic Case for Moving Target Attacks."
- 114 Chapter 2, section "Vinnytsia, July 14, 2022."
- 115 Art. 57(2)(a)(i) AP I; ICRC Commentary on AP I, para. 2198.
- 116 Chapter 2, section "Zlatopil, July 4, 2023."
- 117 Chapter 2, section "Zlatopil, July 4, 2023."
- 118 Art. 57(2)(a)(i) AP I; ICRC Commentary on AP I, para. 2195, 2198; Jean-François Quéguiner, "Precautions under the Law Governing the Conduct of Hostilities," *International Review of the Red Cross*, Vol. 88, No. 864, Dec. 2006, [https://international-review.icrc.org/sites/default/files/irrc\\_864\\_5\\_0.pdf](https://international-review.icrc.org/sites/default/files/irrc_864_5_0.pdf), at 798; Office of the Prosecutor, ICTY, "Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia," June 13, 2000, paras. 28-29.
- 119 Zusko Notice of Suspicion, *supra* note 63; Chapter 2, section "Chernihiv, 19 August 2023."
- 120 Truth Hounds, Missile Attack on the Chernihiv Regional Drama Theatre Building, <https://truth-hounds.org/en/cases/missile-attack-on-the-chernihiv-regional-drama-theatre-building/>, last accessed May 15, 2026; Chapter 2, section "Chernihiv, 19 August 2023".
- 121 Art. 57(2)(a)(iii) AP I.
- 122 Chapter 2, section "Chernihiv, August 19, 2023."
- 123 Arts. 51(4)(a)-(c) AP I; ICRC Commentary on AP I, paras 1946-1966.
- 124 ICRC Commentary on AP I, paras 1951-1966.
- 125 ICRC Commentary on AP I, para. 1958; Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd ed., CUP 2016), at 115.

- 126 Art. 51(5)(b) AP I; ICTY, *The Prosecutor v. Martić*, IT-95-11-T, Judgment, Trial Chamber I, June 12, 2007, para. 463.
- 127 Art. 51(5)(b) AP I; ICRC Commentary on AP I, para. 1980.
- 128 See Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (3rd ed., CUP 2016), at 196-197, para. 413; ICTY, *The Prosecutor v. Galić*, IT-98-29-T, Judgment, Trial Chamber I, Dec. 5, 2003.
- 129 ICTY, *The Prosecutor v. Galić*, IT-98-29-T, Judgment, Trial Chamber I, Dec. 5, 2003, paras. 57-58.
- 130 ICTY, *The Prosecutor v. Martić*, IT-95-11-T, Judgment, Trial Chamber I, June 12, 2007, para. 463.
- 131 Art. 8(2)(b)(iv) RS.
- 132 Art. 8(2)(b)(iv) RS; Elements of Crimes, art. 8(2)(b)(iv), element 4.
- 133 ICTY, *The Prosecutor v. Galić*, IT-98-29-T, Judgment, Trial Chamber I, Dec. 5, 2003, para. 59.
- 134 Elements of Crimes, art. 8(2)(b)(iv), element 4.
- 135 Arts. 8(2)(b)(i), 8(2)(b)(ii) RS.
- 136 Gaza Commission Report, para. 226; Michael N. Schmitt, "Precision Attack and International Humanitarian Law," *International Review of the Red Cross*, vol. 87, no. 859 (2005), at 463.
- 137 Gaza Commission Report, para. 226.
- 138 ICRC Commentary on AP I, Art 51, para. 1952.
- 139 ICRC Commentary on AP I, paras 1948, 1962-1965.
- 140 Art. 8(2)(b)(iv) RS; Elements of Crimes, art. 8(2)(b)(iv), element 4; Gaza Commission Report, para. 221.
- 141 "The bill is on you," section "Legal Qualification."
- 142 Ibid.
- 143 Ibid.
- 144 "The bill is on you," section "Legal Qualification"; Art. 8(2)(b)(iv) RS.
- 145 ICRC Commentary on AP I, para 1952.
- 146 Art. 51(4)(a) AP I; ICRC Commentary on AP I, para. 1958.
- 147 Art. 8(2)(b)(iv) RS; Chapter 2, section "Vinnytsia, July 14, 2022."
- 148 Art. 51(4)(a) AP I; Chapter 2, section "Zlatopil, July 4, 2023."
- 149 Chapter 2, section "Zlatopil, July 4, 2023."
- 150 Truth Hounds, *Missile Attack on the Chernihiv Regional Drama Theatre Building*, <https://truth-hounds.org/en/cases/missile-attack-on-the-chernihiv-regional-drama-theatre-building/>, last accessed May 15, 2026; Chapter 2, section "Chernihiv, August 19, 2023."
- 151 Chapter 2, section "Chernihiv, August 19, 2023."
- 152 Art. 51(4)(c) AP I.
- 153 Art. 8(2)(b)(iv) RS; Elements of Crimes, art. 8(2)(b)(iv), element 4.

This report examines Russian strikes on civilian locations in Ukraine that were justified by the temporary presence of military personnel or military activity. It identifies a pattern of delayed-impact attacks using precision-guided weapons against targets that may have moved, dispersed, or lost military significance before impact. The report assesses these attacks under international humanitarian law and outlines practical indicators for future investigations.



**TRUTH HOUNDS** is a full-spectrum accountability organization founded in 2014 in Kyiv, specializing in documenting and investigating international crimes and serious human rights violations in Ukraine and other conflict-affected regions. The organization conducts field investigations, legal research, and analytical studies on international crimes and crimes against humanity.



**PROJECT EXPEDITE JUSTICE** is a non-profit organization whose core mission is to bring justice to conflict-affected communities, including those impacted by genocide, war crimes, and crimes against humanity. Since April 2022, PEJ has worked to ensure accountability for communities affected by the Russian invasion. We document international crimes and harms throughout Ukraine. Our efforts have included providing custom expert- and technical-based support, direct investigative activities, information collection, and preparation of legal analysis packages for judicial stakeholders.