



**People need
me — if we
don't help
them, who
will?**¹



**Double-tap attacks
against White Helmets
volunteers**

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¹ Bashar al-Dedo, White Helmets volunteer in the SCD centre in Khan Shaykhoun, interviewed by the White Helmets' media team on 21 July 2017. See: @SyrianCivilDefence on Youtube, '26', 'الشهيد المتطوع بشار ددو', December 2017: <https://tinyurl.com/Saye658b>.

EXECUTIVE SUMMARY ²

Throughout the Syrian conflict, members of the Syria Civil Defence, also called White Helmets volunteers, risked their lives daily to rescue their fellow Syrians. Over the last decade or so, 311 White Helmets volunteers died. Among them, more than 200 were killed, while several hundred others were injured in the course of responding to conflict-related incidents. Following the fall of Bashar al-Assad's regime, the Investigation Support and Case-building Unit (ISCU) based in the White Helmets' Netherlands office decided that much more attention needed to be given to attacks against humanitarian workers, and more specifically to White Helmets volunteers.

This report homes in on one particular type of attack, so-called 'double-tap' attacks. For the purpose of this report, a double-tap attack is defined as an incident in which the first attack is followed by a short waiting period and then a second attack is conducted specifically targeting first responders, medical workers or civilians in the vicinity trying to rescue others. The ISCU chose to focus on these attacks as they account for a large part of killings and injuries of the White Helmets volunteers.

The ISCU's research and investigation identified 122 potential double-tap attacks over a period of ten years, from 2014 to early 2025. It narrowed down the selection to the 12 incidents featured in detail in this report, after having weighed the available information, their gravity, and their geographical and temporal diversity. The analysis of these incidents and the underlying evidence - including audiovisual material, first-hand witness testimony and corroborated open-source information - reveals several interesting patterns. The ISCU found that, except in a few cases, there are reasonable grounds to believe that all double-tap attacks aimed at White Helmets volunteers were perpetrated by Assad regime forces and its allies, including Russian forces. From the dataset available to the ISCU, the Syrian army appears to be responsible for most of the double-tap attacks perpetrated against White Helmets volunteers, and Russian forces for a quarter of the incidents.

In almost all incidents, the initial target of the attack was unlawful under international humanitarian law, i.e. aimed at civilian objects and persons. On a number of occasions, the attack was targeting a specially protected site, such as medical or educational facilities. More often than not, the attacks were conducted using indiscriminate weapons or weapons prohibited for the unnecessary suffering they cause, such as barrel bombs. In none of the incidents examined closely by the ISCU were combatants identified among the victims.

Furthermore, the research conducted demonstrates that it is likely that the secondary attacks were intentionally targeted at first responders, as aircraft would often repeatedly strike White Helmets volunteers once they were on the scene. Later on in the conflict, drone assisted guided weaponry was also used in these attacks, showing the precision with which humanitarian workers were killed.

The patterns of these double-tap attacks suggest that they served several objectives. First, they deprived humanitarian and medical personnel of their ability to provide assistance to the local population, by killing and maiming them, by delaying their ability to respond and by increasing the risks incurred in their rescue operations. These attacks also targeted the community more broadly by increasing the pressure on civilians perceived as pro-opposition, already vulnerable due to the Assad regime's use of siege tactics, denial of humanitarian aid and daily attacks. Ultimately, the result amounted to

spreading terror meant to punish civilians and provoke their forced displacement. Finally, through killing the first witnesses of attacks against civilians, double-tap attacks contributed to the overall goal of denying atrocities committed by the Assad regime and undermining the truth. Doing so, they contributed to the broader disinformation campaign led by Russia that sought to cast doubt on the nature of attacks against civilians.

Witnesses and survivors have shared with the ISCU their desire to see the truth come out, but also for those responsible for these attacks to be duly prosecuted. They also underlined their need for reparations and their commitment to contribute to building a new Syria, where human rights violations, breaches of international humanitarian law and international crimes would no longer be tolerated.

KEY RECOMMENDATIONS

The White Helmets call on all stakeholders to work towards ensuring the rights of the victims, survivors and witnesses of double-tap attacks. In doing so, it recommends:

- The Syrian transitional government make a clear commitment to international law, including by developing a comprehensive and inclusive transitional justice process which should include criminal accountability in line with international standards;
- International organisations, such as the United Nations, continue their investigative work on human rights violations and breaches of international humanitarian law committed in Syria and support Syrian institutions to do the same;
- Third States continue standing with Syrian victims, including by supporting Syrian civil society and investigations and prosecutions related to the Syrian conflict, including when based on extraterritorial jurisdiction, and support the Syrian transitional government in doing the same; *and*
- All parties consider attacks against humanitarian workers a strategic priority in their human rights and accountability projects and efforts.

ACKNOWLEDGMENTS

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In addition, the ISCU would also like to acknowledge the work of Syrian American Medical Society (SAMS), the Syria Justice and Accountability Centre (SJAC), the Syrian Archive / Mnemonic, and Physicians for Human Rights (PHR), whose research has been invaluable in our investigative process.

The ISCU thanks the volunteers of the Damascus Syria Civil Defence Centre for their warm welcome during the investigative mission it conducted, and for their incredible support throughout. The ISCU also expresses its sincerest appreciation to the two interpreters who helped conduct interviews and showed patience, kindness and compassion to the witnesses, as well as to the witnesses themselves for having taken the time to share their recollection and knowledge with the ISCU.

Finally, the ISCU acknowledges the courage, the dedication and the sacrifice that all White Helmets volunteers have shown throughout the horrendous conflict which has scarred Syria. It hails these heroes who chose to stand with their communities in the face of danger.

BACKGROUND

THE SYRIAN ARMED CONFLICT

After protests erupted in March 2011, the Syrian authorities deployed the national armed forces, which led to a number of violent incidents, with the security forces killing at least 3,500 unarmed protesters.³ Demonstrations continued to spread across the country throughout the year.⁴ As early as 3 August 2011, the President of the United Nations Security Council (UNSC) issued a statement, condemning the human rights violations perpetrated by the Syrian forces.⁵

The conflict escalated in late 2011 and early 2012 when the security forces implemented blockades in the areas where opposition armed groups were present, thus depriving the population of access to food, medicine and other basic supplies.⁶ Armed violence increased in May 2012 with shelling from the security forces and daily clashes with opposition armed groups.⁷ On 12 June 2012, the United Nations (UN) Under-Secretary-General for Peacekeeping Operations called the situation in Syria a full-scale civil war.⁸

Under international humanitarian law (IHL), non-international armed conflicts (NIAC) have been defined as "protracted armed violence between government authorities and organised armed groups or between such groups within a State."⁹ This determination is made on a case-by-case basis, after assessing whether the degree of intensity of the armed violence and the level of organisation of the group have reached the threshold of a NIAC.¹⁰ This characterisation does not change when a third State is fighting against an armed group with the consent of the territorial State.¹¹

In line with the assessments of the International Committee of the Red Cross¹² (ICRC) and the UN,¹³ the White Helmets considers that the fighting between 'opposition' armed groups and government forces, supported by various armed groups and militias as well as the Russian Federation,¹⁴ amounted to a non-international armed conflict from mid-2012. The ISCU acknowledges the fact that the Syrian context is quite unique in that several armed conflicts - both international and non-international - exist simultaneously and overlap on the territory, with different legal frameworks applying accordingly.¹⁵ All incidents examined by the ISCU were however committed in the context of the conflict between 'opposition' armed groups and the government forces and its various allies.

The Syrian conflict would become known for the toll it took on the civilian population. The army routinely used heavy shelling, siege tactics or razed areas held by or considered to be associated with opposition forces.¹⁶ Throughout the conflict, the government used an array of weaponry designed to inflict the maximum amount of harm, such as cluster

munitions, thermobaric bombs, barrel bombs, and chemical weapons. The conflict was also well known for the number and severity of attacks against protected objects, such as medical facilities. This pattern included not only armed attacks but also a complex disinformation campaign against the White Helmets, which continued until the fall of the regime.

Following an offensive led by the armed group Hay'at Tahrir al-Sham (HTS), the regime of Bashar al-Assad eventually fell on 8 December 2024,¹⁷ although it does not necessarily mean the armed conflict ended.¹⁸ The conflict has ravaged the country: over 600,000 people have been killed, 7.4 million have been internally displaced, 4.4 million have become refugees, and more than 16 million Syrians are now in need of humanitarian and protection assistance.¹⁹

THE SYRIA CIVIL DEFENCE

After the outbreak of the conflict in Syria in 2011, groups of volunteers formed to respond to bombardments and to fill the gap left by the Assad regime's withdrawal of basic government services. In October 2014, as bombs continued to fall, the volunteers came together to form the Syria Civil Defence (SCD),²⁰ pledging allegiance to the international humanitarian values laid out in the Geneva Conventions. Known for their distinctive headwear, SCD became known internationally as the White Helmets. Over 10 years, White Helmets volunteers have saved more than 128,000 lives.



Credit: SCD, 1 December 2024, Idlib Governorate

Through its primarily humanitarian activities, the White Helmets collected a variety of information relevant to documenting human rights violations and international crimes: footage of incidents recorded by volunteers with their famous helmet-mounted cameras, incident reports, flight records of its early warning system, reports of unexploded ordnance, Hazmat reports, and witness accounts. This is why the organisation established its Justice and Accountability Programme in 2021, to fully leverage this in-house documentation and make a meaningful contribution to the pursuit of justice.

After the Assad regime finally collapsed in December 2024, the White Helmets General Assembly made the historic decision to dissolve the organisation and fully integrate into the Syrian transitional government,²¹ marking an end to a decade-long undertaking which saw over 200 White Helmets volunteers sacrifice their lives to save others and left several hundred severely injured and now living with a disability.²²

METHODOLOGY

The following report is the result of several months of research and investigation conducted by the Investigation Support and Case-building Unit (ISCU) based in the White Helmets Netherlands Office.²³ This team benefits from the expertise of its individual members, who have previously held positions in leading international human rights non-governmental organisations (NGOs) and international organisations, including the UN, and received specialised training on international criminal investigations and open-source investigations.

The ISCU focused its efforts on attacks against humanitarian workers, and more specifically White Helmets staff and volunteers. The team first identified incidents where White Helmets staff or volunteers had been either killed or seriously injured. To do so, it analysed evidence collected by White Helmets volunteers and open-source information to clarify the circumstances of death of the 311 White Helmets volunteers who passed away during the conflict. This preliminary research suggested that over 200 of them were killed in a conflict-related incident. Over 70 of those deaths were potentially caused by a double-tap attacks; with others being attributed to direct attacks against White Helmets centres or vehicles, armed attacks against centres or other circumstances.²⁴ As this preliminary research showed double-tap attacks to be the most common cause of death among White Helmets staff and volunteers, the ISCU chose to prioritise this line of investigation for its first report on attacks against humanitarian workers.²⁵

The concept of 'double-tap attack' is ill-defined. It was first used in the context of Syria in 2016 by the UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, who highlighted the intent of the perpetrator as a key aspect, as the latter must have waited after their first use of weapons "just long enough for rescue and medical workers to arrive - before attacking again".²⁶ Several UN investigative mechanisms and NGOs have relied on similar definitions.²⁷ For the purpose of the following report, the ISCU is relying on the following definition:

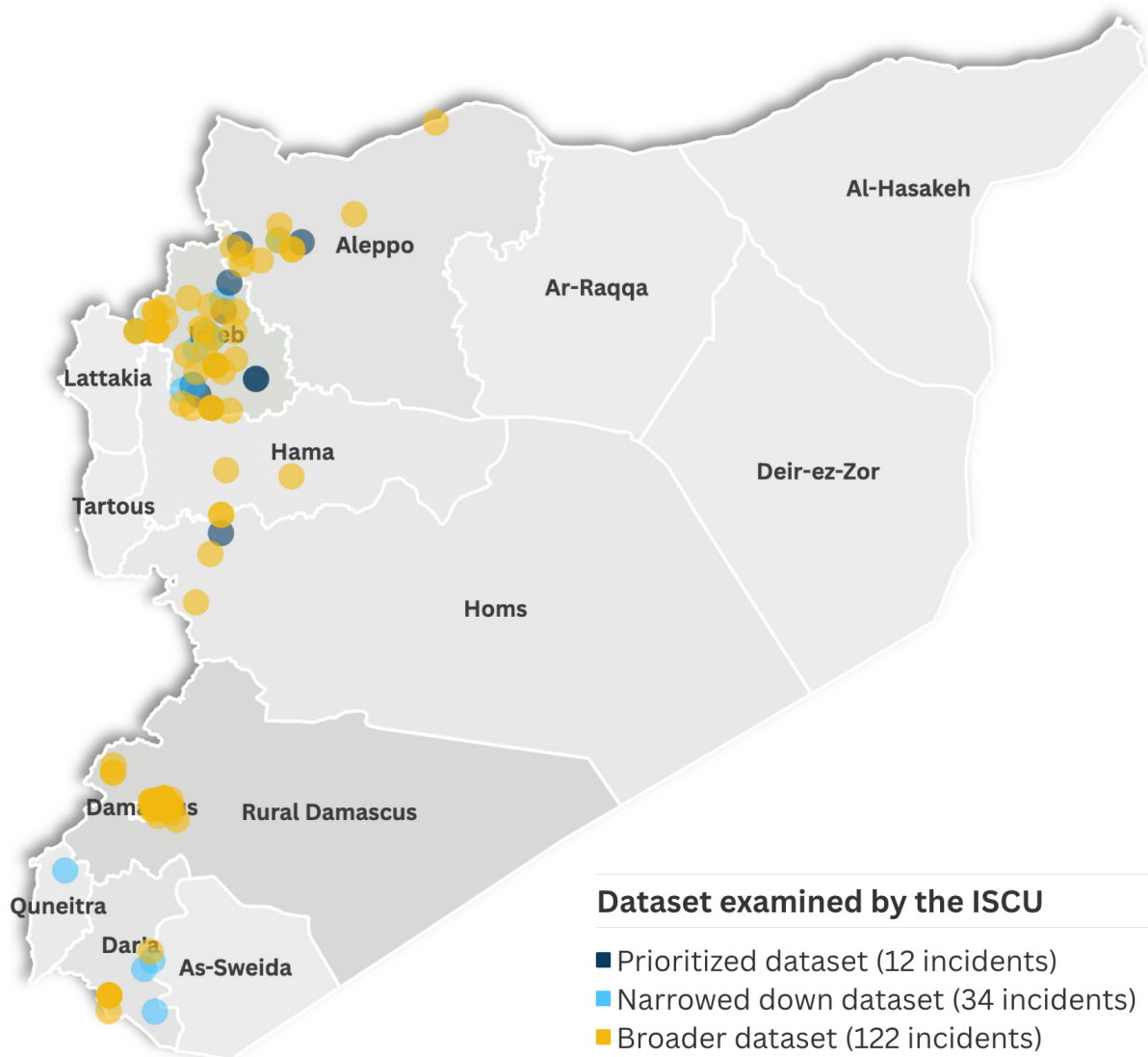
A double-tap attack is an incident in which there is:

- A first attack or series of attacks in rapid succession, whether by shelling or airstrikes;
- A short waiting period, ranging from a few minutes to a few hours; *and*
- A second attack or series of attacks in the same vicinity, which target first responders, medical workers, or civilians trying to rescue others.

In this view, the ISCU also reviewed the following evidence:

- White Helmets incident reports, prepared by White Helmets volunteers shortly after responding to incidents, available for incidents from 2017 to 2024;²⁸
- White Helmets human resources records of injured volunteers;
- Footage taken by White Helmets volunteers whilst responding to incidents;²⁹
- Sentry observations, also referred to as flight logs, tracking military aircraft in Northwest Syria since around August 2016;³⁰
- Intercepted pilot radio communications provided by Hala Systems available since February 2019;
- Open-source information; *and*
- Existing research conducted by SJAC, Hala Systems, and Airwars.

This allowed the ISCU to identify a main dataset of 122 potential double-tap attacks.³¹ After reviewing these, the ISCU prioritised 34 incidents for further research. After weighing the available evidence, the gravity of the incidents, and the added value of the ISCU's work, the team further narrowed down the selection to 12 incidents which are described in detail in this report. To the extent possible, the ISCU also selected incidents keeping in mind geographical and temporal diversity, selecting at least one incident per year from 2014 until 2021.³²



In addition, the ISCU conducted a series of interviews with White Helmets volunteers and staff, including survivors of double-tap attacks. All interviews were conducted by specifically trained team members, with informed consent and according to ethical standards, including do-no-harm principles and respect for the witnesses' security and dignity.

Especially after the fall of the regime of Bashar al-Assad on 8 December 2024, this research serves a dual purpose: showcasing how double-tap attacks have affected White Helmets volunteers throughout the course of the conflict and paying tribute to those who were killed and injured in these attacks and advocating for their rights as victims.

I. THE USE OF 'DOUBLE-TAPS' AGAINST WHITE HELMETS VOLUNTEERS

I.1. UNLAWFUL FIRST STRIKES

All incidents examined by the ISCU targeted civilian areas, sometimes objects that are specially protected under international law, and often using indiscriminate or banned weaponry. This suggests that double-tap attacks were intentionally targeting civilians and first responders, dispelling doubts that White Helmets volunteers might have been collateral damage in attacks against legitimate military targets.

I.1.i. DELIBERATE, INDISCRIMINATE OR DISPROPORTIONATE ATTACKS AGAINST CIVILIANS

The principle of distinction, which is widely accepted as customary international law (CIL), protects civilian persons and objects from being the direct target of a military attack.³³ A civilian is defined as anyone who is not a member of armed forces or armed groups;³⁴ while a civilian object is defined in opposition to military objectives, i.e. "objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction [...] offers a definite military advantage".³⁵ Attacks directed against non-military objectives, i.e. civilian persons or objects are called 'indiscriminate'.³⁶

In almost all of the incidents examined by the ISCU, the targets of the initial attacks appear *prima facie* to be civilian persons and objects: out of 116 incidents, only 21 were not clearly identifiable as civilian targets, as the ISCU could not ascertain the exact target. 58 of these incidents affected residential areas or civilian homes.³⁷ Specific locations, such as transport hubs, markets or near schools and mosques, were often crowded at the time of the attack.³⁸ This confirms what witnesses told the ISCU.³⁹

ATTACK NEAR A MOSQUE DURING RAMADAN KILLS 50 CIVILIANS ON 7 JUNE 2018 IN ZARDANA (IDLIB)

On 7 June 2018 (22 Ramadan), the sunset prayer call took place at 19:43, with iftar soon following. As civilians gathered near Saad bin Mua'dh mosque in Zardana village, a Russian fixed-wing aircraft was observed circling over nearby villages at 21:07.⁴⁰

Shortly after, and before the night prayer call took place at 21:13, a first attack took place on a civilian building near the mosque.⁴¹ Neither the ISCU nor Syrian Archive uncovered any evidence of military presence in the immediate area.⁴²

White Helmets volunteers, wearing their distinctive uniform, were sent out to assist the victims and rescue those trapped under the rubble.⁴³ They received a warning from the early warning system that the aircraft was returning to their location but could not evacuate due to the number of injured people needing assistance.⁴⁴

A second attack took place at around 21:35 on the same location,⁴⁵ with one White Helmets volunteer who was present claiming four thermobaric bombs were delivered.⁴⁶ This hypothesis is consistent with the extent of the damage observed and witnesses reporting "a bright flash".⁴⁷ This second attack killed several civilians who had been trying to rescue victims of the first attack.⁴⁸

Although the Russian Ministry of Defence stated the attack was the result of artillery shelling between armed groups,⁴⁹ evidence shows this to be highly unlikely. Although clashes between armed groups HTS and Jaysh al-Ahrar had been reported nearby the day prior and on the day of the attack, the extent of the damage caused by the attack is not consistent with the use of medium and light weapons reportedly used by the armed groups' members.⁵⁰ In addition, aircraft were spotted both by witnesses of the attack and by Hala System spotters. These were unlikely to be Syrian as Syrian pilots were allegedly unable to fly at night according to then Russian Minister of Foreign Affairs Sergey Lavrov.⁵¹

The search operation that followed lasted through the night⁵² for around 10 hours.⁵³ The extent of the destruction in the neighbourhood was massive and can easily be spotted on satellite imagery.⁵⁴



Google Earth, Image, © 2025 Maxar Technologies Google Earth Pro satellite imagery dated 24 April 2018



Google Earth, Image, © 2025 Maxar Technologies Google Earth Pro satellite imagery dated 17 March 2019

In total, around 50 civilians, including at least 11 children, were killed,⁵⁵ with dozens injured. One witness stated that most had died in the second attack.⁵⁶ White Helmets volunteer Ali Hassan Baradei, who worked for the SCD centre in Killi (Idlib), was among the casualties; with at least four of his colleagues being injured.⁵⁷ The mosque, while still standing, was damaged.⁵⁸



Credit: Omar Haj Kadour for AFP, 7 June 2018

The targeting of a residential building near a religious site at the time of the prayer - especially during the holy month of Ramadan - strongly suggests that the intended target was not a legitimate military target but on the contrary targeted civilians and aimed to cause as many casualties as possible. This would make the first attack itself unlawful; and the second attack targeting first responders and civilians trying to rescue their loved ones intentional and also unlawful.

Under IHL, civilian persons or objects might still be affected by attacks against lawful military objectives, but parties to the conflict must ensure that the incidental loss of life or damage ('collateral damage') is not excessive in relation to the anticipated military advantage: this is the principle of proportionality.⁵⁹ To do so, parties must take all feasible measures to verify the military nature of the target and to avoid or minimise collateral damage and protect the civilian population (principle of precaution),⁶⁰ including through advance warning⁶¹ or the choice of weaponry.⁶²

Witnesses and survivors often described that there was no military presence in the vicinity of double-tap attacks or that they were far from the frontlines.⁶³ Even in cases where some military advantage might have existed, for example to cut armed groups' supply routes, the ISCU considers that these strikes would have likely been at the very least disproportionate, considering the high number of civilian victims.⁶⁴ One witness even pondered this: "why [would they] target the building even if there was a fighter in it, when there were so many children [?]"⁶⁵

I.1.ii. ATTACKS AGAINST SPECIALLY PROTECTED OBJECTS AND PERSONNEL

In addition to this broader level of protection, medical personnel, units and transport are protected in NIACs under common Article 3 of the Geneva Conventions, Additional Protocol II, and CIL.⁶⁶ Personnel or objects falling under these definitions are protected, regardless of whether they display a Red Cross or Crescent:⁶⁷ the emblem is simply meant to facilitate the identification of the protected status and thus the application of the distinction principle. Likewise, educational facilities and schools are also specially protected under IHL.⁶⁸ Out of the 116 double-tap incidents examined by the ISCU, at least eleven targeted specially protected objects and personnel, including medical facilities and medical workers.⁶⁹ This appears in line with the high number of attacks against medical facilities throughout the conflict.⁷⁰

ATTACK TARGETS A SCHOOL NEAR HOSPITAL ON 20 OCTOBER 2015 IN SARMIN (IDLIB)

On 20 October 2015, a school situated next to the SAMS-run Sarmin field hospital was hit by an airstrike.⁷¹ The hospital had been the main medical provider for those affected in the chlorine attack in Sarmin and Qmenas on 16 March 2015.⁷²

White Helmets volunteers wearing uniforms arrived on the scene around ten minutes later, warned the civilians to disperse and not to form a crowd and started evacuating the wounded, as can be seen on SCD footage of the intervention. Shortly after, one of them noticed the aircraft returning towards them – and the video captures a secondary airstrike landing around 20 meters from the hospital.⁷³ The hospital was significantly damaged. Dr. Mohamed Tennari, director of the Sarmin field hospital, later declared that the hospital was no longer able to provide medical care.⁷⁴

In total, at least 12 civilians were killed,⁷⁵ including a medical professional and a White Helmets volunteer from the SCD centre in Sarmin, Abdul al-Razzaq Aboud.⁷⁶ Several other White Helmets volunteers were injured.⁷⁷

The Russian military acknowledged having conducted an airstrike in Sarmin but claimed that the targets were 'terrorist organisations'.⁷⁸ At the date of the incident, the frontline was at least 10 kilometres away from Sarmin.⁷⁹ Neither the ISCU nor other NGOs which reported on this incident found any information suggesting that either the school or the hospital had become legitimate military targets.⁸⁰ On the contrary, both the Syrian Archive and PHR reported it as a direct attack against a medical facility,⁸¹ part of a pattern of such attacks at the time.⁸²

ATTACK TARGETS AN EMERGENCY MEDICAL CENTRE ON 14 AUGUST 2019 IN MA'ARRAT HARMA (IDLIB)

Amidst intensive bombing in the countryside of Hama and Idlib,⁸³ an emergency medical centre of the Hama ambulance system supported by SAMS, located in the countryside of Ma'arrat Harma, was hit by a total of six airstrikes on 14 August 2019.⁸⁴

The first strikes killed two SAMS employees, one of whom was a paramedic.⁸⁵ Pictures of the scene show a completely destroyed ambulance, clearly marked with SAMS' logo, and a collapsed building, presumably the medical centre itself.⁸⁶



Credit: Syrian American Medical Society (SAMS), 14 August 2019

A White Helmets team from Ma'arrat Harma SCD centre, all wearing their vests, was dispatched in a marked vehicle.⁸⁷ Some time later, secondary airstrikes targeted the same location, killing White Helmets volunteer Younis Balouz as he was trying to rescue the victims.⁸⁸ The attack also injured several civilians⁸⁹ – including at least one severely.⁹⁰

While attribution of the first strikes is not clear,⁹¹ some sources alleged that they were conducted by the Russian forces⁹² using vacuum bombs.⁹³ All sources report that Russian aircraft were responsible for the subsequent strikes,⁹⁴ which is consistent with Sentry observations at the time.

Intentionally targeting medical personnel is unlawful, except if they engage in hostile acts, making them legitimate targets.⁹⁵ In that case, belligerent actors must issue them a warning to cease their hostile acts.⁹⁶ None of the evidence gathered by the ISCU suggests that the medical personnel targeted in the incidents reviewed took part in hostilities or that they were issued a warning in any of the incidents examined.

I.1.iii. ATTACKS USING BANNED OR INDISCRIMINATE WEAPONS

IHL also expressly prohibits the use of some type of weaponry, regardless of whether the target is legitimate or not. Some treaties ratified by both the Syrian Arab Republic and the Russian Federation expressly ban specific types of weapons;⁹⁷ and CIL also prohibits the use of weapons that are by nature indiscriminate,⁹⁸ and 'weapons of a nature to cause superfluous injury or unnecessary suffering'.⁹⁹ Although there is no agreed list of which weapons fall under these categories, the evidence reviewed by the ISCU suggests that, in at least some of the double-tap attacks examined, the weaponry used might have been indiscriminate and/or of a nature as to cause unnecessary suffering.

This is for example the case of barrel bombs, which are improvised unguided munitions produced in a way as to maximise the amount of shrapnel projected by adding fragmentation pieces (such as nails) to the explosive.¹⁰⁰ They are cheap to manufacture and are launched from helicopters,¹⁰¹ making them accessible to the Syrian forces, whose arsenal was strained as a result of sanctions that included an arms embargo.¹⁰² The UNSC itself condemned the use of barrel bombs by the regime as indiscriminate;¹⁰³ while the UN Secretary General's Special Envoy described them as "censured weaponry".¹⁰⁴ Barrel bombs were such a prominent feature of the Syrian conflict that one witness told the ISCU that 2015 was "[t]he most dangerous year for Aleppo. It was called the year of barrel bombs".¹⁰⁵

AIRSTRIKE USES BARREL BOMBS ON A CIVILIAN GATHERING ON 9 MARCH 2014 IN ALEPPO (ALEPPO)

On the morning of 9 March 2014, a crowded mini-bus transport hub in al-Haidariya roundabout of Aleppo was targeted using explosive barrels.¹⁰⁶ Seven White Helmets volunteers from the SCD centre in Hanano were dispatched to the incident.¹⁰⁷ They were all wearing their uniforms and arrived in a search and rescue vehicle.¹⁰⁸ One of the survivors interviewed by the ISCU recalled that two helicopters were circling in the area,¹⁰⁹ which is consistent with the use of barrel bombs,¹¹⁰ and that the first attack had caused a lot of destruction and injuries.¹¹¹

About two minutes after they arrived, a secondary strike took place, once again using barrel bombs, and killed three of the volunteers.¹¹² The remaining members of the team worked to rescue the survivors, while another team was dispatched to extinguish the fire that had started.¹¹³

Witnesses stated that the area was far from the front lines¹¹⁴ and that no armed group was present in the immediate vicinity,¹¹⁵ although it sat on the main road connecting opposition-held Aleppo to the countryside.

In total, 12 civilians were killed, including three White Helmets volunteers – Amar Bkar, Ahmad al-Khald and Eahab Horua – and Canadian journalist Ali Mustafa, who had been covering the first responders' work.¹¹⁶

Thermobaric bombs, or so-called 'vacuum bombs', might also be considered of a nature as to cause superfluous injury or unnecessary suffering, at least when used in urban areas.¹¹⁷ On impact, they release a cloud of flammable gas which is then ignited by a secondary charge, creating a huge blast wave and fireball, designed to penetrate and then explode in confined spaces like bunkers or tunnels, bringing them down upon their occupants. The ensuing vacuum effect can rupture internal organs, especially lungs, and lead to deafness and blindness.¹¹⁸ Furthermore, thermobaric bombs are proportionally more powerful than conventional high-explosive munitions, making it nearly impossible to use them in a discriminate manner in populated areas.¹¹⁹

USE OF VACUUM BOMBS AGAINST CIVILIAN RESIDENCES AND BARREL BOMBS AGAINST FIRST RESPONDERS ON 4 MAY 2019 IN RAKAYA (IDLIB)

On 4 May 2019, a Russian aircraft reportedly fired four consecutive thermobaric bombs on civilian residences, killing one woman and inflicting burns on her husband and three children.¹²⁰ A White Helmets team from the SCD centre in Khan Shaykhoun was deployed to the site in marked vehicles and wearing their uniforms.¹²¹ One of the ambulances was targeted while on the way, injuring the driver, Mohammed Shawa, and rendering the vehicle out of service.¹²² Mohammed Shawa later died of his wounds.¹²³

As volunteers were trying to retrieve the remains of the woman killed, a Syrian army helicopter allegedly conducted two further strikes with barrel bombs, causing material damage but no injuries.¹²⁴

Around the time of the attack, both fixed wing attacking aircraft affiliated with Russian forces, and Mi-8 (Hip) helicopter belonging to the Syrian regime were spotted in the vicinity of Rakaya.¹²⁵ This seems to be in line with the open-source information which indicates that the first round of attacks deployed vacuum bombs which would be released from a fixed wing aircraft, and the secondary attacks deployed barrel bombs, which can only be released from a helicopter.

I.2. SUBSEQUENT STRIKES INTENTIONALLY TARGETING FIRST RESPONDERS

Regardless of whether individual White Helmets first responders might have benefited from a special protection as medical workers or civil defence members,¹²⁶ they were in any case protected as civilians.¹²⁷ None of the information collected by the ISCU in relation to the incidents investigated suggests there were any signs that could legitimately be interpreted as White Helmets volunteers directly participating in the hostilities and thus having lost their protected status as civilians. None of the footage reviewed shows any sign of them carrying weapons or engaging in hostile acts; on the contrary, the volunteers were clearly identifiable by their uniforms and their vehicles marked with the White Helmets logo, as can be seen in footage and pictures gathered by the ISCU.¹²⁸ In any case, even where a doubt exists as to the civilian character of a person, parties to the conflict must consider them civilians.¹²⁹



Credit: SCD, 8 October 2023, Idlib Governorate

I.2.i. REPEATED STRIKES OVER A SINGLE CIVILIAN TARGET

With the overwhelming majority of incidents examined by the ISCU clearly targeting civilian persons or objects,¹³⁰ the pattern of subsequent strikes strongly suggest that the intention of the armed forces was to target the remaining civilians and individuals providing first aid and search and rescue support. Indeed, the sheer number of successive strikes on a single location points to the intentional killing and destruction of protected persons and objects.

FIVE SUCCESSIVE STRIKES TARGET INDIVIDUALS RESCUING CIVILIANS ON 11 JULY 2016 IN Termanin (IDLIB)

On 11 July 2016, a market used by civilians to buy fuel on the outskirts of Termanin (Idlib) was targeted with a cluster bomb.¹³¹ A team of White Helmets volunteers was dispatched from the SCD centre in ad-Dana, before calling in support from the SCD centres in Bab al-Hawa and Darat Azzeh. Later on, SCD volunteers from the SCD centres in Killi and Atarib arrived at the scene too. The support teams arrived 10 to 15 minutes later, bringing the number of volunteers on site to around 50, all wearing their uniforms.¹³²

Witnesses recalled seeing at least three aircraft circling above, including two Su-34 which at the time was only operated by the Russian forces.¹³³ This is corroborated by footage of the incident.¹³⁴ Plane spotters also warned of Russian aircraft nearby.¹³⁵

About 10 to 15 minutes after the first strike, a second attack took place and was followed by further strikes at 10-15 minutes intervals. Throughout the rescue operation, the White Helmets volunteers were trying to evacuate the area but could not, due to the successive strikes.¹³⁶

One survivor remembered a drone arriving at the scene before the sixth and final strike and following White Helmets volunteers.¹³⁷ The final strike occurred suddenly and killed two of them and seriously injured several others.¹³⁸

No evidence was found of any legitimate military target; the market was about 50 kilometres from the frontlines.¹³⁹ Even if the regime's claim that the Russian air force had targeted a convoy of fuel tanks heading from ISIL-controlled territory towards Jabhat al-Nusra-controlled territory¹⁴⁰ was true, the number of successive strikes at regular intervals, the number of civilian casualties and the presence of a drone, seemingly surveilling first responders, show that these attacks intentionally targeted protected persons.

In total, the attack killed at least 10 civilians, including two White Helmets volunteers, Haitham al-Hassan and Hassan Baradei, and Ibrahim al-Omar, a journalist working for al-Jazeera, and injured more than 20 others.¹⁴¹

An attack that kills humanitarian workers may, however, be lawful if it is directed at a legitimate military target, so long as said attack is not disproportionate.¹⁴² However, the information gathered by the ISCU suggests this hypothesis is highly unlikely for most, if not all, of the incidents examined, as most of the initial targets were civilian in nature.¹⁴³ Even early on in the conflict when the Syrian forces and its allies had only limited targeting capacities, their attacks would still kill mostly civilians, raising serious concerns under the principle of proportionality. For example, one witness recalled a double-tap attack committed with barrel bombs which killed over 80 civilians in Aleppo.¹⁴⁴

Finally, considering the sheer amount of potential double-tap attacks which have killed White Helmets volunteers, it seems improbable that all these incidents were cases of 'collateral damage'. This does not even account for double-tap attacks which thankfully did not cause the death of a first responder; indeed, two witnesses clearly stated that most attacks were in fact double-tap attacks.¹⁴⁵

I.2.ii. USE OF GUIDED WEAPONS AGAINST HUMANITARIAN WORKERS

The use of guided and highly precise weaponry in attacks against first responders also suggests deliberate targeting. This was most notably the case later on in the conflict, during what a witness called a "Krasnopol campaign" which lasted approximately from May to September 2021 in Idlib Governorate.¹⁴⁶ This refers to Krasnopol projectiles which rely on the use of a drone to home in on their target using a laser designator.¹⁴⁷ With this type of weaponry, the armed forces could perpetrate double-tap attacks with a much greater precision over a longer time span. Whereas with other weapons, the subsequent strikes would take place relatively shortly after the first attack. The Krasnopol laser-guidance allowed the armed forces to target first responders hours after the first attack, which made the work of White Helmets volunteers much more difficult.¹⁴⁸

Krasnopol were reportedly used in Syria for the first time in 2016,¹⁴⁹ and became more common in 2021, when they were linked to several unlawful attacks against medical facilities and humanitarian workers¹⁵⁰ including in double-tap attacks.¹⁵¹ The very fact that these weapons are meant to conduct very precise strikes - for example on a single vehicle - shows that their use against persons and objects protected under IHL was most likely intentional.

DRONE ASSISTED GUIDED WEAPONRY TARGETS HUMANITARIAN WORKERS ON 17 JULY 2021 IN SARJAH (IDLIB)

In the evening of 16 July 2021, White Helmets volunteers from Jabal Arbaeen SCD centre received a warning from a monitor that an attack would take place on Sarjah in the coming hours.¹⁵²

On 17 July 2021 at around 8:30 – shortly before Bashar al-Assad was sworn in for his fourth term in office and pledged to regain control of opposition-held areas¹⁵³ – residential buildings in Sarjah were targeted.¹⁵⁴ A team of volunteers from the Jabal Arbaeen SCD centre, all wearing their uniforms, was dispatched in a van bearing the SCD logo.¹⁵⁵

White Helmets began their search and rescue efforts as soon as they arrived at the site of the attack. They retrieved four girls, all sisters, from the rubble. One of them was already dead. Relatives of the victims arrived and started to gather around the scene, despite warnings from the volunteers to stay away.¹⁵⁶

White Helmets volunteers received another alert from a monitor; shortly after, a secondary strike took place and immediately killed the sisters' grandmother.¹⁵⁷ First responders tried to evacuate the site;¹⁵⁸ as they were moving, an Orlan 30 drone arrived and followed them until they reached a small building where they took shelter.¹⁵⁹ This is consistent with observations made by monitors, which recorded the presence of both a drone and a Russian fixed-wing aircraft in the area at the time.¹⁶⁰ Footage also shows civilians warning each other: "we are being watched".¹⁶¹

At around 10:30, another strike hit the small building where the White Helmets volunteers were sheltering with some civilians, possibly with a vacuum bomb.¹⁶² This was caught on camera by one of the volunteers.¹⁶³ A civilian was killed, and the rest were severely injured.¹⁶⁴

Sarjah was about 6 kilometres from the frontline; but there were no armed groups in the village itself and Turkish monitors of the ceasefire were present around it.¹⁶⁵ In any case, the White Helmets volunteers whom the drone followed and identified as a target were all wearing distinctive signs of their protected status. The UN Commission of Inquiry (CoI) noted that the photographs of the remnants of the weapon were consistent with the guidance system of a Krasnopol-type weapon system,¹⁶⁶ indicating that the volunteers were intentionally targeted.

In total, at least six civilians were killed, and many others injured.¹⁶⁷ One White Helmets volunteer, Hammam Alassi, was among the injured and later died of his injuries.¹⁶⁸

II. RATIONALE FOR USING DOUBLE-TAP ATTACKS: ERODING CIVILIANS' HOPE

While double-tap attacks, and attacks against humanitarian workers in general, did not serve any legitimate military objective, they did pursue the broader aim of the Assad forces and its allies to crush any opposition¹⁶⁹ and erode the civilian population's sense of dignity and faith in the future,¹⁷⁰ as well as denying it the means to survive.¹⁷¹ It also contributes to the strategic logic of increasing the human cost of the conflict and "separat[ing] the opponent from its civilian supporters by using violence to cleanse territory of a particular group of civilians".¹⁷²

II.1. MAKING RESCUE AND MEDICAL ASSISTANCE AS DIFFICULT AS POSSIBLE

The very first and practical effect of double-tap attacks is to render difficult, if not impossible, rescue and first aid operations to civilian populations perceived as 'opposition' by the regime. The ISCU was able to document the death of over 70 White Helmets volunteers as a result of these attacks, with over 200 volunteers injured. Many of the injured have long-lasting health issues and disabilities which have prevented them from continuing their life-saving work on the ground. These numbers are conservative estimates. For each volunteer killed, SCD centres would have to recruit a new person and train them quickly, in very challenging circumstances.

In addition to the risk posed by double-tap attacks taken individually, their repeated use amidst larger bombardment campaigns, such as the so-called 'Dawn of Idlib' campaign which started in May 2019¹⁷³ and routinely targeted medical facilities and other specially protected objects,¹⁷⁴ increased the likelihood that humanitarian workers would be killed or maimed. White Helmets volunteers were not only repeatedly targeted in double-tap attacks,¹⁷⁵ with some surviving several until they were sadly killed or injured in the line of duty,¹⁷⁶ but also equally dangerous incidents, such as chemical weapons attacks, adding to the risk to their lives.¹⁷⁷

DOUBLE-TAP ATTACK ON 18 AUGUST 2019 ON MA'ARRAT AN-NU'MAN (IDLIB) LEAVES WHITE HELMETS VOLUNTEER DISABLED

In the morning of 18 August 2019, observers warned the SCD centre in Ma'arrat an-Nu'man that Russian aircrafts were attacking a factory on the highway between Aleppo and Damascus, in al-Hamidiyah.¹⁷⁸ The reports are corroborated by pilot radio communications intercepted at the time which demonstrate a Russian-speaking pilot seeking authorisation for and confirming airstrikes, according to the analysis conducted by the ISCU.¹⁷⁹

Two White Helmets volunteers, both wearing their uniforms, arrived in an SCD ambulance around 10 minutes later.¹⁸⁰ They found men under a collapsed concrete ceiling, all wearing civilian attire, at least one of whom was already dead, and started to rescue them.¹⁸¹

When the aircraft returned to the site 10 to 15 minutes after they had arrived, one of the volunteers, M.H., rushed to the ambulance to take shelter. A strike happened before he could reach it, and he found himself on the ground with his leg severely injured.¹⁸² He had to crawl to the vehicle before being taken to the National Hospital in Ma'arrat an-Nu'man.¹⁸³ Footage taken by White Helmets volunteers depict the extent of his injury.¹⁸⁴ Another team appears to have arrived afterwards to rescue the victims but was delayed because of the risk of an additional airstrike.¹⁸⁵

M.H.'s injuries were so severe that he had to be transferred to several successive hospitals, undergoing at least five surgeries,¹⁸⁶ having his leg amputated twice and nearly dying.¹⁸⁷ Prior to this incident, he had already survived two double-tap attacks and had witnessed one of his colleagues die.¹⁸⁸ Now living with a disability, M.H. was not able to return to his search and rescue work, and was unemployed for a year and a half, all the while being internally displaced. He later returned to work as a White Helmets volunteer as a dispatch officer.¹⁸⁹

White Helmets developed a series of measures to mitigate these risks and protect themselves from potential double-tap attacks. The first and foremost was a technique coined 'stealing or kidnapping the injured' (سرقة أو خطف الجرحى): volunteers had to rescue and evacuate as many victims as possible, as fast as possible, meaning proper first response procedures often could not be followed.¹⁹⁰ More generally, volunteers would try to evacuate and hide when they received an observer's warning that aircraft were still present in the area or were returning to the area.¹⁹¹ They also learnt to count the number of strikes to know when it would be safe to intervene.¹⁹² One witness even recalled that they would sometimes drive directly below the military helicopter so as to be able to extract victims of the first strike while the aircraft was circling back to strike again.¹⁹³

White Helmets volunteers were acutely aware that their work – and the very uniform meant to protect them – put a target on their backs, and they would warn civilians to stay away from them so that they would not be caught in a double-tap attack.¹⁹⁴ Since SCD centres and vehicles were potential targets, White Helmets volunteers would also leave their centre, even if they were not directly responding to the first attack, or park their ambulances in various locations, as the Asaad regime forces would sometimes target the SCD centre after having hit a civilian target.¹⁹⁵ Indeed, out of the 116 double-tap attacks examined by the ISCU at least four took place directly against an SCD centre.

DOUBLE-TAP ATTACK DIRECTLY AGAINST SCD CENTRE IN KHAN SHAYKHOUN (IDLIB) ON 26 DECEMBER 2017

On 26 December 2017, several airstrikes targeted the residential area of Mazra'at al-Azizyeh in Khan Shaykhoun at around 10:20 local time, killing at least two brothers and injuring five more civilians, including children.¹⁹⁶ White Helmets volunteers in uniform from the Khan Shaykhoun SCD centre and the surrounding area rushed to rescue the victims. Photographs of the location also show the extent of the damage to civilian residences.¹⁹⁷

Between 12:45 and 13:52 local time, a series of attacks took place against the SCD centre and killed one White Helmets volunteer, Bashar al-Dedo.¹⁹⁸

Later in the afternoon, airstrikes hit civilian areas in Khan Shaykhoun and in nearby al-Latamneh, killing and injuring several civilians.¹⁹⁹ Both locations would have fallen under the responsibility of the SCD centre in Khan Shaykhoun; however, the ISCU has not found information that White Helmets volunteers were able to respond to either of those incidents, presumably as they were still dealing with the aftermath of the attack against the centre.

At the time, the city of Khan Shaykhoun was under the control of HTS and roughly 10 kilometres from the frontlines.²⁰⁰ Al-Latamneh was also under HTS control but closer to the frontline with the regime forces.

Earlier that year, on 4 April 2017, Bashar al-Dedo had been one of the first responders rescuing the victims of a chemical weapons attack in Khan Shaykhoun and had himself been exposed to sarin.²⁰¹ Al-Latamneh had also been attacked with a chemical weapon on 24 and 25 March 2017.²⁰²

Considering the extent of destruction and harm airstrikes would cause to civilians, White Helmets volunteers, driven by their commitment to their humanitarian work, would not always follow their own precautionary measures. Although double-tap attacks did raise the cost and risk of providing first aid to victims, they did not deter volunteers. One witness recalled that ***"sometimes you don't even think about your own life. [...] You get to a location and see a child screaming, it is impossible for you to allow this to go on."***²⁰³

II.2. TARGETING THE COMMUNITY AT LARGE AND SPREADING TERROR

Double-tap attacks were also part of the wider pattern of attacks by the Assad regime, meant to demoralise, if not terrorise, the civilian population, to create a sense of hopelessness, cause repeated forced displacements, tear apart the social fabric, and ultimately break the people's will to resist the regime. Similarly, the UN Col had found as early as 2013 that attacks against medical facilities "spread terror among the civilian population",²⁰⁴ a year later, it clearly stated that "the military strategy employed by the Government is one of inflicting terror on civilians [...] Civilians are uprooted and dehumanised."²⁰⁵ Attacks against humanitarian workers, like attacks against medical workers, contributed to a healthcare crisis in Syria, characterised by a cruel lack of resources and extremely high and specific needs, especially in trauma medicine.²⁰⁶

It has been argued that attacks against humanitarian and medical workers may be partly aimed at breaking up local communities, by demoralising them and inducing mass displacements.²⁰⁷ White Helmets volunteers themselves were indeed displaced, often several times.²⁰⁸ One witness noted that while the main goal of double-tap attacks was to kill first responders and civilians alike, they also meant to cause fear among the population²⁰⁹ by targeting those bringing aid and representing hope.

DOUBLE-TAP ATTACK ON 27 JANUARY 2020 IN MOATAF (IDLIB) PURSUES A 'SCORCHED EARTH' POLICY

The second phase of the Assad regime forces' so-called 'Dawn of Idlib' campaign, which aimed to regain control of localities around Ma'arrat an-Nu'man, started in mid-December 2019.²¹⁰ The intensified bombing, part of 'scorched earth' tactics,²¹² would ultimately kill at least 300 civilians and displace a million people.²¹³ In the days leading up to the capture of Ma'arrat an-Nu'man on 28 January 2020,²¹⁴ government forces conducted over 15 airstrikes in the area.²¹⁵

In the evening of 27 January 2020, an attack targeted a residential area of Moataf, near Sarjah,²¹⁶ killing four civilians, including a man and his two sons.²¹⁷ White Helmets volunteers from the SCD centre in Bazabour appear to have been dispatched to the scene. According to observations by plane spotters,²¹⁸ a secondary airstrike, allegedly with vacuum bombs, took place less than 10 minutes later, killing one volunteer, Othman al-Othman, and injuring others.²¹⁹ Because of the threat of further attacks, the remains of the victims could only be extracted from the rubble the following day.²²⁰

Othman al-Othman had been a White Helmets volunteer since 2015 and had since then become team leader.²²¹ The grief of his relatives and colleagues was unfortunately caught on camera,²²² and shows the impact that these attacks against humanitarian workers have on their immediate community.

Families of White Helmets volunteers would feel first and foremost the effect of these repeated attacks. One witness shared that: **"I was always afraid for my family because of the [White Helmets] vest I was wearing"**.²²³ Sometimes, several members of the same families volunteered with the White Helmets,²²⁴ which increased the impact of any double-tap attacks on them. For example, one witness recalled that one of his colleagues had recovered the body of his own son, both of them having been volunteers in the same SCD centre.²²⁵

However, conflict can both harm or strengthen social bonds, depending on the circumstances.²²⁶ Although survivors of double-tap attacks interviewed by the ISCU all show signs of physical and psychological trauma,²²⁷ their affect wavered the most when talking about losing their colleagues, whom for many had become family.²²⁸ **"You are together today, and then they are gone"** stated one of the White Helmets members.²²⁹ Bashar al-Dedo, who was killed in a double-tap attack in Khan Shaykhoun,²³⁰ had been interviewed by the White Helmets media team about his response to a chemical weapon attack and shared: **"My love for my friends and for my work is the main driving force that pushes me to work with my colleagues and serve the people of my country. People need me—if we don't help them, who will?"**²³¹

MULTIPLE ATTACKS AGAINST WHITE HELMETS VOLUNTEERS ON 26 JUNE 2019 IN KHAN SHAYKHOUN (IDLIB)

Amidst the 'Dawn of Idlib' campaign,²³² on 26 June 2019, the city of Khan Shaykhoun was targeted no less than ten times in a single day, with locations nearby also being attacked.²³³

Around noon, multiple Russian airstrikes were reported in the al-Bireh neighbourhood to the East of Khan Shaykhoun,²³⁴ which is consistent with Sentry observations recorded at the time.²³⁵ White Helmets teams from the SCD centre in Azmarin were dispatched to the scene, wearing their uniforms.²³⁶

After having arrived at the scene, first responders were targeted in several separate follow-up strikes. These killed two White Helmets volunteers, Omar Kayal and Ali al-Ahmad al-Qadour, and injured at least four others.²³⁷ Footage captured by White Helmets volunteers shows them as the radio warns them that an aircraft is returning towards them, while some of them are already injured.²³⁸ The strikes also destroyed at least one of the White Helmets ambulances,²³⁹ and injured at least four civilians.²⁴⁰

The ISCU did not uncover any information indicating the presence of a legitimate military target in the area.

Footage taken after the incident shows the distress caused among the volunteers by the loss of their colleagues, as well as the community at large gathering to honour them during the funeral.²⁴¹



All witnesses interviewed by the ISCU reported that they had chosen to do this work precisely because they saw the needs of their community and felt compelled to join the White Helmets to pursue humanitarian objectives.²⁴² However traumatic and difficult, these attacks against humanitarian workers did not deter White Helmets volunteers. On the contrary, several witnesses shared that attacks against humanitarian workers only motivated them more to pursue their work and did not have a negative impact on recruitment.²⁴³ **"We always thought of our humanitarian and moral duty: if we stop, who is going to help the people?"**²⁴⁴

II.3. UNDERMINING THE TRUTH

While double-tap attacks directly targeted the few remaining independent sources (journalists, medical workers, and humanitarian personnel) capable of informing the world about the suffering of the Syrian people,²⁴⁵ they also aligned with a broader strategy to delegitimise first responders, healthcare professionals, and Syrian civil society by spreading disinformation and discrediting those still able to bear witness.²⁴⁶ One witness recalled that one of his colleagues killed in a double-tap attack "was a media activist and his only goal in life was to make our voices heard."²⁴⁷ Indeed, attacks against humanitarian workers also served to undermine the truth of the conflict. The Syrian regime used disinformation from the start of the conflict,²⁴⁸ but the Russian military intervention coincided with a wider and more organised disinformation campaign, both about attacks and casualties and about the nature and reliability of opposition groups and civil society.²⁴⁹

The most common tactic was to describe any opposition group as 'terrorist' and victims as militants or military targets.²⁵⁰ Even before the Russian intervention in Syria officially started,²⁵¹ regime supporters spread lies about the White Helmets and other civil society organisations, linking them to terrorist groups. This continued throughout the conflict²⁵² and until the fall of the regime,²⁵³ with claims aimed at discrediting the information provided by White Helmets volunteers, but also at presenting them as legitimate military targets.²⁵⁴ Dehumanising language was thus used to justify attacks. For example, one survivor recalled being told that White Helmets volunteers had been described as "seven dogs" in an intercepted radio communication, before the speaker, presumably the pilot, added: "do not let them get out alive".²⁵⁵

Public statements would also deny crimes committed by the Assad regime,²⁵⁶ relying on the illusory truth effect by which statements, even if false, gain traction with repetition:²⁵⁷ attacks against humanitarian workers, depicted as military targets, were no longer news-worthy, allowing the Assad regime to continue its tactics relatively unimpeded.

RUSSIA JOINS THE CONFLICT WITH DOUBLE-TAP ATTACK TARGETING A RESIDENTIAL AREA IN TALBISEH (HOMS) ON 30 SEPTEMBER 2015

On 30 September 2015, the Russian Federation officially joined the conflict alongside the Syrian army, to fight against the Islamic State (ISIL)"and other terrorist groups operating in Syria",²⁵⁸ and immediately conducted airstrikes, to support ground operations by Syrian forces.²⁵⁹ In its letter to the UN Security Council, Russia makes the distinction between the "patriotic opposition" and terrorist groups.²⁶⁰

One of these very first strikes targeted a residential area in Talbiseh, causing substantial damage to a mosque and a school in the morning of 30 September 2015.²⁶¹ It also hit a bread depot, which allegedly hosted the local civilian council.²⁶² Spotters warned civilians to evacuate the streets after observing two planes in the area and intercepting pilot communications in Russian.²⁶³ Several airstrikes took place shortly after, allegedly using thermobaric weapons.²⁶⁴ It appears that Abdul Latif al-Dhahik, a White Helmets volunteer, had rushed out to extinguish fires and was then killed by another rocket.²⁶⁵ Footage of the immediate aftermath of the attack and the rescue operation show the devastated scene.²⁶⁶

In total, the attack killed at least 18 civilians, including Abdul Latif al-Dhahik and four children, and injured dozens of others.²⁶⁷ The injuries treated at the hospital, such as internal organs rupture or eardrum perforations, were consistent with the use of thermobaric weapons.²⁶⁸



Credit: SCD, 19 August 2020

That very day, representatives of the Russian military made bold statements, recognising having conducted at least 12 strikes "only outside inhabited areas",²⁶⁹ against ISIL's 'dens' and inflicted heavy losses to the group.²⁷⁰

According to what witnesses told activists, there were no military targets in the immediate area,²⁷¹ although Talbiseh appears to have been controlled by the Free Syrian Army at the time.²⁷² In any case, the strikes were not conducted against ISIL-held territory.²⁷³ The Russian Ministry of Foreign Affairs quickly dismissed reports that most, if not all, victims were civilians and not ISIL members, as "an information-based attack – the information war of which we have heard so often."²⁷⁴

In the following days, Russian media reported that the Syrian Air force had dropped leaflets over Talbiseh, warning civilians to leave before the military operation began,²⁷⁵ presumably in response to reports of high numbers of civilian casualties. Even if confirmed, such an advance warning²⁷⁶ would not mean the operation complied with IHL, as it neither dispenses the warring party of assessing the proportionality of its attack, nor renders every individual still present in the location a legitimate military target.

This public discourse and disinformation not only sowed the idea that there were no attacks against humanitarian workers, but also that claims to the contrary were made by terrorist groups themselves, preventing their voice from being heard, even when they had not been killed. Thus, attacks against the White Helmets quickly evolved into conspiracy theories that the volunteers were in fact faking attacks and rescue operations²⁷⁷ and escalated to accusations of committing or planning crimes themselves.²⁷⁸ The disinformation campaign grew with time, reaching a peak in 2018,²⁷⁹ and spiked in correlation with military or diplomatic developments,²⁸⁰ including the White Helmets' well-publicised nomination for the Nobel Peace Prize. It was spread both by individuals and official government accounts.²⁸¹ While this campaign was largely successful in creating uncertainty - for example delaying or impeding policy decisions,²⁸² justifying the deportation of Syrian asylum seekers,²⁸³ and impacting the funding allocated to humanitarian organisations operating in Syria²⁸⁴ - its effectiveness varied depending mostly on the stakeholders' knowledge and understanding of the Syrian context.

It also had a deep and personal impact on individuals affected.²⁸⁵ Ismail Alabdullah, White Helmets' Media Coordinator and himself a double-tap attack survivor, explained: "If you search my name, you'll see tweets claiming I belong to an armed group and that I make everything up [...] People see your photo with all that false information on social media. How

can you live your life like that?"²⁸⁶ Nonetheless, the disinformation did not deter human rights activists and humanitarians from pursuing their work.²⁸⁷ On the contrary, for some it became proof that their work was crucial and feared by the regime, which motivated them further.²⁸⁸

III. ALLEGED PERPETRATORS

On 30 September 2015, Russia, at the invitation of the Assad regime, joined the conflict in Syria.²⁸⁹ According to open-source information, sentry observations²⁹⁰ and the White Helmets incident reports, over 50% of the 116 potential double-tap incidents considered by the ISCU were perpetrated by the Assad regime and around 25% by the Russian forces.²⁹¹ Based on the data available, the ISCU was able to establish with some certainty that Russian forces were responsible for the attack on Ma'arrat an-Nu'man on 18 August 2019,²⁹² and Syrian regime forces were responsible for the attack on Khan Shaykhoun on 26 December 2017.²⁹³

Russian forces were more persistent in conducting double tap attacks and would stay in the area and circulate until they managed to hit the target.²⁹⁴ After an airstrike affecting a hospital,²⁹⁵ one doctor told The Guardian: "I think it was Russian [...] When we were targeted by the Syrian regime airstrikes, it was different from this time." Coincidentally, this attack occurred less than a month after the Russian forces officially entered the conflict; the same witness stated: "In the last three four weeks the airstrikes have become very accurate, very precise and very intense."²⁹⁶ This is corroborated by the testimony of White Helmets volunteers, who explained that Russian airstrikes were more accurate than Syrian ones.²⁹⁷

III.1. RUSSIAN AIRFORCE

Sentry observations analysed by the ISCU indicate that nearly all of the Russian attacking fixed-wing aircraft took off from the Hmeimim airbase.²⁹⁸ Also known as Latakia International Airport, it is located south-east of Latakia.²⁹⁹ The Russian forces in Syria have been stationed at Hmeimim airbase since 26 August 2015, when Syria and Russia signed an agreement on the military deployment of the latter on Syrian territory.³⁰⁰ On 22 February 2016, the Russian Centre for Reconciliation of Conflicting Sides in Syria, which has been responsible for some of the disinformation against the White Helmets, also began operating from the Hmeimim airbase.³⁰¹

ATTACK ON 18 AUGUST 2019 ON MA'ARRAT AN-NU'MAN (IDLIB)

As outlined above, on the morning of 18 August 2019, Russian aircraft attacked a factory on the highway between Aleppo and Damascus in al-Hamidiyah. Approximately 10 to 15 minutes after White Helmets volunteers arrived at the site of the attack, the Russian aircraft returned and launched a second strike, severely injuring one of the White Helmets volunteers, M.H.³⁰²

According to open-source information, as well as in-house incident reports, the two airstrikes occurred between 8:25 and 10:00.³⁰³ The ISCU extracted eight relevant sentry observations of aircraft flying in the area around Ma'arrat an-Nu'man at this time. To determine from which airbase those aircraft might have departed, the ISCU identified the following departure observations prior to the last relevant aircraft observation at 8:57. Results show that all Russian fixed wing attacking aircraft that could have been used in this incident took off from the Hmeimim airbase.

In sum, the ISCU infers that the aircraft used in this attack is one or several of the Russian fixed-wing attacking aircraft which departed from Hmeimim airbase between 6:31 and 8:09. The team deduces that these were then spotted circling in the area between 8:15 and 8:57, which is consistent with the alleged times of the strikes:

Location	Observation Local Datetime	Aircraft Category	Aircraft Type	Heading	
Hmeimim Airbase	18/08/2019 06:31:58	Fixed Wing	Russian	South East	✈️
	18/08/2019 07:13:16	Fixed Wing	Russian	South East	✈️
	18/08/2019 08:09:51	Fixed Wing	Russian	South East	✈️
Ma'arrat al-Nu'man	18/08/2019 08:15:52	Fixed Wing	Russian	South East	✈️
	18/08/2019 08:18:59	Fixed Wing	Russian	East	➡️
	18/08/2019 08:20:00	Fixed Wing	Russian	Circling	🌀
	18/08/2019 08:23:30	Fixed Wing	Russian	Circling	🌀
	18/08/2019 08:25:37	Drone	Drone	Circling	🌀
	18/08/2019 08:51:58	Fixed Wing	Russian	South	⬇️
	18/08/2019 08:56:55	Fixed Wing	Russian	North East	↗️
	18/08/2019 08:57:17	Fixed Wing	Russian	Circling	🌀

The ISCU also reviewed 159 pilot radio intercepts where voice was detected on 18 August 2019 between 8:15 and 9:30.³⁰⁴ The recorded location was Hmeimim Airbase for 54 of them, indicating that the pilot was communicating on the frequency used by the Hmeimim Airbase.³⁰⁵ From the 36 recordings containing intelligible speech in Russian, it is possible to discern Russian-speaking pilot(s) confirming three airstrikes. The first confirmation takes place at approximately 8:22 when sentry observations report an aircraft circling near Ma'arrat an-Nu'man. The following two confirmations take place at approximately 9:19 when an aircraft was spotted circling near Khan Shaykhoun; and at approximately 9:29 when an aircraft was spotted circling near al-Tamanah.

Together, the Sentry observations and radio intercepts demonstrate that the Russian forces were most likely responsible for the double-tap attack on Ma'arrat an-Nu'man on 18 August 2019.

From February to September 2019, Colonel General Andrei Nikolayevich Serdyukov was Commander of the Group of Troops of the Armed Forces of the Russian Federation in the Syrian Arab Republic.³⁰⁶ This puts him in charge during much of the so-called 'Dawn of Idlib' campaign.³⁰⁷ He would have been ultimately responsible as a military commander for the 18 August 2019 attack on Ma'arrat an-Nu'man (Idlib).³⁰⁸ He might also be responsible for the attacks in Rakaya on 4 May 2019, in Khan Shaykhoun on 26 June 2019, and in Ma'arrat Harma on 14 August 2019 (Idlib).³⁰⁹ In February 2020, Colonel General Serdyukov was awarded the title of Hero of Russia for his "participation in the counter-terrorist operation in Syria".³¹⁰ He served again as the Commander of the Group of Troops of the Armed Forces of the Russian Federation in the Syrian Arab Republic from December 2022 to November 2023.³¹¹

Colonel General Alexander Vladimirovych Dvornikov was Commander of the Russian military operation from September 2015 to July 2016,³¹² when the attacks on Talbiseh (Homs) and on Sarmin (Idlib) took place.³¹³ In July 2016, when the attack on Termanin (Idlib) took place,³¹⁴ and in June 2018, at the time of the attack on Zardana (Idlib),³¹⁵ Lieutenant General Alexander Aleksandrovych Zhuravlev was in charge.³¹⁶

On 7 and 8 December 2024, as the regime of Bashar al-Assad was falling, some of the Russian assets located at the Hmeimim airbase were reportedly moved to the Tartus naval base.³¹⁷ At the time of the publishing of this report, the Russian forces remain present in Syria, including in the Hmeimim airbase with Colonel General Alexander Yuryevich Chaiko currently serving as the commander of the Russian Force Grouping in Syria.³¹⁸

III.2. SYRIAN REGIME

The ISCU's investigation of the double-tap attacks highlights the involvement of two airbases: Hama Military Airbase and the T-4 (West) Airbase in Homs. According to open-source information, the Hama Military Airbase stationed the 63rd Brigade (independent helicopter brigade) of the Syrian Air Force. This Brigade consisted of three squadrons, that is, 253rd squadron, 255th squadron, and 257th squadron. All of them used Mi-8/17 helicopters.³¹⁹ The T-4 (West) Airbase in Homs housed the 70th Brigade of the 22nd Division (North) of the Syrian Air Force. This Brigade consisted of two squadrons, that is, the 819th squadron using Su-24 attacking aircraft, and 827th squadrons using Su-22 attacking aircraft.³²⁰

ATTACK ON 26 DECEMBER 2017 ON KHAN SHAYKHOUN (IDLIB)

As outlined above, between around 12:45 and 15:00, Khan Shaykhoun was repeatedly attacked by the Syrian regime, killing several civilians and one White Helmets volunteer. According to the White Helmets incident reports, the first two strikes at around 12:45 and 13:20 were barrel bombs; the following two at around 13:40 and 13:52 were conventional airstrikes.³²¹

The ISCU identified five relevant sentry observations in Khan Shaykhoun, all of which relate to attacking aircraft affiliated with the Syrian regime, i.e. Mi-8 helicopter and Su-24 fixed wing attacking aircraft. To determine from which airbase they might have departed, the ISCU identified departure observations between 11:45, which is an hour prior to the attack, and 13:51, which is the latest spotting of an Su-24 relevant for this incident. These showed Mi-8 (Hip) Syrian regime helicopter(s) departing from the Hama Military Airbase, and Su-24 (Fencer) Syrian regime fixed wing aircraft departing from the T-4 (West) Airbase. Khan Shaykhoun is located approximately 40 kilometres north of Hama Military Airbase, and approximately 135 kilometres northwest of the T-4 (West) Airbase in Homs.



In sum, the ISCU infers that the aircraft used for the first two strikes in this attack are likely to be a Mi-8 helicopter(s) which departed from Hama Military Airbase between 12:00 and 13:03 and were circling above Khan Shaykhoun at 12:52, 13:19 and 13:26 - which is consistent with the reported times of attack. The following strikes appear to have been launched from an Su-24 aircraft, which departed from T-4 (West) Airbase around 13:32 and was then spotted circling Khan Shaykhoun at 13:42 and 13:51, which is also consistent with the alleged times of attack:

Observation Local Datetime	Location	Aircraft Category	Aircraft Type	Heading	
26/12/2017 12:02:15	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:05:20	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:08:51	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:11:01	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:17:16	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:30:43	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 12:52:48	Khan Sheikhun	Helicopter	Mi-8 (Hip)	Circling	○
26/12/2017 13:03:23	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 13:19:26	Khan Sheikhun	Helicopter	Mi-8 (Hip)	Circling	○
26/12/2017 13:26:27	Khan Sheikhun	Helicopter	Mi-8 (Hip)	Circling	○
26/12/2017 13:27:50	Hama Military Airbase	Helicopter	Mi-8 (Hip)	North	↑
26/12/2017 13:32:03	T4 West Airbase	Fixed Wing	Su-24 (Fencer)	North West	↖
26/12/2017 13:42:13	Khan Sheikhun	Fixed Wing	Su-24 (Fencer)	Circling	○
26/12/2017 13:51:59	Khan Sheikhun	Fixed Wing	Su-24 (Fencer)	Circling	○

The Sentry observations suggest that the Syrian forces, specifically, the 63rd Brigade of the Syrian Air Force stationed at the Hama Military Airbase, and the 819th squadron of the 70th Brigade of the 22nd Division (North) of the Syrian Air Force stationed at the T-4 (West) Airbase, were most likely responsible for the double-tap attack on Khan Shaykhoun on 26 December 2017.

Major General Ahmed Balloul was the Commander of the Syrian Arab Air Force and Air Defence Forces from January 2013 until 25 October 2020.³²² This makes him responsible as a commander for most of the double-tap attacks that the ISCU examined. Major General Balloul is already wanted for the war crime of deliberate attacks against the civilian population by the French War Crimes Unit, which issued an international arrest warrant against him and other military leaders.³²³

IV. ACCOUNTABILITY PROSPECTS FOR VICTIMS OF DOUBLE-TAP ATTACKS

After more than a decade of war, the pattern of double-tap attacks against White Helmets volunteers ceased after the fall of the Assad regime. The sheer scale of the gross human rights violations, breaches of international humanitarian law and international crimes perpetrated against all sections of the Syrian people during the conflict represents an incredible challenge in the process of "[coming] to terms with a legacy of large-scale past abuses, in order to ensure accountability, serve justice and achieve reconciliation".³²⁴ That being said, however arduous the task, survivors and victims have a right under international human rights law to obtain justice for the human rights violations, breaches of IHL and international crimes they suffered.³²⁵

Under most human rights treaties, States' duties are set out in relation to the individuals present on their territory and subject to their jurisdiction,³²⁶ which includes not only their citizens and individuals present on their territory, but effectively every individual "within the power or effective control of the forces of a State Party acting outside its territory, regardless of the circumstances in which such power or effective control was obtained."³²⁷ Thus, while the Syrian State remains the primary duty-bearer towards victims and survivors of double-tap attacks committed in Syria, it is not the only one.

Like all States, the Syrian State's duty to ensure the effective enjoyment of human rights of all those subject to its jurisdiction includes guaranteeing the right to an effective remedy, which is enshrined in most human rights texts,³²⁸ and is now customary.³²⁹ The right to an effective remedy carries several obligations for the duty-bearer: the duty to investigate human rights violations, the duty to prosecute alleged perpetrators, the duty to provide reparations to victims, and the duty to offer guarantees of non-recurrence.³³⁰

IV.1. DUTY TO INVESTIGATE AND UNCOVER THE TRUTH

The duty of States to ensure the right to an effective remedy implies a duty to investigate alleged human rights violations.³³¹ Failure to do so is in itself a human rights violation. Truth and recognition of the crimes they had suffered over the years was a recurring theme for White Helmets volunteers,³³² with one stating: ***"I just want the truth to be told"***.³³³ Another declared: ***"Our children and grandchildren deserve to know what happened to our country."***³³⁴

Investigations also contribute to the right to truth,³³⁵ one of the foundational building blocks of transitional justice. More than a cursory investigation, the new authorities of Syria must depart from the Assad regime's legacy of systematic denial and undertake an extensive effort to effectively investigate all allegations of serious human rights violations, breaches of humanitarian law and international crimes, regardless of the perpetrator, and to "reveal to victims and society at large all known facts and circumstances of past abuses".³³⁶ This will imply collaborating with international investigative mechanisms, such as the UN Col, but also NGOs which have been and continue documenting these crimes.

While the ISCU was able to examine some alleged double-tap attacks against White Helmets volunteers to produce this report, its resources did not allow it to conduct an in-depth investigation. The Syrian transitional government now has the "legal duty to ensure the thorough documentation and review of all alleged violations, the gathering of all relevant testimonial and documentary evidence, the undertaking of all relevant scientific analysis and the establishment and preservation of adequate archival resources."³³⁷ This extensive work should include attacks against humanitarian and medical workers.

IV.2. DUTY TO PROSECUTE THOSE RESPONSIBLE

The duty of States to ensure the right to an effective remedy includes an obligation to bring perpetrators of human rights violations to justice. Failure to do so is a human rights violation in itself.³³⁸ Criminal accountability was a unanimous demand of White Helmets volunteers interviewed by the ISCU.³³⁹

States have a duty to prosecute all alleged perpetrators of gross violations of human rights, serious violations of international humanitarian law, and international crimes. It also extends to States other than Syria, via extraterritorial jurisdiction.³⁴⁰ In addition to this legal obligation, the Syrian conflict has unfortunately demonstrated the global impact that the conduct of conflict can have on conflicts elsewhere, and how impunity can breed further crimes in other contexts.³⁴¹ One such example is the case of Colonel General Alexander Vladimirovych Dvornikov, nicknamed 'the butcher of Grozny' and then 'the butcher of Aleppo', who was appointed commander of the Russian forces in Ukraine in 2022.³⁴²

Double-tap attacks examined by the ISCU may amount at the very least to war crimes of killing³⁴³ and unlawful attacks³⁴⁴ and crimes against humanity of murder.³⁴⁵ Some incidents examined by the ISCU also suggest that war crimes of use of prohibited weapons and spreading terror among the civilian population³⁴⁶ might also have been committed.

As of the day of writing this report, Syria faces incredible challenges, should it try to prosecute those responsible for the attacks targeting White Helmets volunteers. Firstly, Syria's Criminal Code³⁴⁷ does not prohibit war crimes or crimes against humanity – precluding prosecutions in

line with international standards, unless domestic reform is enacted. Syrian courts are thus currently unable to fully capture the material elements of the attacks against humanitarian workers and facilities committed in the country. Although the government has stated that its international obligations are part of the domestic legal system, the gap between the provisions of the treaties it is bound by and its domestic legal framework is wide, as was noted by the Human Rights Committee.³⁴⁸

Secondly, decades of autocratic rule and years of conflict that decimated the country and the existing Syrian institutions, especially its law enforcement and judiciary, must be rebuilt. The international community should extend its support to the new Syrian government to ensure its ability to collect, preserve and make use of the evidence for truth and justice purposes. One witness acknowledged the challenges faced by Syrian institutions to ensure a fair and impartial justice with one of the parties of the conflict now in power;³⁴⁹ another explicitly mentioned wanting to see Bashar al-Assad stand trial before the International Criminal Court (ICC).³⁵⁰ Regardless of the type of mechanism or jurisdiction tasked with the prosecution of alleged perpetrators of crimes under international law committed in Syria, they will have to comply with international legal standards, and thus ensure fair and impartial justice, with full respect of human rights.

Adopting the necessary legal and judicial reforms required for the prosecution of suspects for international crimes and gross violations of human rights in Syria, with respect of the right to a fair trial, may take years. In the meantime, impunity cannot be allowed to persist, and victims' rights cannot be shunned further. It is crucial for third States to respect their duty to investigate and prosecute allegations of violations, especially when suspects are present on their territory. Domestic courts across the world have already shouldered some of that work and should continue to do so.

However, particular attention needs to be paid to double-tap attacks and attacks against humanitarian workers in general. The fact that such attacks are rarely prosecuted may contribute to the growing numbers of similar attacks, especially in Ukraine and in Palestine.³⁵¹

IV.3. DUTY TO PROVIDE REPARATIONS TO THE VICTIMS

States also have a duty to provide reparations to victims of serious human rights violations,³⁵² that is restitution, compensation and rehabilitation.³⁵³

Medical rehabilitation is one of the most concrete forms of reparations that the Syrian authorities and the donor community could provide to survivors and victims of double-tap attacks. Several hundred White Helmets volunteers now live with a disability³⁵⁴ and it is nearly impossible to know how many more were injured less seriously but might suffer adverse health effects in the future.³⁵⁵ Bashar al-Dedo, a White Helmets volunteer who had been affected by a chemical weapon attack,³⁵⁶ shared how the medical treatment and physical therapy he received changed his life: ***"I went through physical therapy and medical treatment until I was finally able to hold a phone or carry my son and hug him to my chest. It affected everything in my life, but thanks to the treatment, I've recovered. Now I can hold my children in my arms again and continue my work with my colleagues."***³⁵⁷ In addition to physical therapy, most White Helmets volunteers, especially those who survived double-tap attacks, would also benefit from psychosocial support of some sort.³⁵⁸ The extent of trauma they suffered will have long lasting repercussions on their overall health.

Considering the breadth of victimisation in Syria, it is unlikely that all victims will be able to receive individual financial compensation, underlining the need for collective reparations. To some extent, these might be at least partly fulfilled by the reconstruction of basic infrastructure (such as schools and medical facilities) destroyed over the course of the conflict,³⁵⁹ to which much of Syria's resources will no doubt be spent on. This is also in line with how White Helmets volunteers interviewed by the ISCU talked about reparations, mentioning their desire to rebuild their village, region and country:³⁶⁰ ***"I would do the impossible to build this new State, so that Syria becomes the best country in the world."***³⁶¹

However, injured and disabled White Helmets volunteers do need financial compensation, especially when they are now unable to work and provide for their family.³⁶² This could include disability benefits, housing support, or a recognised status as a person living with disability allowing them to access public services faster.³⁶³ In this regard, international actors, including UN agencies, will need to provide technical and financial support to the Syrian transitional government so that all victims may receive the assistance they are entitled to in a timely manner.

IV.4. DUTY TO OFFER GUARANTEES OF NON-RECURRENCES

States also have a duty to prevent any recurrence of past violations,³⁶⁴ i.e. to take measures such as reforming legislation or policies. These measures may include, but are not limited to, ratifying or adopting international human rights instruments, implementing vetting processes, and undertaking criminal justice, constitutional, and security sector reforms. For a people for whom gross human rights violations have been a daily occurrence for as long as anyone can remember, it will be especially important that any transitional justice plan includes solid guarantees of non-recurrence. This will be essential for sustained peace.

With regards to double-tap attacks and attacks against humanitarian workers more broadly, White Helmets volunteers did not mention any specific need. They did however express their thirst for human rights more broadly: ***"We Syrian citizens have always been suppressed. We have never had rights. I want to live a life of a citizen who has rights."***³⁶⁵ While building State institutions with a human rights culture and respect for the rule of law will be a long process, one of the first steps the transitional government can take to signal their intent to protect human rights is to proceed with the ratification of international conventions, such as the Rome Statute of the ICC and the Convention for the Protection of All Persons from Enforced Disappearance. They should also engage in individual complaint mechanisms and international courts, so that legal avenues may, in the future, be available to Syrian victims of human rights violations.

CONCLUSION AND RECOMMENDATIONS

While the White Helmets' ISCU was only able to examine a limited number of double-tap attacks which killed White Helmets volunteers, it can state with certainty that many more incidents of attacks against humanitarian workers took place throughout the country.

One of the White Helmets volunteers recalled working during the conflict, “[w]henever I went to work, I would kiss my children and say my goodbyes because I had the feeling I might not go back. Because of the double-taps, I always felt that I was in danger, but I felt like I couldn’t leave these women and children without help”. It is the duty of all the involved parties to ensure that no humanitarian worker needs to feel this way.

The survivors and witnesses whom the ISCU interviewed all shared that they had felt joy and hope since December 2024, but they also recognised that much work remained to be done to rebuild Syria. *“I love my country so much, beyond description.”*³⁶⁶

Taking stock of all of the above, the White Helmets makes the following recommendations:

To the Syrian transitional government:

- i. Abide at all times by international human rights law and IHL, including by refraining from attacking humanitarian and medical workers and meaningfully investigating and prosecuting individuals responsible for such crimes;
- ii. Amend Syrian law to comply with international human rights standards and to criminalise crimes against humanity, war crimes and genocide, and ensure that these are prosecutable without temporal limitations;
- iii. Ensure that the National Commission for Transitional Justice (NCTJ) is operationally independent, equipped and able to fully investigate violations of human rights, breaches of IHL and crimes under international law, regardless of the perpetrator, and in particular attacks against humanitarian workers, with a gender-sensitive and victim-centred approach;
- iv. Empower the NCTJ to recommend referrals for prosecution;
- v. Commit to full public disclosure of the NCTJ's findings in accessible formats and languages, including Arabic and Kurdish, so that all components of Syrian society may access the material, regardless of their background, level of education or abilities;
- vi. Enable the NCTJ to conduct outreach activities to seek collaboration with civil society organisations and to promote knowledge of the process within Syrian society;
- vii. Conduct studies and consultations with civil society, international institutions and the donor community as to how to achieve accountability for crimes under international law committed in Syria, regardless of the perpetrator, including national, hybrid, and universal jurisdiction options;
- viii. Cooperate with third States' jurisdictions seeking judicial assistance in pursuing investigations and prosecutions of international crimes committed in Syria;
- ix. Provide immediate relief to humanitarian and medical workers who have survived attacks and were seriously injured, and recognise them legally as victims of gross human rights violations eligible for reparations;
- x. Establish a national assistance scheme to provide long-term financial, compensation, disability pensions, housing support, administrative, medical and psychosocial care to current and former humanitarian workers and their families;

- xi. Ratify key international conventions, such as the Rome Statute of the ICC and the International Convention for the Protection of All Persons from Enforced Disappearance;
- xii. Accept the competence of the International Criminal Court, in line with Article 12 of the Rome Statute, and individual communication mechanisms, for example under the Optional Protocol to the International Covenant on Civil and Political Rights and the Optional Protocol to the Convention against Torture; *and*
- xiii. Order a study of best practices for the protection of humanitarian workers from attacks and share knowledge acquired by the White Helmets over the years with civil defence services and humanitarian organisations targeted in other conflicts around the world.

To international organisations, including the United Nations:

- xiv. Continue supporting the Syrian transitional government in reaching compliance with international law;
- xv. Continue engagement with the Syrian transitional government to deploy humanitarian agencies and human rights bodies on the territory of Syria so as to strengthen their mandates and build capacities;
- xvi. Support, including financially and through capacity-building, the mandate of the NCTJ;
- xvii. Continue investigating human rights violations and breaches of international humanitarian law committed in Syria, including through its investigative bodies;
- xviii. Cooperate with the Syrian transitional government to overcome any legal obstacles to the sharing of evidence collected thus far by the International, Impartial and Independent Mechanism and the UN Col; *and*
- xix. For investigative bodies, consider attacks against humanitarian and medical workers a key thematic priority, in line with UNSC Resolution 2286 (2016).³⁶⁷

To third States:

- xx. Continue engaging diplomatically with the Syrian transitional government, in particular with regards to sanction relief and humanitarian assistance;
- xxi. Encourage the Syrian transitional government to adhere to international law and actively participate in multilateral *fora*, including by cooperating with relevant international investigative bodies;
- xxii. Support, including financially and through capacity-building, the mandate of the NCTJ;
- xxiii. Continue supporting an independent Syrian civil society; *and*
- xxiv. Pursue investigations and prosecutions of international crimes committed in Syria, especially when victims or alleged perpetrators are present on their territory, in accordance with CIL and relevant national legislation.

GLOSSARY

CIL: Customary International Law
Col: Commission of Inquiry
EAC: Extraordinary African Chambers
ECtHR: European Court of Human Rights
HTS: Hay'at Tahrir al-Sham
ICC: International Criminal Court
ICCPR: International Covenant on Civil and Political Rights
ICJ: International Court of Justice
ICRC: International Committee of the Red Cross
ICTJ: International Center for Transitional Justice
ICTR: International Criminal Tribunal for Rwanda
ICTY: International Criminal Tribunal for the Former Yugoslavia
GMT: Greenwich Mean Time
IHL: International Humanitarian Law
ISCU: Investigation and Case-building Unit
ISIL: Islamic State in Iraq and the Levant
NCTJ: National Commission for Transitional Justice
NGO: Non-Governmental Organisation
NIAC: Non-International Armed Conflict
OPCW: Organisation for the Prohibition of Chemical Weapons
PHR: Physicians for Human Rights
SAMS: Syrian American Medical Society
SCD: Syria Civil Defence
SCSL: Special Court for Sierra Leone
SJAC: Syria Justice and Accountability Center
UN: United Nations
UNGA: United Nations General Assembly
UNHCR: United Nations High Commissioner for Refugees
UNHRC: United Nations Human Rights Council
UNHRCt: United Nations Human Rights Committee
UNOCHA: United Nations Office for the Coordination of Humanitarian Affairs
UNSC: United Nations Security Council

¹ Bashar al-Dedo, White Helmets volunteer in the SCD centre in Khan Shaykhoun, interviewed by the White Helmets' media team on 21 July 2017. See: @SyrianCivilDefenceIdlib on Youtube, 'الشهيد المتطوع بشار ددو - خان شيخون - الدفاع المدني السوري', 26 December 2017: <https://tinyurl.com/5ave658b>. Bashar al-Dedo was later killed in a double-tap attack on his SCD center on 26 December 2017. See: Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p.18.

² Note that all URLs below were last accessed on 30 July 2025.

³ Al-Jazeera, 'Deadliest day' in Syria uprising', 23 April 2011: <https://tinyurl.com/y2s8x222>; UNHRC, First report of the independent international commission of inquiry on the Syrian Arab Republic, 23 November 2011, A/HRC/S-17/2/Add.1, para. 28.

⁴ UNHRC, Second report of the independent international commission of inquiry on the Syrian Arab Republic, 22 February 2012, A/HRC/19/69 (hereafter: 2nd Col Report), para. 15.

⁵ UNSC, Statement by the President of the Security Council, 3 August 2011, S/PRST/2011/16.

⁶ 2nd Col Report, para. 73.

⁷ UNHRC, Oral update of the Independent International Commission of Inquiry on the Syrian Arab Republic on the events in al-Houla, 26 June 2012, A/HRC/20/CRP.1, para. 90-93.

⁸ BBC, 'Syria in civil war, says UN official Herve Ladsous', 12 June 2012: <https://tinyurl.com/49fhnd8m>.

⁹ ICTY, Appeals Chamber, *The Prosecutor v. Dusko Tadić*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995, IT-94-1-AR72 (hereafter: *Tadić*, Decision on Interlocutory Appeal on Jurisdiction), para. 70; ICC, Pre-Trial Chamber I, *The Prosecutor v. Thomas Lubanga Dyilo*, Decision on the confirmation of charges, 29 January 2007, ICC-01/04-01/06, para. 233; SCSL, Trial Chamber, *The Prosecutor v. Sesay, Kallon and Gbao*, Judgement, 2 March 2009, SCSL-04-15-T, para. 95; Report of the Secretary-General's Panel of Experts on Accountability in Syria, 31 March 2011, para. 181; ICRC, Commentary on the First Geneva Convention, 2016, para. 421.

¹⁰ ICTY, Trial Chamber II, *The Prosecutor v. Fatmir Limaj et al.* Judgment, 30 November 2005, IT-03-66-T, para. 90; ICTY, Trial Chamber I, *The Prosecutor v. Ramush Haradinaj et al.*, Judgment, 3 April 2008, IT-04-84-T, para. 49 and 60; ICTY, Trial Chamber II, *The Prosecutor v. Ljube Bošković and Johan Tarculovski*, Judgment, 10 July 2008, IT-04-82-T, para. 177 and 194.

¹¹ Commentary on the First Geneva Convention, para. 411; ICC, Trial Chamber II, *The Prosecutor v. Germain Katanga*, Judgment pursuant to article 74 of the Statute, 7 March 2014, ICC-01/04-01/07-3436-ENG, para. 1184.

¹² ICRC, 'ICRC and Syrian Arab Red Crescent maintain aid effort amid increased fighting', 17 July 2012: <https://tinyurl.com/4d8w4ybp>.

¹³ UNGA, Resolution 67/262, The situation in the Syrian Arab Republic, 4 June 2013, A/RES/67/262; UNSC, Resolution 2139 (2014), 22 February 2014, S/RES/2139 (2014); UNHRC, Third report of the independent international commission of inquiry on the Syrian Arab Republic, 16 August 2012, A/HRC/21/50, para. 12.

¹⁴ UNSC, Letter dated 15 October 2015 from the Permanent Representative of the Russian Federation to the United Nations addressed to the President of the Security Council, 15 October 2015, S/2015/792; UNHRC, Eleventh report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 11 February 2016, A/HRC/31/68 (hereafter: 11th Col Report), para. 19.

¹⁵ *Tadić*, Decision on Interlocutory Appeal on Jurisdiction, para. 72-73; ICC, Trial Chamber I, *The Prosecutor v. Thomas Lubanga Dyilo*, Judgment pursuant to Article 74 of the Statute, 14 March 2012, ICC-01/04-01/06-2842, para. 540.

¹⁶ UNHRC, Oral Update of the Independent International Commission of Inquiry on the Syrian Arab Republic on continuing human rights and humanitarian law violations, 11 March 2013, A/HRC/22/CRP.1 (hereafter: 2013 Col Oral Update), para. 34-35.

¹⁷ UNHRC, Thirty-first Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 14 March 2025, A/HRC/58/66, para. 22-34.

¹⁸ Farley B. R. & Pradhan A., 'Establishing a practical test for the end of non-international armed conflict', March 2025, International Review of the Red Cross (2024), 106 (927); *Tadić*, Decision on Interlocutory Appeal on Jurisdiction, para. 70; ICRC, Commentary on the Third Geneva Convention, 2020, para. 521-530.

¹⁹ Syrian Observatory for Human Rights, 'Syrian Revolution 13 years on | Nearly 618,000 persons killed since the onset of the revolution in March 2011', 15 March 2024: <https://tinyurl.com/38frjyev>; UNHCR, 'Syria emergency': <https://tinyurl.com/4c8w7y4e>; UNHCR Operational Data Portal, 'Syria Regional Refugee Response': <https://tinyurl.com/4zhph9kf>.

²⁰ Ultimately, the SCD would open offices in five different countries: Syria, Türkiye, the Netherlands, Canada and the United States. All these legal entities had different names and legal status depending on local laws; but all fell under the SCD umbrella.

²¹ The White Helmets, 'Statement on the Integration of the Syria Civil Defense (The White Helmets) into the Syrian Government', 3 June 2025: <https://tinyurl.com/4m2k36bh>.

²² 145 individuals have received long-term medical treatment through the White Helmets' Hero Fund.

²³ Stichting White Helmets Foundation.

²⁴ Further investigation would be necessary to get a clearer picture of what happened to every White Helmets volunteer killed in the course of their work.

²⁵ Other lines of inquiry included direct attacks against SCD centers, vehicles and volunteers. As the White Helmets Netherlands office is closing along with the rest of the SCD organisations, the ISCU will not be able to further investigate these incidents.

²⁶ UNOCHA, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Stephen O'Brien, Statement to the Security Council, New York, 22 August 2016.

²⁷ UNHRC, Thirteenth report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 2 February 2017, A/HRC/34/64, para. 49; UNHRC, Situation of human rights in Yemen, including violations and abuses since September 2014, 17 August 2018, A/HRC/39/43, para. 38; SJAC, When the Planes Return, Double-Tap Strikes on Civilians in Syria, July 2022, p. 1; Truth Hounds, Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine, December 2024, p. 7.

²⁸ These so-called incident reports were kept in a paper format around 2014-2015. Many of these have been lost or destroyed by the war. Since 2016, the SCD have created digital versions of incident reports. These typically include the location, time and date of the attack, the number of killed and wounded civilians and SCD volunteers, as well as the type of the attack, for example, airstrike.

²⁹ This footage is managed through the Bayanat application, which the White Helmets has used to analyze the footage. The application was developed by SJAC.

³⁰ While the initial purpose of the Sentry observations was to provide an early warning system to civilians about potential airstrikes nearby, it can also be used to examine which aircrafts were spotted in the vicinity of the attack location at the time of the interest. Due to the initial humanitarian objective of the Sentry, observers did not record aircraft landing in airbases; only departures and movements.

³¹ In this report, the ISCU provides statistics for 116 of these incidents. This discrepancy stems from that fact that the ISCU continued to adjust its dataset until this report was published to accommodate new findings.

³² Due to its area of activity ebbing and flowing throughout the conflict, the information gathered by the White Helmets is not exhaustive.

³³ Common article 3 to the Geneva Conventions (I) for the Amelioration of the Conditions of the Wounded and Sick in Armed Forces in the Field, (II) for the Amelioration of the Conditions of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, (III) relative to the Treatment of Prisoners of War, and (IV) relative to the Protection of Civilian Persons in Time of War, 12 August 1949; Additional Protocol II to the Geneva Conventions relating to

the Protection of Victims of Non-International Armed Conflicts, 1977, Geneva (hereafter: Additional Protocol II), art. 4 and 13; ICRC, Study on customary international humanitarian law, 2005, Rules 1 and 7.

³⁴ Study on customary international humanitarian law, Rule 5. Civilians however lose their protected status when taking direct part in the hostilities. See: Additional Protocol II, art. 13(3); Study on customary international humanitarian law, Rule 6.

³⁵ Additional Protocol I to the Geneva Conventions, 1977, Geneva, art. 52; Study on customary international humanitarian law, Rules 8 and 9.

³⁶ Study on customary international humanitarian law, Rules 11 and 12(a).

³⁷ See for example: Airstrike uses barrel bombs on a civilian gathering on 9 March 2014 in Aleppo (Aleppo), p. 12; Russia joins the conflict with double-tap attack targeting a residential area in Talbiseh (Homs) on 30 September 2015, p.21; Attack targets a school near hospital on 20 October 2015 in Sarmin (Idlib), p. 10; Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14; Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p. 18; Attack near a mosque during Ramadan kills 50 civilians on 7 June 2018 in Zardana (Idlib), p. 7; Use of vacuum bombs against civilian residences and barrel bombs against first responders on 4 May 2019 in Rakaya (Idlib), p. 13; Multiple attacks against White Helmets volunteers on 26 June 2019 in Khan Shaykhoun (Idlib), p. 20; Attack targets an emergency medical centre on 14 August 2019 in Ma'arrat Harma (Idlib), p. 11; Double-tap attack on 18 August 2019 on Ma'arrat an-Nu'man (Idlib) leaves White Helmets volunteer disabled, p. 17; Double-tap attack on 27 January 2020 in Moataf (Idlib) pursues a 'scorched earth' policy, p. 19; and Drone assisted guided weaponry targets humanitarian workers on 17 July 2021 in Sarjah (Idlib), p. 16.

³⁸ See for example: Airstrike uses barrel bombs on a civilian gathering on 9 March 2014 in Aleppo (Aleppo), p. 12; Russia joins the conflict with double-tap attack targeting a residential area in Talbiseh (Homs) on 30 September 2015, p. 21; and Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14.

³⁹ Interview with M.Y., para. 27 and 30; Interview with R.J., para. 19-20.

⁴⁰ Hala Systems Inc., 'Supplemental Report: Airstrikes on Civilian Institutions in Zardana, Idlib' (undated).

⁴¹ Airwars, Assessment of incident RS3428, last updated 23 July 2025: <https://tinyurl.com/itrzmwcm>; Naba News on Youtube, 'دمار هائل في زردنا نتيجة الغارات', 8 June 2018 (this video is no longer available online but was preserved by the Syrian Archive); Syrian Archive, 'Zardana residential neighborhood targeted with airstrikes', 17 December 2018: <https://tinyurl.com/uxz9hv3x>.

⁴² 'دمار هائل في زردنا نتيجة الغارات الجوية الروسية'; 'Zardana residential neighborhood targeted with airstrikes'.

⁴³ @EdlibMediaCenter on Youtube, 'الغارات الجوية الروسية على بلدة زردنا شمال إدلب', 7 June 2018: <https://tinyurl.com/dm9h6ztk>; @EdlibEmc1 on Facebook, 'Zardana (21:05 GMT): <https://tinyurl.com/y9ev6z8k>'; @StepNewsAgency on Youtube, 'شاهد مكان الغارة الجوية التي نفذها الطيران', 8 June 2018: <https://tinyurl.com/3xca7fk8>.

⁴⁴ @aljazeeraambasher on Youtube, 'مقتل وإصابة العشرات جراء غارات على بلدة زردنا بريف إدلب', 9 June 2018: <https://tinyurl.com/ve9ts54e>.

⁴⁵ 'دمار هائل في زردنا نتيجة الغارات الجوية الروسية'; 'Zardana residential neighborhood targeted with airstrikes'.

⁴⁶ 'مقتل وإصابة العشرات جراء غارات على بلدة زردنا بريف إدلب'.

⁴⁷ 'شاهد نتائج الغارات'; @thiqanewsagency on Youtube, '45 شهيد نتيجة الغارات', 8 June 2018: <https://tinyurl.com/4pr3jb3c>; @SY_Plus on Youtube, '70 قتيلاً و 70 جريحاً. بيوت دُفنت بأهلها في بلدة زردنا بإدلب', 8 June 2018: <https://tinyurl.com/5arh8uyk>; @Qasiounar on Youtube, 'أثار الدمار الذي خلفته الغارات الروسية على قرية زردنا شمال إدلب', 8 June 2025: <https://tinyurl.com/5arh8uyk>; @Orient-News on Youtube, 'أعداد ضحايا مجزرة زردنا في إدلب يارتفع مستمر', 8 June 2018: <https://tinyurl.com/393jvfyv>.

Also see p. 13.

⁴⁸ 'Zardana residential neighborhood targeted with airstrikes'; 'دمار هائل في زردنا نتيجة الغارات الجوية الروسية'.

⁴⁹ Russia Today, 'В Минобороны опровергли данные об авиаударе ВКС России в сирийском Идлибе', 8 June 2018: <https://tinyurl.com/yf29h23e>; Interfax, 'В Минобороны РФ опровергли информацию о российском авиаударе в сирийском Идлибе', 8 June 2018: <https://tinyurl.com/y3k69kvp>.

⁵⁰ Step News Agency, 'تفاصيل مقتل تحرير الشام وجيش الأحرار في "زردنا" شمال إدلب', 7 June 2018: <https://tinyurl.com/bdcuwhrw>.

⁵¹ Ria Novosti, 'Лавров объяснил, почему сирийские ВВС не могли обстрелять гумконвой ООН', 21 September 2016: <https://tinyurl.com/yc5k5kw8>; 'Zardana residential neighborhood targeted with airstrikes'.

⁵² @HalabTodayTV on Youtube, 'شاهد مكان الغارة الجوية التي نفذها الطيران الحربي الروسي في بلدة زردنا شمال إدلب', 8 June 2018: <https://tinyurl.com/5a66wnwc>.

⁵³ 'استشهاد وإصابة أكثر من مئة مدني بصف جوي روسي على بلدة زردنا بريف إدلب المندرجة ضمن اتفاق خفض التصعيد'; 'لاستهداف طيران الإحتلال الروسي بلدة زردنا شمال إدلب'.

⁵⁴ 'مقتل وإصابة العشرات جراء غارات على بلدة زردنا بريف إدلب'; 'SCD Incident Report of attack on Zardana, Idlib, on 7 June 2018'.

⁵⁵ 'أثار الدمار الذي خلفته الغارات الروسية على قرية زردنا شمال إدلب'; 'آثار الدمار الذي خلفته الغارات الروسية على قرية زردنا شمال إدلب'.

⁵⁶ Accurate numbers are not available, with estimates ranging from 45 to 52 casualties and 70 to 121 injured.

⁵⁷ See: SCD Incident Report of attack on Zardana, Idlib, on 7 June 2018; 'Zardana residential neighborhood targeted with airstrikes'; Assessment of incident RS3428.

⁵⁸ 'قتيلًا و 70 جريحاً. بيوت دُفنت بأهلها في بلدة زردنا بإدلب', 45.

⁵⁹ White Helmets' human resources records; SCD Incident Report of attack on Zardana, Idlib, on 7 June 2018; Assessment of incident RS3428; 'مقتل وإصابة العشرات جراء غارات على بلدة زردنا بريف إدلب'.

⁶⁰ Coordinates: 36° 2'39.68"N, 36°45'6.51"E, as shown above in the satellite imagery.

⁶¹ See also: @انس-عثمان on Facebook, 'آثار الدمار الذي خلفته الغارات الروسية على قرية زردنا شمال إدلب', 8 June 2018 (20:49 GMT): <https://tinyurl.com/mhdfbpak>.

⁶² Study on customary international humanitarian law, Rule 14.

⁶³ Study on customary international humanitarian law, Rules 15, 16 and 22.

⁶⁴ Study on customary international humanitarian law, Rule 20.

⁶⁵ Study on customary international humanitarian law, Rule 17.

⁶⁶ See for example: Airstrike uses barrel bombs on a civilian gathering on 9 March 2014 in Aleppo (Aleppo), p. 12; and Russia joins the conflict with double-tap attack targeting a residential area in Talbiseh (Homs) on 30 September 2015, p. 21.

⁶⁷ See for example: Airstrike uses barrel bombs on a civilian gathering on 9 March 2014 in Aleppo (Aleppo), p. 12; and Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14.

⁶⁸ Interview with K.Z., para. 26.

⁶⁹ Common Article 3 to the Geneva Conventions; Additional Protocol II, art. 9(1) and 11(1).

⁷⁰ Study on customary international humanitarian law, Rule 30.

⁷¹ Study on customary international humanitarian law, Rule 38. See also: Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict, 25 May 2000, Preamble.

⁷² See for example: Attack targets an emergency medical centre on 14 August 2019 in Ma'arrat Harma (Idlib), p. 11.

⁷³ 2013 Col Oral Update, para. 34-35; UNHRC, Eighth report of the independent international commission of inquiry on the Syrian Arab Republic, 13 August 2014, A/HRC/27/60, Annex V, para. 1-9; UNHRC, Tenth report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 13 August 2015, A/HRC/30/48, para. 141-143; UNHRC, Twelfth report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 11 August 2016, A/HRC/33/55, para. 22 and 42-61; UNHRC, Fourteenth report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 8 August 2017, A/HRC/36/55, para. 62-66; UNHRC, Sixteenth Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 9 August 2018, A/HRC/39/65, para. 54 and 56; UNHRC, Eighteenth Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 15 August 2019, A/HRC/42/51 (hereafter: 18th Col Report), para. 45-46; UNHRC, Twentieth Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, 3 September 2020, A/HRC/44/61 (hereafter: 20th Col Report), para. 36-47; UNHRC, Twenty-fourth Report of the of the Independent International Commission of Inquiry on the Syrian Arab Republic, 13 August 2021,

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- ⁹⁵ Study on customary international humanitarian law, Rule 25.
- ⁹⁶ Additional Protocol II, art. 9(2) and art. 11(2); ICRC, Commentary on the Additional Protocol II, 1987, para. 4726.
- ⁹⁷ In this regard, the Russian Federation is legally bound by more treaties than the Syrian Arab Republic, which has not ratified the 1980 Convention on the Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects, among others.
- ⁹⁸ Study on customary international humanitarian law, Rule 71.
- ⁹⁹ Study on customary international humanitarian law, Rule 70; ICJ, Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, 8 July 1996, ICJ Reports 1996, para. 238. The assessment of whether a weapon is of a nature to cause superfluous injury or unnecessary suffering is made on the basis of its effects on combatants, i.e. whether the injury or suffering caused serves any military purpose. When said weapon causes "a harm greater than that unavoidable to achieve legitimate military objectives", it should be considered prohibited and its use unlawful, regardless of the target.
- ¹⁰⁰ Human Rights Watch, 'Death from the skies: Deliberate and indiscriminate air strikes on civilians', 2013, p. 21; SAMS, 'The use of indiscriminate weapons in Syria', September 2022, ISBN: 978-1-62313-0039, p. 7.
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- ¹⁰⁹ Interview with B.J., para. 27 and 29-30.
- ¹¹⁰ Syrian helicopters could each carry two barrel bombs. See: Interview with B.J., para. 19-20; Notes from meeting with unexploded ordnances and flight tracking experts, 6 May 2025.
- ¹¹¹ Interview with B.J., para. 30.
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- ¹¹³ Interview with B.J., para. 33.
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- ¹¹⁶ White Helmets' human resources records; Interview with B.J., para. 31-32; Al-Jazeera, 'صحفي كندي يقتل بالبراميل المتفجرة في حلب', 10 March 2025: <https://tinyurl.com/5n8e8jv3>; Violations Documentation Center in Syria: <https://tinyurl.com/yc7u3sru>.
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- ¹²⁴ 'أربعة قتلى وعدة جرحى في قصف على ريف إدلب الجنوبي'; @Step_Agency on X, 4 May 2019 (13:18 GMT): <https://tinyurl.com/42apucsp>.
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- ¹²⁷ See p. 7.
- ¹²⁸ See for example: Airstrike uses barrel bombs on a civilian gathering on 9 March 2014 in Aleppo (Aleppo), p. 12; Russia joins the conflict with double-tap attack targeting a residential area in Talbiseh (Homs) on 30 September 2015, p. 21; Attack targets a school near hospital on 20 October 2015 in Sarmin (Idlib), p. 10; Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14; Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p. 18; Use of vacuum bombs against civilian residences and barrel bombs against first responders on 4 May 2019 in Rakaya (Idlib), p. 13; Multiple attacks against White Helmets volunteers on 26 June 2019 in Khan Shaykhoun (Idlib), p. 20; Attack targets an emergency medical centre on 14 August 2019 in Ma'arrat Harma (Idlib), p. 11; Double-tap attack on 18 August 2019 on Ma'arrat an-Nu'man (Idlib) leaves White Helmets volunteer disabled, p. 17; and Drone assisted guided weaponry targets humanitarian workers on 17 July 2021 in Sarjah (Idlib), p. 16.
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¹⁶⁰ Hala Systems Inc., 'Supplemental Report: Artillery Attack on SCD Team in Sarjah, Idlib', 18 July 2021.

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¹⁷⁶ See for example: Attack targets a school near hospital on 20 October 2015 in Sarmin (Idlib), p. 10; and Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14.

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See also: Attack near a mosque during Ramadan kills 50 civilians on 7 June 2018 in Zardana (Idlib), p. 7; Double-tap attack on 18 August 2019 on Ma'arrat an-Nu'man (Idlib) leaves White Helmets volunteer disabled, p. 7; and Drone assisted guided weaponry targets humanitarian workers on 17 July 2021 in Sarjah (Idlib), p. 16.

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See also: Drone assisted guided weaponry targets humanitarian workers on 17 July 2021 in Sarjah (Idlib), p. 16.

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²⁸⁸ Centre for International Governance Innovation, 'For Syria's White Helmets, the Ukraine War Is Déjà Vu', 9 May 2022: <https://tinyurl.com/2ud9fupy>.

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²⁹¹ For the remaining 25% of the attacks, the perpetrators were unknown, or the attribution was inconclusive.

²⁹² See: Double-tap attack on 18 August 2019 on Ma'arrat an-Nu'man (Idlib) leaves White Helmets volunteer disabled, p. 17.

²⁹³ See: Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p. 18.

²⁹⁴ Interview with S.S., para. 23; Interview with K.Z., para. 37. See also: Interview with B.J. para. 19 and 23.

S.S. also had knowledge of Russian forces being responsible for attacks through the so-called SCD operational room.

²⁹⁵ See: Attack targets a school near hospital on 20 October 2015 in Sarmin (Idlib), p. 10.

²⁹⁶ 'Four Syrian hospitals bombed since Russian airstrikes began, doctors say'.

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³⁰⁴ The ISCU also reviewed all the recordings with Arabic speech for this timeframe, as well as the Sentry observations of Syrian aircrafts. They seem to be unrelated to the attack on Ma'arrat An Nu'man.

³⁰⁵ Hala Systems Inc. explained to the ISCU that the location assigned to each observation was set manually by the observer based on the radio frequency typically associated with a specific airbase. Therefore, the location may not always reflect the actual position of the transmitter at the time of observation.

³⁰⁶ Interfax, 'Airborne Forces Commander Serdyukov heads Russian contingent in Syria – newspaper', 12 April 2019: <https://tinyurl.com/2vfdpvnf>; CSTO Joint Staff, 'Colonel General SERDYUKOV Andrei Nikolayevich', date unknown: <https://tinyurl.com/bdpm2ptb>.

See also: Ministry of Defence of the Russian Federation, 'Andrey Serdyukov: Commander of the Airborne Forces, Colonel General', date unknown: <https://tinyurl.com/4kvf6c5s>.

³⁰⁷ See p. 17.

³⁰⁸ See: Double-tap attack on 18 August 2019 on Ma'arrat an-Nu'man (Idlib) leaves White Helmets volunteer disabled, p. 17.

³⁰⁹ See: Use of vacuum bombs against civilian residences and barrel bombs against first responders on 4 May 2019 in Rakaya (Idlib), p. 13; Multiple attacks against White Helmets volunteers on 26 June 2019 in Khan Shaykhoun (Idlib), p. 20; and Attack targets an emergency medical centre on 14 August 2019 in Ma'arrat Harma (Idlib), p. 11.

³¹⁰ TASS, 'Источник: два генерала получили звания Героев России за операцию в Сирии', 28 February 2020: <https://tinyurl.com/bddhvxtd>.

³¹¹ CSTO Joint Staff, 'Colonel General SERDYUKOV Andrei Nikolayevich', date unknown.

³¹² Ministry of Defence of the Russian Federation, 'Dvornikov Alexander Vladimirovich: Commander of the Southern Military District, Colonel General', date unknown: <https://tinyurl.com/mr273jkd>; War Heroes, 'Дворников Александр Владимирович', date unknown: <https://tinyurl.com/5n6peyix>.

³¹³ See: Russia joins the conflict with double-tap attack targeting a residential area in Talbiseh (Homs) on 30 September 2015, p. 21; and Attack targets a school near hospital on 20 October 2015 in Sarmin (Idlib), p. 10.

³¹⁴ See: Five successive strikes target individuals providing rescuing civilians attacked on 11 July 2016 in Termanin (Idlib), p. 14.

³¹⁵ See: Attack near a mosque during Ramadan kills 50 civilians on 7 June 2018 in Zardana (Idlib), p. 7.

³¹⁶ Geopolitika, 'General Alexander Zhuravlev will command Russian forces in Syria', 22 July 2016: <https://tinyurl.com/mseva8a2>; Syria Notes, 'The men who give the orders', date unknown: <https://tinyurl.com/vi88x2me>.

³¹⁷ Nikolov B., 'Massive An-124 lands at Khmeimim amid Russian retreat signs', 7 December 2024: <https://tinyurl.com/2hdd8v3f>; Kushnikov K., 'Russians evacuate S-400 and Tor from Hmeymim base', 7 December 2024: <https://tinyurl.com/878n4ep2>; Reuters, 'Russian bases in Syria threatened by insurgent advance, say Moscow's war bloggers', 7 December 2024: <https://tinyurl.com/b2mddxh4>; Defense Intelligence of Ukraine, "Велична" втеча путіна з Сирії – росіяни виводять кораблі з бази у Тартусі та перекидають залишки озброєння літаками з Хмейміма, 8 December 2024: <https://tinyurl.com/4dx9r6a3>.

³¹⁸ Middle East Institute, 'Russia's military presence in post-Assad Syria: A growing security liability undermining stability', 2 July 2025: <https://tinyurl.com/5x8v35ax>; Institute for the Study of War, 'Russian Offensive Campaign Assessment, December 1, 2024', 1 December 2024: <https://tinyurl.com/2iv5xawn>.

³¹⁹ GPPI, 'The Syrian Air Force Today', April 2021: <https://tinyurl.com/272ccuxn>.

³²⁰ 'The Syrian Air Force Today'; Scramble (Dutch Aviation Society), 'Syrian Arab Air Force', date unknown: <https://tinyurl.com/5n7f2ny2>; Global Security.org, 'Syrian Arab Air Force – Order of Battle', date unknown: <https://tinyurl.com/j8arvrv>; Bellingcat, 'Fortress T4: An Airbase at War', 29 June 2015: <https://tinyurl.com/mpwvhrade>.

³²¹ See: Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p. 18.

³²² European Union, Council Implementing Decision (CFSP) 2025/1095 of 27 May 2025 implementing Decision 2013/255/CFSP concerning restrictive measures in view of the situation in Syria, 28 May 2025, ST/8445/2025/INIT; KKS Sy, 'بعد استخدامها ضد', 24 December 2020: <https://tinyurl.com/ywxamrvp>; Zaman al-Wasl, 'السوريين.. تآكل القوى الجوية يدفع قوات الأسد إلى دمج أسراب في 6 ألوية ضمن سرب واحد', 24 December 2017: <https://tinyurl.com/2bw73wrv>.

³²³ Le Monde, 'La justice française délivre quatre mandats d'arrêt contre les plus hauts commandants de l'armée syrienne', 19 October 2023: <https://tinyurl.com/yfpfwubc>; SCM, 'The Abou Nabout Case: French judges issue arrest warrants against four senior Syrian officials (Questions and Answers)', 2023: <https://tinyurl.com/y52vwb69>.

The attack which is the object of this case was conducted in Deraa in June 2017, with barrel bombs. See p. 12.

³²⁴ UNSC, Report of the Secretary-General: 'The rule of law and transitional justice in conflict and post-conflict societies', 23 August 2004, S/2004/616, para. 8.

³²⁵ See: UNGA, 'Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law', 21 March 2006, A/RES/60/147.

³²⁶ International Covenant on Civil and Political Rights, 1966 (hereafter: ICCPR), art. 2.

³²⁷ UNHRC, General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, 26 May 2004, CCPR/C/21/Rev.1/Add.13 (hereafter: General Comment no. 31), para. 10. See also: ECtHR, Grand Chamber, *Loizidou v. Turkey*, Judgment, 18 December 1996, app. No. 15318/89, para. 52.

³²⁸ Universal Declaration of Human Rights, 10 December 1948, UNGA 217/A, art. 8; ICCPR, art. 2(3); European Convention on Human Rights, 4 November 1950, art. 13; Arab Charter on Human Rights, 2004, art. 23.

³²⁹ See: Schabas W., *The Customary International Law of Human Rights*, 2021, Oxford University Press.

³³⁰ General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, para. 15-18.

³³¹ General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, para. 15.

³³² Interview with M.Y., para. 19.

³³³ Interview with K.Z., para. 10.

³³⁴ Interview with B.J., para. 50.

³³⁵ UN Commission on Human Rights, Study on the right to the truth, Report of the Office of the United Nations High Commissioner for Human Rights, 8 February 2006, E/CN.4/2006/91, para. 10; UNHRC, Resolution 9/11, Right to truth, 18 September 2008, A/HRC/RES/9/11.

³³⁶ UNHRC, Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence on transitional justice in weakly institutionalized post-conflict settings, 21 August 2017, A/HRC/36/50, para. 20.

³³⁷ UNHRC, Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence, Bernard Duhaime, on his approach to the mandate and preliminary areas of interest, 15 July 2024, A/HRC/57/50, para. 52.

³³⁸ General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, para. 18.

³³⁹ Interview with S.S., para. 36; Interview with M.H., para. 46; Interview with K.Z., para. 74; Interview with M.Y., para. 17; Interview with B.J., para. 48.

³⁴⁰ Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence on transitional justice in weakly institutionalized post-conflict settings; UNHRC, Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence, Pablo de Greiff, on prosecutorial prioritization strategies in the aftermath of gross human rights violations and serious violations of international humanitarian law, 27 August 2014, A/HRC/27/56, para. 30 and 102.

³⁴¹ For example, Col. Gen. Serdyukov took part in the Chechen wars and in the annexation of Crimea to the Russia Federation prior to his involvement in Syria; while Col. Gen. Alexander Chaiko was linked to the Bucha massacre in Ukraine before being posted in Syria. See: CSTO Joint Staff, 'Colonel General SERDYUKOV Andrei Nikolayevich', date unknown; PBS, "Kill Everyone": Russian Violence in Ukraine Was Strategic', 26 October 2022: <https://tinyurl.com/waptscmn>.

³⁴² Also see p. 24.

³⁴³ Al-Jazeera, 'Who is the general leading Russia's new war strategy in Ukraine?', 12 April 2022: <https://tinyurl.com/yvrvzvt>; The Guardian, 'Aleksandr Dvornikov: Russian general who helped turn tide of Syrian war', 10 April 2022: <https://tinyurl.com/v9wb3ahu>.

³⁴⁴ Also see p. 24.

³⁴⁵ Rome Statute, art. 8(2)(c)(i); Updated Statute of the International Criminal Tribunal for the Former Yugoslavia, September 2009 (hereafter: ICTR Statute), art. 2(a); Statute of the International Tribunal for Rwanda, 1994 (hereafter: ICTR Statute), art. 4(a); Statute of the Special Court for Sierra Leone, 2000 (hereafter: SCSL Statute), art. 3(a); Statute of the Extraordinary African Chambers, 2013 (hereafter: EAC Statute), art. 7(2)(a).

³⁴⁶ Rome Statute, art. 8(2)(e)(i), 8(2)(e)(iii), 8(2)(e)(iv); ICTY Statute, art. 2(d) and 3(d); SCSL Statute, art. 4(a) and (b).

³⁴⁷ Rome Statute, art. 7(1)(a); ICTY Statute, art. 5(a); ICTR Statute, art. 3(a); SCSL Statute, art. 2(a); EAC Statute, art. 6(b).

³⁴⁸ Rome Statute, art. 8(2)(e)(iv); ICTY Statute, art. 3(a); ICTR Statute, art. 4(d); SCSL Statute, art. 3(d); EAC Statute, art. 7(2)(d).

³⁴⁹ See also: ICTY, Appeals Chamber, *The Prosecutor v. Stanislav Galic*, Judgement, 30 November 2006, IT-98-29-A, para. 102-104; ICTY, Appeals Chamber, *The Prosecutor v. Dragomir Milošević*, Judgement, 12 November 2009, IT-98-29/1-A, para. 31-37; ICTY, Trial Chamber, *The Prosecutor v. Radovan Karadžić*, Public redacted version of judgement issued on 24 March 2016, 24 March 2016, IT-95-5/18-T, para. 460-465; SCSL, Trial Chamber II, *The Prosecutor v. Charles Ghankay Taylor*, Judgement, 18 May 2012, SCSL-03-01-T, para. 403-407.

³⁵⁰ القانون الجنائي, 22 June 1949, Legislative Decree No. 148/1949.

³⁵¹ Human Rights Committee, Concluding observations on the fourth periodic report of the Syrian Arab Republic, 21 August 2024, CCPR/C/SYR/CO/4, para. 6.

³⁵² Interview with M.Y., para. 19.

³⁵³ Interview with B.J., para. 48.

³⁵⁴ See: 'Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine'; UNHRC, Detailed findings on the military operations and attacks carried out in the Occupied Palestinian Territory from 7 October to 31 December 2023, 10 June 2024, A/HRC/56/CRP.4, para. 110. See also: UN News, "Attacks on aid workers must end," Security Council told, 2 April 2025: <https://tinyurl.com/27xkfy26>.

³⁵⁵ General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, para. 16.

³⁵⁶ Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence on transitional justice in weakly institutionalized post-conflict settings, para. 20.

³⁵⁷ See p. 13-14.

³⁵⁸ See also Interview with S.S., para. 26-28.

³⁵⁹ Interview with M.H., para. 10; Interview with K.Z., para. 71-72; Interview with B.J., para. 43-45.

³⁶⁰ See: Double-tap attack directly against SCD centre in Khan Shaykhoun (Idlib) on 26 December 2017, p. 18.

³⁶¹ @abomalekify on Youtube, 'عام على رحيل الشهيد بشار ددو رجال الإنسانية', 26 December 2018: <https://tinyurl.com/mvwew2cf>.

³⁶² Interview with S.S., para. 30; Interview with K.Z., para. 70.

³⁶³ ICTJ, 'The Rabat Report: The concept and challenges of collective reparations', February 2009 (last accessed 23 January 2025), p. 59: <https://tinyurl.com/2mcj4mna> (last accessed 26 January 2025); UNHRC, Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence on practical experiences of domestic reparation programmes, 11 July 2019, A/HRC/42/45, para. 110.

³⁶⁴ Interview with S.S., para. 35-36; Interview with K.Z., para. 75; Interview with M.H., para. 45.

³⁶⁵ Interview with B.J., para. 47.

³⁶⁶ Interview with S.S., para. 32; Interview with M.H., para. 43; Interview with B.J., para. 49.

³⁶⁷ Interview with M.H., para. 43 and 45-49.

³⁶⁸ General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, para. 16; Report of the Special Rapporteur on the promotion of truth, justice, reparation and guarantees of non-recurrence on transitional justice in weakly institutionalized post-conflict settings, para. 20.

³⁶⁹ Interview with S.S., para. 37.

³⁷⁰ Interview with B.J., para. 10.

³⁷¹ UNSC, Resolution 2286 (2016), 3 May 2016, S/RES/2286 (2016).

