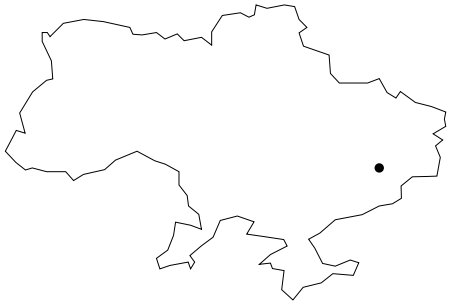
CASE 7.
Indirect fire:

A hospital caught in a war zone (Ukraine, 2015)

AUTHOR: PAX

COUNTRY

Ukraine



PERPETRATOR

The Ukrainian armed forces and local separatist forces

ACT

used explosive weapons with wide-area effects in populated areas

OBJECTIVES*

- to defeat the military opponent

** As far as we have been able to discern; the list may not be exhaustive in this regard*

CONSEQUENCES

Damage beyond the immediate target, in this case damaging parts of a hospital

↳ reducing access to, and availability and quality of health care

Psychological trauma among hospital staff and patients

Internal displacement of people moving away from the fighting

↳ causing brain drain

↳ contributing to further damages to overall healthcare quality and availability

The armed conflict in Eastern Ukraine has its roots in a series of protests and civil tensions about the political relationship between Ukraine and the EU as opposed to Russia. In December 2013, thousands of demonstrators took to the streets to protest then-President Yanukovych's decision not to sign the Association Agreement with the EU, and to seek closer economic ties with Russia instead (Shveda & Park, 2015; Docherty & Boer, 2017).[1] When the authorities violently suppressed the continuing demonstrations on Maidan Square in February 2014, the protest movement – known as the 'Euromaidan' – evolved into 'a mass action of a national scope against the existing power' (Shveda & Park, 2015, p. 85). From Kiev, civil unrest quickly spread to the east and south, and by April 2014 had escalated into armed conflict in the Crimea and the Donbass regions, the latter encompassing the oblasts (administrative regions) of Donetsk and Luhansk (International Crisis Group [ICG], 2014; Docherty & Boer, 2017).

President Yanukovych's flight from Ukraine in February 2014 had created a power vacuum in the Crimea and Donbass regions: Anti-maidan, pro-Russian armed groups seized the opportunity to take over territory, and declared the Donetsk and Luhansk oblasts independent People's Republics in April 2014; a move not recognised by the UN (Docherty & Boer, 2017). Ukraine responded with military force, leading to armed conflict (Docherty & Boer, 2017; ICG, 2014). Fighting has been particularly acute around the so-called 'contact line', marking the border between government and non-government-controlled areas, where – despite the so-called 'Minsk agreements' peace deal attempts – fighting never ceased completely (Docherty & Boer, 2017). By now, the situation has largely stabilised into a stalemate but occasional flare-ups are commonplace still (BBC, 2020). The widespread use of explosive weapons has been characteristic of the conflict, with the opposing parties launching explosives into populated areas on both sides of the contact line (BBC, 2020). According to the NGO Action on Armed Violence, between 2011 and 2015 alone, explosive weapons had resulted in 3,435 deaths and injuries in Ukraine, at least half of which concerned civilian casualties (Action on Armed Violence, n.d.; Overton et al., 2016).

7.1 Case: The shelling of Maryinka District Central Hospital[2]

Located in the Donbass region in Eastern Ukraine, Maryinka District Central Hospital in Krasnohorivka was one of the places caught in a crossfire of near-constant shelling for two years from 2014 onwards. The shelling was so common that the head of the hospital's department of therapy would not even guess at how often it occurred. She merely stated: 'No one counted [the attacks]. If it happened, it happened' (Docherty & Boer, 2017, p. 34). At one point, the continuous shelling broke almost every window of the hospital. The department head, Dr. Natalia Dolzhenko, recalled, 'All the time you are feeling afraid for yourself and your patients when bullets and shelling are whistling all around' (Docherty & Boer, 2017, p. 34). It had become an everyday reality for staff and patients to seek shelter in the hospital's basement whenever heavy shelling occurred.

One such particularly heavy bout of shelling occurred in proximity to the hospital on 3 June 2015, between 7.00 and 9.00 p.m. (Docherty

& Boer, 2017). Explosive weapons struck the hospital, causing significant damage. A doctor in the ambulance substation recalls how he was thrown against the wall when the substation got hit, and how fragments of the blast wedged in the plaster just above his head. The memory of his fear when running for cover amid shelling remains with him: 'It's very scary when everything is gone. You're outside with no protection' (Docherty & Boer, 2017, p. 35). The explosives caused a fire which destroyed the garage with nine ambulance bays: One ambulance went up in flames, others got damaged by shelling fragments. The fire spread to the adjacent neurology department, where hospital personnel evacuated the premises, having to carry many of the dozen patients across a lawn to another hospital building. 'As a shell falls down, people start to cry and you need to find a way to reassure them', says Dr. Valentina Ksenofontova, head of the department. 'To carry patients was also quite dangerous […] You know shells are falling but you don't know where' (Docherty & Boer, p. 35). No one died in the attack, but the shelling damaged twelve storage units, the roof and floor of one of the hospital buildings, in addition to the previously mentioned ambulance substation and individual ambulances (Docherty & Boer, 2017; Denysenko et al., 2017).

Subsequent attacks occurred throughout the year (Denysenko et al., 2017). In September 2016, researchers from the Harvard Law School International Human Rights Clinic and PAX found that large parts of the Maryinka District Central Hospital were still non-functional, more than one year after the June 2015 attack. Having housed at least a dozen departments and more than 350 beds prior to the armed conflict in Eastern Ukraine, just 2 departments, a general clinic, approximately 70 beds and 2 ambulances remained in use (Docherty & Boer, 2017). Moreover, the hospital continued to send many patients to other hospitals to get treatment. The shelling of this particular hospital is a striking and representative example of the potentially devastating impact of the use of explosive weapons on medical facilities and the provision of health care.

7.2 Perpetrators: Disregard for civilian lives

While health care facilities can be intentionally and illegally targeted to gain military advantage or to terrorise a population, in other cases 'it looks more like hospitals and clinics have been collateral damage than targets', according to research by The Washington Post (Buckley et al., 2018), a finding confirmed by the International Committee of the Red Cross (ICRC, 2011a). In Eastern Ukraine this also appears to be the case. According to Denysenko et al. (2017, p. 11), in Eastern Ukraine 'the shelling was chaotic rather than deliberately targeting hospitals and other medical facilities.' Nonetheless, 'collateral' does not equal 'accidental'.[3] All parties to the conflict in the Donbass region use types of explosive weapons that create a blast and fragmentation radius that can kill, injure or damage anyone or anything within its reach, making their devastating impact – when used in populated areas – foreseeable (UN Office for the Coordination of Humanitarian Affairs, 2017). Explosive weapons – including conventional artillery, heavy mortars and multiple barrel rocket launchers – create wide-area effects when they have a large blast and fragmentation radius, when they are inaccurate, and/or when multiple munitions are used, putting civilians at great risk. Such weapons are neither precise nor accurate enough to target specific buildings (Buckley et al., 2018). Grads, for example, can fire multiple munitions at once, affecting a wide area that makes it both likely and predictable for extensive damage to occur when these weapons are used in populated areas.

There are no reports of the Maryinka District Central Hospital being used for military purposes at the time it was under fire. Nor is there any evidence that either of the conflicting parties active at the time of the attack took appropriate measures to prevent harm to civilians or civilian objects like the hospital (Denysenko et al., 2017). The report 'Operating under Fire' (Docherty & Boer, 2017) by the Harvard Law School International Human Rights Clinic and PAX, offers the most detailed account of the June 2015 attack that damaged the hospital. However, the report set out to describe the consequences of the attack rather than wishing to identify and attribute blame to a particular perpetrator. As a result, no forensic research was done to determine the culpable party in this particular case. We do know that all conflict parties active in the area made frequent use of explosive weapons with wide-area effects.

7.3 Victims: Deterioration of health care services

As heavy shelling of towns and cities along the contact line became common practice in Eastern Ukraine following the outbreak of conflict in 2014, many civilians lived in fear and regularly sought shelter for longer periods of time while explosive weapons destroyed their homes, workplaces, schools and medical facilities. In several cases, explosives have directly killed and injured medical personnel and patients, and damaged or destroyed hospitals, clinics, ambulances and medical equipment upon impact (Docherty & Boer, 2017). Fortunately, during the shelling of Maryinka District Central Hospital, no patients or medical personnel were killed or severely injured (Docherty & Boer, 2017; Denysenko et al., 2017). Nevertheless, the events impacted staff who had to carry patients to safety – several of whom were immobilised due to having suffered strokes or other illnesses – and as significant damage to the hospital infrastructure effectively put several departments and various ambulances out of working order. One employee noted the painful contrast between the largely non-operational hospital during and after the conflict, as opposed to the 'city' it once was before hostilities occurred, when the hospital still housed numerous departments and over 300 patient beds (Docherty & Boer, 2017, p. 60).

But the negative effects of the use of explosive weapons with wide-area effects in populated areas – also known as EWIPA –, and in particular in the vicinity of medical facilities, on civilians extend far beyond these weapons' immediate impact. The quality, availability and accessibility of healthcare are all negatively impacted as a result. The quality of healthcare has declined as hospitals in the region have had to restrict their operations to confined spaces, as well as having to improvise when carrying out treatment. Explosive weapons can impact utilities necessary for the provision of proper care, such as electricity, water and gas. In Maryinka District Central Hospital, the staff had no electrical power to charge their equipment, had to conduct surgery by candlelight, care for patients in the cold, and bring their own water to work in buckets or bottles. One of the doctors interviewed in September 2016 described the conditions: 'All the staff carries [water] canisters every day', as the shelling had disrupted the regular water supply (Docherty & Boer, p. 59). The lack of water, heating and electricity as a result of damage to infrastructure created near-impossible working conditions for medical staff, negatively affecting overall health care quality.

Additionally, shelled roads and travel risks can interfere with the transport of patients, whether by ambulance or personal vehicle. Many medical personnel either face difficulties to reach their workplace or have fled the region. In Maryinka District Central Hospital, only

2 ambulances – responsible for emergency calls within a 30-kilometre radius – remained functional. The ambulances must navigate severely damaged roads, lowering their response time and effectiveness (Docherty & Boer, 2017). Availability of medication has also become limited as many pharmacies in the region closed in the face of significant security risks.

In terms of health care accessibility, many civilians – both patients and health care professionals – have often found it too dangerous to travel to hospitals or clinics. A doctor at a different hospital in the region recalled that on at least two occasions, fighting was so bad that she could not reach her work: 'I saw blasts every second. I was thinking, "Will I be useful when I die?"' (Docherty & Boer, 2017, p. 49). The management from Maryinka District Central Hospital ordered the ambulance team not to leave the station if shelling created an unwarranted risk, and even when ambulances could leave, trips took longer than usual due to the damage that explosive weapons had caused to the roads (Docherty & Boer, 2017).

In 2017, two years after the worst attack, a staff member of the Maryinka District Central Hospital described the conditions at that time:

> *We need construction supplies to renovate the facility. We fixed the roof where we could do it and installed windows. There is no gas supply in the town. Lack of gas and water supply in the hospital is a major challenge. There is a technical water supply in the city, but we have a separate pipeline that is currently cut off by the other side. We spent two winters without heating. Every patient admitted to the hospital brings his or her heater. Another problem is the lack of staff. We used to have 450 employees, but only 100 remain. We lack medication, too. (Denysenko et al., 2017, p. 36)*

It is evident that the impact of explosive weapons in towns and cities in Eastern Ukraine has severe reverberating and long-term effects on healthcare: Reduced quality, limited availability, and hampered access to health care represent harm to larger amounts of people than those directly killed and injured in an attack, and concerns harm that is not only instant, but extended in time from the moment of the attack onwards (ICRC, 2011a; Bagshaw, 2017).

7.4 Significance: The devastating effects of indiscriminate weapons

In contemporary armed conflict, hostilities – like in Eastern Ukraine – increasingly take place in populated areas, exposing civilians to increased risks of harm.[4] Explosive weapons, most notably those with wide-area effects, were often designed for use in open battlefields; used in towns and cities, they create severe risks for civilians (Docherty & Boer, 2017). Such wide-area effects are caused by three main characteristics of certain explosive weapons: a large blast and fragmentation radius; inaccuracy of delivery; and the use of multiple warheads or multiple firings. As explained by PAX and the British not-for-profit organisation Article 36:

> *These effects are cumulative, with blast and fragmentation effects always present and with inaccuracy of delivery and the use of multiple warheads, where applicable, extending those effects across a wider area. As well as increasing the likelihood of direct civilian deaths and injuries, the combination of these effects also results in the destruction of civilian property and infrastructure vital to the civilian population, with longer-term implications for public health and development (sometimes called 'tertiary' or 'reverberating' effects). (PAX & Article 36, 2018, p. 1)*

The employment of explosive weapons as such is not prohibited by International Humanitarian Law (IHL) (ICRC, 2011b). However, as with all weapons, they must be used in accordance with IHL. There are two rules that are especially relevant when explosive weapons are used in populated areas. First, IHL dictates that 'in the conduct of military operations, constant care shall be taken to spare the civilian population, civilians and civilian objects.' In particular, parties to a conflict should take 'all feasible precautions […] to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects' (see Rule 15 in ICRC, n.d.). Moreover, IHL requires those planning and deciding on an attack 'to do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects' (see Art. 57 in Additional Protocol I, 1977). Civilian hospitals, for example, may therefore not be targeted under IHL (see Art. 18 in Geneva Convention IV, 1949). Second, violence that neglects to distinguish between civilians and combatants – so-termed 'indiscriminate attacks' - is also prohibited (see Art. 51 in Additional Protocol I, 1977). These provisions are crucial to the use of EWIPA, because their use in places where civilians are concentrated will often fail to make that key distinction between civilians and combatants, and between civilian objects and military objectives, heightening the risk of indiscriminate death, injury or destruction (ICRC, 2011b). This is also noted by the ICRC, stating that a circumstance that could make the employment of a certain weapon indiscriminate is its use in a densely populated area. The ICRC remarks that

> *there is generally no cause for concern when explosive weapons with a wide impact area are used in open battlefields, but when they are used against military objectives located in populated areas they are prone to indiscriminate effects, often with devastating consequences for the civilian population. (ICRC, 2011b, p. 41)*

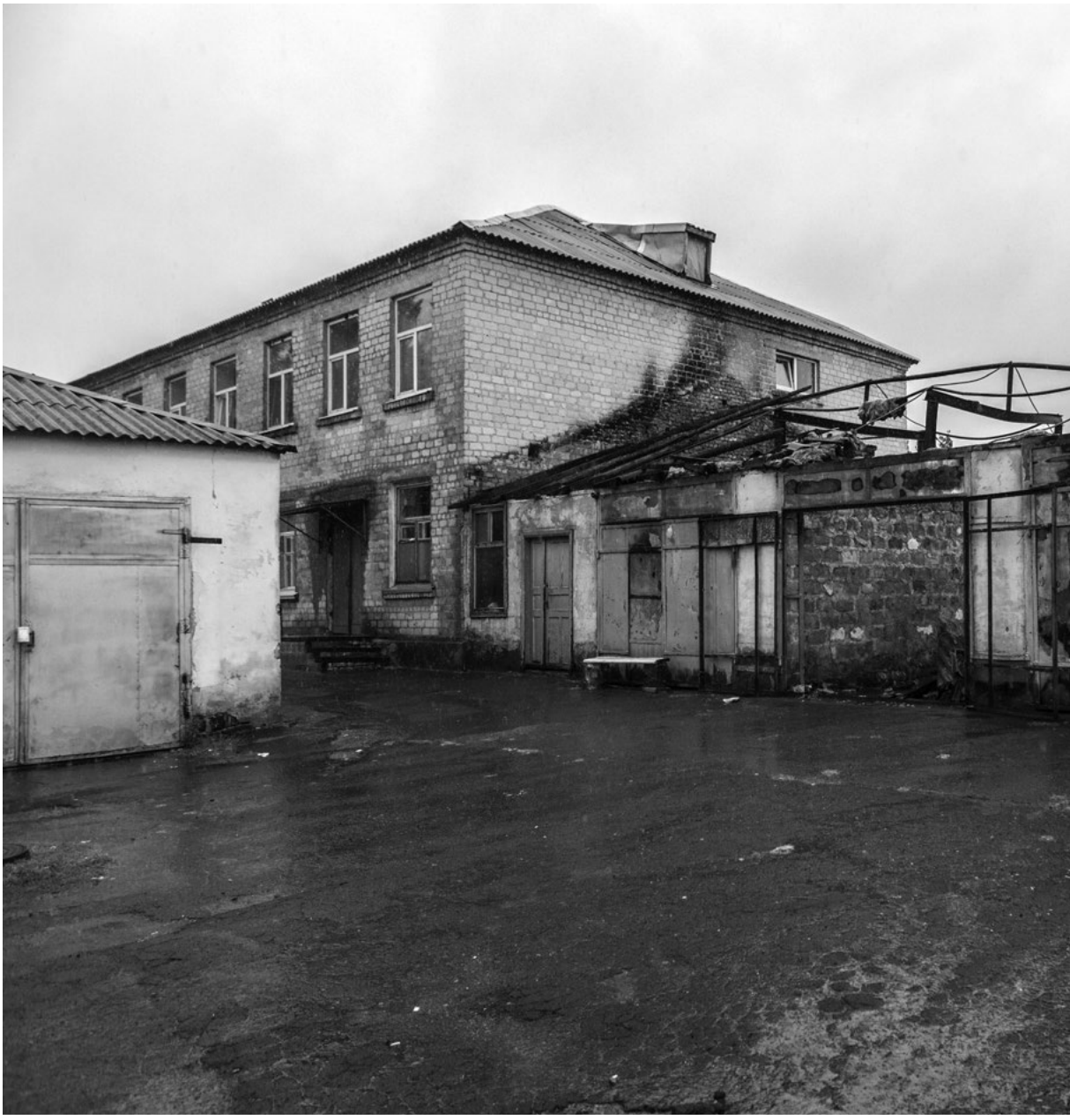
It therefore advocates that 'all parties should avoid using explosive weapons that have a wide-impact area in populated places' (ICRC, 2011a, p. 42).

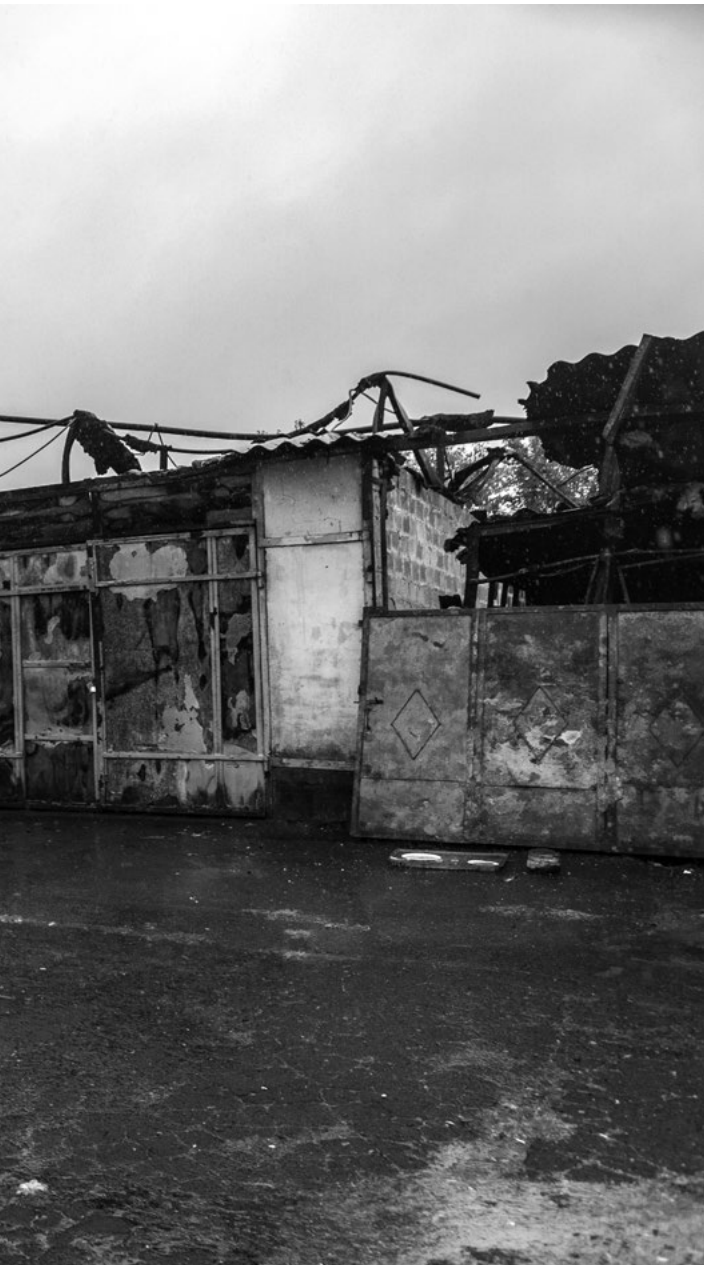
In the last decade, concern about the use of explosive weapons, especially those with wide-area effects, in populated areas has grown amongst states, the UN, the ICRC and non-governmental organisations (NGOs). The NGO partnership the International Network on Explosive Weapons (INEW), as well as the ICRC have called for immediate action to prevent human suffering from the use of EWIPA (Sidiqi, 2020). The UN Secretary-General has repeatedly drawn attention to the impact of EWIPA and called on parties to armed conflict to 'refrain from using explosive weapons with wide area effects in populated areas' (UN Security Council, 2016, p. 68). In a joint statement in 2019, the UN Secretary-General and ICRC furthermore declared to be '[a]larmed at the devasting humanitarian consequences of urban warfare', and were 'appealing to States and all parties to armed conflict to avoid the use of explosive weapons with a wide impact area in populated areas'. They continued by stating that conflict parties 'must recognize that using explosive weapons with wide area effects in cities, towns and refugee camps places civilians at high risk of indiscriminate harm' (ICRC & UN Secretary-General, 2019). Similar recognitions of harm by EWIPA have been made by organisations like the EU and AU, as well as many states.[5] A process, led by Ireland, is currently underway to develop a political declaration that addresses the use of EWIPA and resulting humanitarian harm.[6]

The use of EWIPA is a global problem. Unfortunately, it has become a defining and devastating feature of contemporary armed

conflict (Elhaj & Tonkin, 2015). Civilians in countries such as Iraq, South Sudan, Syria, Yemen and Ukraine have all suffered harm inflicted by explosive weapons (Docherty & Boer, 2017).[7] Data illustrates the immense scope of the problem: Around 90 per cent of direct casualties and injured people from the use of EWIPA are estimated to be civilians (Sidiqi, 2020). This is not to mention that these numbers only refer to direct casualties and exclude the considerable harm from indirect effects, as illustrated by this case description of the impact of such weapons on health care quality, accessibility and availability in Eastern Ukraine.

Images





On the right, the destruction of the hospital's ambulance substation; on the left, the damaged neurology department. The destruction was caused by explosive weapons in June 2015.
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Explosive weapons caused broken windows at Maryinka District Central Hospital.

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Endnotes

1 The Association Agreement was an agreement between the EU and Ukraine to establish a political and economic association.

2 This case is drawn from previous work by PAX´s Humanitarian Disarmament Team with the Harvard Law School Human Rights Clinic. See also the report 'Operating Under Fire' (Docherty & Boer, 2017).

3 See the Introduction for our discussion of these and other terms.

4 See the chapter on victims of civilian harm in Part II for a more elaborate discussion of the negative implications of urban warfare for civilians.

5 As of July 2020, 109 states and territories had acknowledged the harm caused by the use of explosive weapons in populated areas.

6 For updates on the progress of the development of the political declaration, see the INEW website.

7 See also chapter 9 on Coalition airstrikes in Syria in the context of the battle against ISIS.