



Civilian harm mitigation in large-scale combat operations:

Lessons for UK defence

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Cover photo: An Iraqi man walks in the rubble of the heavily damaged Church of St. Ephraim, a Syriac Orthodox church in Mosul, Iraq, months after this part of Mosul was taken from ISIS (May 2017).

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Ceasefire Centre for Civilian Rights

The Ceasefire Centre for Civilian Rights is an international charity based in the UK which supports civilian-led monitoring of violations of international humanitarian law and human rights, helps civilians to secure justice, and promotes civilian protection and military accountability. We work in a number of conflict-affected jurisdictions in the Middle East, Africa and Europe, operating in some of the world's most challenging environments.

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Abbreviations

CHM	civilian harm mitigation
CHMR	civilian harm mitigation and response
CHMR-AP	Civilian Harm Mitigation and Response Action Plan
CIVCAS	civilian casualties
CNA	Center for Naval Analysis
COIN	counterinsurgency
CPM	Civilian Protection Monitor
DoD	Department of Defense (US: now renamed Department of War)
Dutch MoD	the Netherlands Ministry of Defence
EOF	escalation of force
EWIPA	explosive weapons in populated areas
ICRC	International Committee of the Red Cross
IHL	international humanitarian law
IHRL	international human rights law
ISAF	International Security Assistance Force
ISIS	Islamic State of Iraq and Syria
JCOA	Joint Center for Operational Analysis
LSCO	large-scale combat operation
MoD	Ministry of Defence (UK)
NATO	North Atlantic Treaty Organization
NGO	non-governmental organization
NSS	National Security Strategy
OHCHR	UN Office of the High Commissioner for Human Rights
OIR	Operation Inherent Resolve
PoC	Protection of Civilians
SDR	Strategic Defence Review



Executive summary

In 2025, the UK government announced its largest sustained increase in defence spending since the Cold War and subsequently released a new Strategic Defence Review (SDR) and an updated National Security Strategy (NSS). Together, the SDR and NSS redefine the UK's defence posture for a new era, sending a clear signal that the UK is preparing for combat at scale. However, the government's new vision of a 'battle-ready, armour-clad nation' provides limited detail on how it intends to mitigate or respond to civilian harm or evaluate and ensure compliance with international humanitarian law (IHL), including the principles of distinction, proportionality and precautions in attack.

The UK currently lacks a coherent institutional framework for civilian harm mitigation and response (CHMR). Placing overwhelming emphasis on protecting civilians from the actions of other militaries or non-state actors, rather than from its own operations, the UK approach scatters civilian protection across a patchwork of ad hoc policies, doctrines and operational practices. While containing promising practices, this leaves significant gaps and falls short of the UK's rhetorical commitment, and its obligation, to protect civilians in armed conflict.

The UK's lack of a comprehensive framework for mitigating and responding to harm to civilians from its own military operations means that it trails its allies, placing it behind the leading international understanding and practice in civilian harm mitigation (CHM).

Civilian harm mitigation and response in large-scale combat operations

IHL contains the obligation on parties to conflict to take constant care to spare the civilian population from harm and prohibits both directing attacks on civilians as well as attacks on military objectives that are expected to cause excessive civilian harm in relation to the anticipated military advantage. However, it is a reality of modern warfare that civilians are harmed even where actors ostensibly adhere to these rules. The practice of CHMR emerged to support militaries in operationalizing their duty to protect civilians, while also recognizing that compliance with IHL represents only a minimal threshold, and that there is a strategic as well as legal imperative to minimize 'lawful civilian harm' (sometimes referred to as collateral damage). CHMR may also seek to address broader understandings of civilian harm not explicitly captured by IHL rules, for example, the reverberating and compounding effects of attacks, such as the destruction of critical infrastructure and the disruption of access to basic needs and services.

Military actors have often conceptualized civilian protection or CHMR as an impediment to mission effectiveness, treating it as a constraint rather than a strategic advantage. This perception has been a major barrier to embedding CHMR as an institutional norm. Yet,

operational experience from recent conflicts has demonstrated that protecting civilians and achieving mission objectives are not mutually exclusive but mutually reinforcing. Scaling CHMR frameworks for LSCOs, however, will not be straightforward. Much of the policy debate and practical reform relating to CHMR has drawn on lessons learned during counterinsurgency (COIN) operations, and uncertainties remain over how militaries will be able to adapt. Considering the increased tempo and intensity of operations and the complexity of urban battlefields, mitigating and responding to harm to civilians from military action in LSCOs will be more difficult, complex, and pressurized than in any other modern war. However, doing so is both possible and essential.

Although the UK does not yet use the term ‘CHMR’, this report adopts it both for analytical clarity and because it explicitly focuses on avoiding or minimizing harm caused by a military force’s own actions. In the development of a UK CHMR framework, due consideration must be given to the experience of states that have already established, or are in the process of establishing, their own such frameworks. The United States and the Netherlands, both NATO allies and regular partners of UK forces, are key examples.

The UK’s patchwork of policies currently falls short

In contrast to its allies, the UK until recently resisted reviewing the adequacy of its approach to civilian protection. Currently it appears unable proactively to perceive or acknowledge civilian harm from UK military operations, while at the same time introducing legislative barriers to victims’ access to redress.

The UK’s ad hoc approach to CHMR is rooted in its ‘Approach to Protection of Civilians’ (first published in 2010 and updated in 2020) and its ‘Human Security in Defence’ policy (first published in 2021 and updated in 2024). Both include relevant elements of good practice, for example the placement of human security advisers in some units throughout the military. However, the concept of CHMR itself is not articulated, and there is no guidance for the practical application of systems to track, investigate or respond to harm caused by the UK’s own actions, or for building buy-in from military units or commanders.

Although the Ministry of Defence (MoD) has acknowledged the value of tracking harm to civilians, there is no publicly available evidence that it has a functional tracking mechanism that is able to account for civilians harmed according to a tested methodology. Similarly, there is no evidence available in the public sphere about the methodology used to investigate reports of harm, beyond allegations of criminal conduct. Where investigations have been conducted, they have been delayed and, to date, often ineffective. Although the UK has, during certain periods, provided public liability and ex gratia payments to civilians it has harmed, it lacks a standing mechanism for providing redress to affected individuals and/or communities.

The MoD is currently progressing a baseline study to analyse and assess the way its human security policy has been implemented and institutionalized across the defence ecosystem (this report was prepared prior to the release of the findings). Without a coherent institutional approach and clear, agile operational guidance, efforts to mitigate and respond to civilian harm risk remaining fragmented and reactive.

Lessons from the evolution of the US approach to CHM

Based largely on alleged failures to minimize civilian casualties in COIN operations in Afghanistan and Iraq, the US spearheaded the development of CHMR. Over the course of the 2000s, US forces in Afghanistan and Iraq learned from civilian harm incidents, including where civilians or civilian infrastructure were mistakenly identified as a threat or military objective. Allegations of civilian harm were tracked and investigated, revealing root causes, and enabling refined, context-specific training, guidance, and standard operating procedures. This approach successfully decreased the number of civilian casualties. Importantly, analysis of the available data suggested that these civilian casualty mitigation efforts were a win-win, with no apparent cost to mission effectiveness or increase in friendly force casualties. At the same time, the US came to recognize that civilian harm, even when lawful, causes negative second-order effects on its national, strategic and operational interests.

Some aspects of CHM developed during earlier deployments were repeated during Operation Inherent Resolve (OIR) against ISIS in Iraq and Syria, and Operation Resolute Support, a NATO-led train-and-advise mission in Afghanistan, such as a civilian harm tracking cell that collected and verified reports of potential civilian harm. However, the data-driven learning approach to CHM was not carried forward and when civilian harm rates increased over time, no operational adjustments were made in response to attempt to reduce them.

Two particularly devastating incidents in Afghanistan during Operation Resolute Support sparked magnified media scrutiny: an attack in 2015 which destroyed a Médecins Sans Frontières hospital in Kunduz, killing 42 civilians, and a drone strike in 2021 which killed a humanitarian worker and nine other civilians in Kabul.

In a landmark policy shift, the US released a Civilian Harm Mitigation and Response Action Plan (CHMR-AP) in 2022 and a new Department of Defense (DoD) Instruction in 2023 (Instruction 3000.17), both of which incorporated civil society input. While US CHMR have since faced institutional challenges under the Trump administration, most notably the apparent dismantling of a civilian protection 'Center of Excellence', the ambition and detail of the CHMR-AP and DoD Instruction 3000.17 provide a valuable reference point. They emphasize the importance of operational learning and adaptive planning, calling for a dedicated office to be responsible for CHM, including the management and identification of lessons and data regarding civilian harm, as well as the creation of new positions, and senior leader governance and involvement, to promote CHMR across all aspects of security cooperation and military training, planning and control.

The evolution of the US approach to CHMR offers key lessons for UK defence. Progress cannot be expected to be linear, but sharing lessons between operations and institutionalizing those lessons is vital to sustaining good practices, and it requires a proactive approach.

The scale and tempo of LSCOs can introduce difficulties to a data-driven learning and adaptive approach to CHM. However, the US experience suggests that overcoming these difficulties holds significant strategic value. Possible efforts may include front-loading

learning and adaptation, with the military institution rehearsing, experimenting and adapting in advance to be prepared for the specific operational dilemmas introduced in LSCOs, and identifying alternate tactics and capabilities to promote precision effects and mitigate civilian harm.

Dutch lessons for strengthening the UK's CHM policy

In June 2015, the Royal Netherlands Air Force bombed a car-bomb factory in Hawija, Iraq, as part of Operation Inherent Resolve, causing a massive secondary explosion which killed at least 70 civilians, injured hundreds more and destroyed large parts of the surrounding neighbourhood. Following initial denials and growing public anger, the Dutch government established an inquiry in 2020 on a request from parliament. The Sorgdrager Commission reported in January 2025, finding that the civilian harm in Hawija was the result of several systemic shortcomings, including the misinterpretation of the target environment, structural failures in intelligence and oversight, issues related to legal and political accountability, and insufficient reparation.

The Dutch government has in recent years sought to provide redress to victims in Hawija, and has implemented changes aimed at reducing and responding to future civilian harm. Key to these developments has been sustained consultation with civil society. Since 2021, the Dutch MoD has been engaged in a collaborative 'Roadmap Process' with a consortium of academic experts and civil society organizations to strengthen Dutch policy and practice on preventing, reducing and responding to civilian harm from military operations through regular technical exchanges. The Sorgdrager Commission and the Roadmap Process have made important findings and recommendations on embedding CHMR across all aspects of the use of military force – including training, planning, intelligence gathering, coalition operations, transparency, oversight, reparations and community engagement – many of which are now beginning to be implemented.

Efforts by the Netherlands to acknowledge past failures and evolve its defence policy, in consultation with civil society, provide a compelling case study in institutional learning and reform, demonstrating that meaningful change is possible. The Dutch government has shifted toward operational learning and adaptive planning to mitigate harm, acknowledging harm done, and accounting for and responding to harm – even when operations are conducted within legal bounds – in ways that build public trust and operational legitimacy.

Recommendations

Meaningful reform in the UK does not, and must not, require waiting for a catastrophic incident to occur from UK actions or omissions. In preparing for LSCOs, the government should urgently review, assess and update its civilian protection systems, drawing on lessons from allies and ensuring they are adaptable to the anticipated operational environment. Specific recommendations include:

To the UK government:

- Fund, resource and support the MoD to strengthen its CHMR capabilities, including by establishing a comprehensive CHMR framework that prioritizes operational learning and adaptive planning.

- Facilitate parliamentary oversight of civilian harm, including that resulting from Special Forces operations, for example, through regular reporting requirements, dedicated oversight bodies, and expanded access to classified briefings, where appropriate.
- Establish a statutory civilian harm redress scheme for civilians who have been subject to harm in UK military operations overseas that enables access to holistic reparation, including restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition, and does not place high procedural burdens on victims.

To the UK MoD:

- In line with emerging best practice, establish a dedicated institutional policy framework that embeds CHMR at all levels across training, planning and command structures, and across the entire spectrum of operations, including LSCOs, with clarity on the methodologies that will be used to track, assess, investigate and respond to allegations of civilian harm.
- Ensure senior leader governance and involvement to guide reforms and promote progress towards strengthened CHMR capabilities, and foster buy-in across command levels. Establish clear accountability structures for CHMR implementation.
- Recognize parliament, NGOs, academia and international allies as vital agents in driving and sustaining CHMR reforms, and institutionalize avenues for regular consultation with stakeholders.
- Establish a dedicated CHMR office to both proactively track and investigate individual allegations of harm and to be responsible for the management of data regarding civilian harm, including its root causes, and analyse trends and patterns across incidents to improve practices and reduce further harm.
- Ensure there is a functional system in place for affected civilians and third-party actors to report allegations of civilian harm, and update those who submit allegations on the progress of their review. Establish and publish clear and transparent criteria for assessing the credibility of allegations.
- Incorporate open-source intelligence, civil society and civilian-provided data into intelligence assessments, battle damage assessments, and civilian harm tracking and investigation systems.
- In line with NATO standards, increase transparency through clear public reporting and communications, and adopt mechanisms for the timely public disclosure of civilian harm incidents.
- Fully integrate CHMR into LSCO planning, ensuring that the evidence and past lessons on the value of CHMR are integrated into military guidance and addressed in a public output, and that CHMR is formalized within the doctrinal framework for LSCOs.

Introduction

Having already committed to sustained increases in defence spending,¹ the UK government released its Strategic Defence Review (SDR) and National Security Strategy (NSS) in June 2025.² Together, these documents redefine the UK's defence posture, signifying a landmark shift to 'warfighting readiness' in what Sir Keir Starmer's government has called a 'new era' for defence and security.³ Yet, amid rapidly evolving methods and means of warfare, and the proliferation of new technologies, the government's vision of a 'battle-ready, armour-clad nation' is almost completely silent on how it will mitigate or respond to civilian harm during its own military operations, or evaluate and ensure compliance with the international humanitarian law (IHL) principles of distinction, proportionality and precautions in attack.⁴ These omissions underscore the extent to which the UK lags behind leading international understanding and practice of civilian harm mitigation and response (CHMR),⁵ at a time when the risks to civilian populations are escalating and IHL, the primary legal framework governing the conduct of hostilities, is under serious threat.

As the nature of warfare continues to evolve, so too does the character and potential scale of harm to civilians. Experts have linked rising global levels of civilian harm to permissive and expedient interpretations (made in 'bad faith') of the legality of military conduct as well as the normalization of IHL violations, which have in turn eroded its normative and protective force.⁶ The consequences of these dynamics have become particularly evident in the post-counterinsurgency era, where confrontations between state or quasi-state actors are increasingly unfolding in urban environments, characterized by sustained, high-intensity campaigns, and taking an 'immense human toll'.⁷

- 1 Gov.UK, Prime Minister sets out biggest sustained increase in defence spending since the Cold War, protecting British people in new era for national security, press release, 25 February 2025.
- 2 Ministry of Defence, *Strategic Defence Review – Making Britain Safer: Secure at Home, Strong Abroad*, 2025; HM Government, *National Security Strategy 2025: Security for the British People in a Dangerous World*, June 2025.
- 3 MoD, *Strategic Defence Review*.
- 4 Gov.UK, *PM's remarks on the Strategic Defence Review: 2 June 2025*.
- 5 Some practitioners and organizations use 'civilian harm mitigation' (CHM) to encompass all measures, including post-incident response, on the grounds that mitigation inherently requires responding to harm already inflicted. Others distinguish response as a discrete activity warranting additional emphasis, giving rise to the term 'civilian harm mitigation and response' (CHMR). Both usages are retained in this report.
- 6 See Cordula Droegge, 'Awful but lawful' military tactics are undermining the Geneva Conventions', International Committee of the Red Cross (ICRC), 9 August 2024; Mirjana Spoljaric, 'A call to make International Humanitarian Law a political priority', ICRC, 6 February 2025; ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts: Building a Culture of Compliance for IHL to Protect Humanity in Today's and Future Conflicts*, Report, September 2024; Jessica Dorsey and Luke Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems: Restoring balance through the legitimacy of military operations', SSRN, 2 May 2025; Elizabeth Stubbins Bates, *Strengthening UK Military Investigations into Civilian Harm: Towards Compliance, Mitigation and Accountability*, Ceasefire Centre for Civilian Rights, November 2024, p. 6.
- 7 UN Security Council, Report of the Secretary-General: Protection of civilians in armed conflict, S/2025/271, 15 May 2025, para. 3.

Since 2021, conflicts in Myanmar, Ukraine, Sudan, Gaza and elsewhere have caused widespread and wide-ranging harm to civilians, including death, injury, property damage, forced displacement, infrastructure collapse, food insecurity and water scarcity,⁸ illustrating what observers have called a ‘civilian protection crisis.’⁹ This crisis is starkly reflected in the steep rise in civilian casualties over recent years. According to the UN Office of the High Commissioner for Human Rights (OHCHR), the number of civilian deaths in armed conflict had been steadily decreasing since 2015, but this trend reversed in 2022, with figures rising year-on-year from 14,447 in 2021 to 48,384 in 2024.¹⁰ The actual figures are likely higher.

The increasing urbanization of warfare, as well as the development of methods which enable it to be conducted at arm’s length – from the use of private military companies to remotely piloted drones and AI-decision support systems – clearly present new challenges for the protection of civilians, despite technological advances in precision capabilities that allow for so-called ‘clean’ operations (often cited by Western governments as a way to justify military action rather than limit it).¹¹ One such challenge is the continued use of explosive weapons with wide-area effects in populated areas, despite calls to avoid, international initiatives to limit, and commitments by some of the world’s largest militaries to restrict or refrain from using such weapons.¹² The International Committee of the Red Cross (ICRC) notes the devastating consequences of the use of explosive weapons in populated areas, which include mass civilian casualties, long-term displacement, societal trauma and the disruption or collapse of essential public services, and cites it as one of the main causes of civilian harm in contemporary armed conflict.¹³ As major militaries shift their focus from counterinsurgency (COIN) to large-scale combat operations (LSCOs)¹⁴ and prepare to engage in high-intensity conflict with near-peer adversaries – likely to take place in populated areas – it is imperative that they confront and seek to address the challenges associated with protecting civilians.

In recent years, emerging policy and civil society advocacy have emphasized the legal, moral and strategic imperative to mitigate harm to civilians. Much of the policy debate and practical reform relating to CHMR has drawn on lessons learned during COIN, most notably the ground wars in Afghanistan and Iraq, and the air campaign against ISIS in Iraq and Syria. While the International Contact Group on Civilian Harm Mitigation and

8 See UN Security Council, S/2022/381; S/2023/345; S/2024/385; S/2025/271.

9 Stubbins Bates, *Strengthening UK Military Investigations into Civilian Harm*, p. 6; Kristoffer Lidén, ‘Protection of civilians in crisis: Geneva Conventions at 75’, Peace Research Institute Oslo, 26 November 2024; See also ‘2025 NGO statement ahead of the open debate on protection of civilians’, May 2025.

10 OHCHR, *Human Rights Count*, June 2025.

11 Jolle Demmers, Lauren Gould and David Snetselaar, ‘Perfect war and its contestations’, in Sarah Maltby, Ben O’Loughlin, Katy Parry and Laura Roselle (eds) *Spaces of War, War of Spaces*, London, Bloomsbury, 2020, pp. 231–46. See also Lauren Gould, ‘Investigating civilian harm in an era of Western remote warfare’, Armed Groups and International Law, 28 January 2025.

12 See Explosive Weapons Monitor, *Explosive Weapons Monitor 2024*, May 2025; INEW, *Briefing note: Protecting civilians from the use of explosive weapons in populated areas*, May 2025.

13 ICRC, *Explosive Weapons with Wide Area Effects: A Deadly Choice in Populated Areas*, January 2022. See also Isabel Robinson and Ellen Nohle, ‘Proportionality and precautions in attack: The reverberating effects of using explosive weapons in populated areas’, *International Review of the Red Cross* 98(1), 2016, pp. 107–45.

14 The term ‘large-scale combat operations’ is not a legal term under IHL. It is a military doctrinal concept, primarily used by the United States and some others to describe ‘extensive joint combat operations in terms of scope and size of forces committed’, typically involving multiple corps and divisions, substantial joint and multinational forces, and often including conventional and irregular forces on both sides. See Abby Zeith and Lakmini Senevirante, *Reducing the Human Cost of Large-scale Military Operations*, SSRN, 25 March 2025.

effective civilian harm mitigation can serve as a strategic advantage during large-scale combat operations

Response – an inter-state working group of which the UK is a member – has acknowledged the challenge of scaling CHMR policies from COIN to LSCOs,¹⁵ leading researchers argue that it is not only possible, but can serve as a strategic advantage.¹⁶ This report seeks to advance

this debate, while providing key lessons and practical recommendations to the UK as it enters its new era for defence, on how it can reinforce its commitment to civilian protection and display leadership by preparing institutionally to mitigate and respond to civilian harm during LSCOs, drawing on comparative insights from the United States and the Netherlands.

What is civilian harm mitigation and response?

Defining civilian harm

The Geneva Conventions and their Additional Protocols, the cornerstone of IHL, strictly prohibit civilians and civilian objects from being the object of attack¹⁷ and contain the obligation on parties to take ‘constant care [...] to spare the civilian population, civilians and civilian objects’.¹⁸ While the treaties do not employ the term ‘civilian harm’, in their attempt to balance the principles of humanity and military necessity they implicitly acknowledge its occurrence through reference to ‘incidental loss of civilian life, injury to civilians and damage to civilian objects’, and require parties to take all feasible precautions to avoid or minimize it.¹⁹ Attacks expected to cause civilian harm which would be ‘excessive in relation to the concrete and direct military advantage anticipated’ are prohibited.²⁰

These provisions largely frame civilian harm in terms of incidental casualties and physical damage, leaving unaddressed the wider, longer-term impacts of armed conflict.²¹ Contemporary understandings of civilian harm are broader, taking into account the indirect and cumulative effects of prolonged exposure to conflict. Bijl and van der Zeijden have defined it as:

Negative effects on civilian personal or community well-being caused by use of force in hostilities. Effects can occur directly (death, physical or mental trauma, property

15 Erin Bijl, ‘Key takeaways for civilian harm mitigation and response from the Russia–Ukraine war’, Just Security, 21 January 2025.

16 Larry Lewis, Sabrina Verleysen, Samuel Plapinger and Marla Keenan, *Preparing for Civilian Harm Mitigation and Response in Large-scale Combat Operations*, CNA (Center for Naval Analysis), August 2024; Lucca de Ruiter, Erin Bijl and Megan Karlshoej-Pedersen, ‘In preparing for large-scale conflicts, states neglect lessons on civilian protection at their peril’, Just Security, 14 August 2025.

17 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), of 8 June 1977 (AP I), Art. 51–52.

18 AP I, Art. 57(1).

19 Ibid., Art. 57(2)(a)(ii).

20 Ibid., Art. 51(5)(b).

21 Noam Lubell and Janina Dill, *Cumulative Civilian Harm in War: Addressing the Hidden Human Toll of the Law’s Blind Spot*, ongoing research project (University of Essex, University of Oxford et al., funded by UKRI, ESRC and NSF, 2023–2026).

*damage) or indirectly through the destruction of critical infrastructure, disruption of access to basic needs and services, or the loss of livelihood.*²²

Gould and others have clarified this distinction, identifying three categories of harm: direct, reverberating and compounding. Direct effects include the ‘immediate and (usually) physical impact directly from the armed conflict’;²³ reverberating effects are ‘those effects that are not necessarily caused directly by the attack, but are nonetheless a product thereof’;²⁴ and finally, compounding effects occur ‘when two or more separate events or forms of harm [...] combine to create an exponentially more harmful effect for civilians’.²⁵

Civilian harm, in all its forms, is rarely unforeseeable and affected civilian populations are prolific and effective in documenting it. Nevertheless, it remains a defining feature of modern warfare, often because it is insufficiently anticipated, prevented or addressed.

**civilian harm is rarely
unforeseeable and affected civilian
populations are effective in
documenting it**

Civilian harm mitigation and response: An essential element of civilian protection

The practice of CHMR emerged to reinforce IHL compliance and support militaries in operationalizing their duty to protect civilians and upholding their rights, while also seeking to address broader understandings of civilian harm not fully captured by IHL rules. While international law provides the foundation for CHMR, compliance with IHL represents only a minimal threshold. Lewis and others have long called for a comprehensive approach that moves beyond compliance.²⁶ In this way, CHMR promotes more effective civilian protection by marrying international law with policy and military practice, and by framing it appropriately within operational contexts. The term itself is rooted in recent US doctrine, particularly the Department of Defense (DoD) Civilian Harm Mitigation and Response Action Plan (CHMR-AP) published in August 2022 and DoD Instruction 3000.17 on Civilian Harm Mitigation and Response, effective from December 2023.²⁷

22 Erin Bijl and Wilbert van der Zeijden, ‘Civilian harm tracking, analysis and response: What it is and why it matters’, position paper, PAX, June 2020, p. 4.

23 Sarah Holewinski et al., ‘Beyond casualty counts: Building dynamic models to capture and foresee civilian harm’, White Paper, Frontlines Lab, 2021, p. 5, quoted in Lauren Gould, ‘Investigating civilian harm in an era of western remote warfare’, Armed Groups and International Law, 28 January 2025.

24 Robinson and Nohle, ‘Proportionality and precautions in attack: The reverberating effects of using explosive weapons in populated areas’.

25 Erin Bijl, Welmoet Wels and Wilbert van der Zeijden (eds), *On Civilian Harm: Examining the Complex Negative Effects of Violent Conflict on the Lives of Civilians*, PAX, June 2021, p. 245, quoted in Gould, *Investigating civilian harm ...*, 2025.

26 Larry Lewis, ‘Why we haven’t made progress on civilian protection’, Just Security, 3 February 2021.

27 U.S. Department of Defense (DoD), *Civilian Harm Mitigation and Response Action Plan (CHMR-AP)*, 25 August 2022; DoD, *DoD Instruction 3000.17 Civilian Harm Mitigation and Response*, 21 December 2023.

As outlined by NATO, civilian harm mitigation (CHM)²⁸ refers to:

*Exercising restraint in the conduct of operations to avoid or in any case minimise harm in compliance with the principles of IHL, including actions regarding [force protection]. This effort includes measures to prevent, identify, investigate, and track incidents of civilian casualties from own actions, while also providing amends and post-harm assistance when civilians are harmed as a result of these operations. Civilian harm mitigation is an essential component of the mission.*²⁹

CHM includes actions to ‘prevent, deter, pre-empt, and respond to situations where civilians are targets of violence or are under threat of violence.’³⁰

CHMR is defined by the Center for Naval Analysis (CNA) as ‘the collective efforts armed actors, militaries and nations can take to reduce the scale and impact of [...] harm to civilians, both direct and indirect, from their actions.’³¹ It refers to the full spectrum of institutional and operational processes designed to prevent, assess, investigate, track and respond to civilian harm, whether resulting from lawful or unlawful actions.³² By recognizing that even lawful harm carries strategic, moral and political consequences that undermine legitimacy and long-term security objectives, the CNA argues that CHMR is not a constraint on military success but a means of enhancing it.

Holewinski argues that one of the most significant barriers to embedding CHMR as an institutional norm lies in how military actors conceptualize the relationship between mission effectiveness, force protection and civilian protection.³³ These three aims are too often cast as a false trilemma, in which prioritizing any single pillar is assumed to detract from the others.³⁴ However, operational experience shows they are mutually reinforcing.³⁵ For example, in Afghanistan and Iraq, analysts found that ‘efforts to minimize, track, and respond to civilian harm [...] improved targeting, built legitimacy, and strengthened force protection.’³⁶

CHMR represents one of several conceptual frameworks developed to save civilians from the devastation of war.³⁷ Stigall identifies the three principal frameworks as Human

28 Some practitioners and organizations use ‘civilian harm mitigation’ (CHM) to encompass all measures, including post-incident response, on the grounds that mitigation inherently requires responding to harm already inflicted. Others distinguish response as a discrete activity warranting additional emphasis, giving rise to the term ‘civilian harm mitigation and response’ (CHMR). Both usages are retained in this report.

29 North Atlantic Treaty Organization (NATO), *Protection of Civilians Handbook*, 2021, p. 28.

30 Ibid. Mitigating harm has two components; the first refers to mitigating harm due to a military’s own actions (p. 28); the second, Adversarial Threat Mitigation, references the same actions to protecting civilians from other threats (p. 29).

31 Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-scale Combat Operations*, p. 6.

32 See DoD, CHMR-AP, 2022; Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-scale Combat Operations*.

33 See panel event on *Improving Civilian Protection in Conflict* organized by the Center for Strategic and International Studies, 1 April 2021. Transcript available [here](#).

34 Ibid.

35 Ibid.

36 Lucca de Ruiter, Erin Bijl and Megan Karlshoej-Pedersen, ‘In preparing for large-scale conflicts, states neglect lessons on civilian protection at their peril’. See also Larry Lewis, *Reducing and Mitigating Civilian Casualties: Enduring Lessons*, Joint and Coalition Operational Analysis (JCOA) Division, 12 April 2013.

37 Dan E. Stigall, ‘Beyond Compliance Symposium – the harm mitigation holarchy: human security, protection of civilians, and civilian harm mitigation and response’, *Articles of War*, 5 November 2024.

Security, Protection of Civilians (PoC), and CHMR, and observes that they are ‘distinct but interrelated concepts, each with its own unique identity, but existing within a holarchy of nesting concepts’.³⁸ Although the UK does not yet use the term ‘CHMR’, instead emphasizing human security and PoC, this report adopts it for both analytical clarity and because it explicitly focuses on avoiding or minimizing harm caused by a military force’s *own* actions (rather than by the conduct of partners or other third parties).

Focus and structure of this report

This report draws on and hopes to complement the Civilian Protection Monitor (CPM), a joint project by Airwars and PAX launched in April 2025, which benchmarks states’ policy and practice across key CHMR indicators.³⁹ The CPM currently focuses on the UK, the US and the Netherlands, selected for their significant recent military interventions, stated commitments to civilian protection, and the lessons their approaches offer in terms of best practices and practices to avoid⁴⁰ – the present report follows this rationale.

According to the CPM, the UK ranks as ‘uncommitted’ in four of its five categories, and it concludes:

*Overall, the UK’s approach to protecting civilians during military operations could benefit from greater clarity, coordination, and transparency. Creating CHMR-focused policies that build on existing human security policy, combined with improvements in tracking harm, investigating incidents, and providing post-harm responses are necessary to strengthen the UK’s civilian protection efforts going forward.*⁴¹

With contributions from three leading experts, this report further considers how civilian protection is conceptualized and implemented within UK military systems, examines the development of CHMR in the US, and evaluates Dutch lessons for strengthening UK policy. It explores how the UK could evolve towards a more comprehensive framework that embeds CHMR across training, planning and command structures, with applicability across all operational environments, including LSCOs. By analysing the approaches of allies that have begun reorienting their approach, particularly by acknowledging past systemic failings, the report highlights both missed opportunities and emerging best practices for the UK to adopt.

Figure 1: Civilian harm mitigation and response can be understood as existing within a holarchy of nesting conceptual frameworks



38 Ibid.

39 Civilian Protection Monitor (CPM), Airwars and PAX.

40 CPM, *Methodology*.

41 Lucca de Ruiter, Megan Karlshoej-Pedersen and Erin Bijl, *Country Report: United Kingdom 2024*, CPM, April 2025, p. 7.

The UK's current approach to CHMR

While the UK has repeatedly affirmed its commitment to the protection of civilians in both domestic and international fora, its practical approach remains underdeveloped and ad hoc. CHM is not articulated through a dedicated framework, but rather dispersed across a patchwork of policies, doctrines and operational practices. These include the UK's 'Approach to Protection of Civilians' (first published in 2010 and updated in 2020)⁴² and its 'Human Security in Defence' policy (first published in 2021 and updated in 2024).⁴³

the UK's practical approach to protecting civilians from its own operations remains underdeveloped and ad hoc

Chapter 1 of this report reviews the UK's current systems for tracking, investigating and responding to civilian harm. It examines recent developments in policies, doctrines and operational practices, identifying systemic shortcomings and gaps. It offers targeted recommendations for strengthening CHMR mechanisms, while maintaining a

focus on the civilians harmed in past and ongoing UK operations who continue to seek transparency and accountability.

The Ministry of Defence (MoD) is currently progressing a baseline study to analyse and assess the way its human security policy has been implemented and institutionalized across the defence ecosystem, and to evaluate current CHMR capabilities and determine whether further action is needed to strengthen them. This report was prepared prior to the release of the baseline study's findings. We welcome the study's preparation and hope the analysis presented here will complement its conclusions.

Lessons from the US and the Netherlands

The US and the Netherlands, both NATO allies and regular partners of UK forces, have also engaged in planning and preparing for LSCOs. Unlike the UK, however, both countries have made significant efforts to respond to documented civilian protection failures and civilian harm allegations by taking steps to learn from past shortcomings and systematically embed CHMR into military training, planning and control. These experiences resonate with the UK's own challenges and provide valuable comparative insights.

Chapter 2 examines over two decades of US experience in CHM, highlighting key takeaways and offering lessons to help guide the UK and others in their own efforts. Based on experiences in Afghanistan and Iraq, the US came to recognize that civilian harm caused negative second-order effects on its national, strategic and operational interests, and that adapting its approach could yield significant benefits. Despite significant efforts and some success in minimizing civilian casualties, by 2021 there was a widely held belief, both inside and outside the DoD, that the US military had a fundamental problem with civilian harm that it had yet to confront. Media scrutiny following two particularly devastating incidents in Afghanistan – an attack in 2015 which destroyed an Médecins Sans Frontières hospital in Kunduz, killing 42 civilians, and a drone strike in 2021 which killed a humanitarian worker and nine other civilians in Kabul – spurred major

42 Gov.UK, [UK Approach to Protection of Civilians in Armed Conflict](#), policy paper, 27 August 2020.

43 MoD, JSP 985, [Human Security in Defence](#), Version 2.0, June 2024.

investments to strengthen CHM capabilities, culminating in the release of the CHMR-AP in 2022, and marking a landmark policy shift.

While the US CHMR enterprise has since faced institutional challenges, most notably the apparent dismantling or stalling of some implementation efforts, the ambition and detail of the CHMR-AP and DoD Instruction 3000.17, along with the US military's emphasis on operational learning and adaptive planning, provide a valuable reference point. The current recession of US leadership presents an opportunity for the UK to strengthen its own approach to CHMR, while displaying leadership in civilian protection standards internationally.

Chapter 3 further argues that the UK has a clear opportunity to learn from allies in strengthening its approach to CHMR by institutionalizing good practices, enhancing transparency, and engaging more directly with civil society and independent monitors. It assesses the recent forward-leaning and transparent approach taken by the Netherlands to acknowledge past failures and strengthen its approach to CHMR, prompted by the fallout of the Dutch airstrike in Hawija, Iraq, in 2015, which took a devastating civilian toll and sparked a public outcry. Not without its flaws and challenges, the Dutch case underscores that meaningful change is possible, demonstrating how a more proactive, accountable and transparent approach to CHMR can complement existing legal frameworks, improve military effectiveness, and enhance credibility both at home and abroad.

Preparing for the protection of civilians in large-scale combat operations: a review of current systems in the UK

Megan Karlshoej-Pedersen

Since 2022, the United Kingdom's Ministry of Defence (MoD) has increasingly shifted its focus away from the counterinsurgency wars that defined the beginning of the 21st century. In its place, the MoD is now focused on what it perceives to be a more fundamental threat: war with Russia or another near-peer.⁴⁴ Such a large-scale combat operation (LSCO) would be catastrophic for civilians caught in the fray, in the immediate term and for decades to come. Harm is likely to be particularly prolific as a result of hostile actors; Russia has, for instance, shown disregard for civilian life and international humanitarian law (IHL) across its recent engagements in Ukraine and Syria, where thousands have been killed.⁴⁵ Yet as it prepares to protect civilians from the actions of enemy forces, the UK must also place mitigating harm to civilians from its own military actions at the core of its planning.

While the UK prioritizes adherence to IHL across its policies and guidance, it is a reality of modern warfare that civilians are harmed even where actors ostensibly adhere to the laws of war. During Operation Inherent Resolve (the US-led anti-ISIS operations conducted in Iraq and Syria), for instance, independent monitoring group Airwars⁴⁶ estimates that at least 8,247 civilians have been killed by the coalition as a whole since 2014.⁴⁷ The UK was the second-biggest contributor to this campaign.

Several of the UK's allies have publicly recognized the challenges of mitigating harm to civilians from their own military actions over the last few years and have engaged in significant review processes to identify gaps and adopt best practices. Both the US (covered in chapter 2 of this report), and the Netherlands (covered in chapter 3) have been particularly focused on improving their approaches in light of the legal, moral and strategic imperative to mitigate harm to civilians. Yet, while the UK has made some positive steps, for instance by taking on the co-leadership of the International Contact

44 Ministry of Defence, *Strategic Defence Review 2025 – Making Britain Safer: Secure at Home, Strong Abroad*, p. 2.

45 Clarie Alspektor, *Patterns of Civilian Harm from Alleged Russian Actions in Kharkiv Oblast*, Airwars, 2023.

46 The author is a Policy Specialist at Airwars, working across the US, the UK, and several European countries.

47 Airwars, 'U.S.-led Coalition in Iraq & Syria', n.d., accessed 12 June 2025.

Group on Civilian Harm Mitigation and Response, initially spearheaded by the US and the Netherlands,⁴⁸ the UK has largely resisted comparable reflection and reform.

While the US recognized in 2022 that its civilian harm tracking mechanisms had been under-resourced and engaged in a detailed review process to begin to address this, the UK appears to have maintained a methodology that leaves it almost unable to perceive or acknowledge civilian harm.⁴⁹ While the Netherlands recognized in early 2025 that its response mechanisms had failed to take into account the wishes of those affected by Dutch airstrikes and that reconstruction projects aimed to make amends were ‘too little and too late’,⁵⁰ the UK introduced further legislative barriers for civilians hoping to access reparations, including a presumption against prosecution for all but the most serious crimes.⁵¹

To evaluate the strength of these states’ approaches to civilian harm mitigation and response (CHMR), Airwars and PAX recently developed the Civilian Protection Monitor (CPM). CPM is a framework that allows for monitoring and analysis across five categories, each of which have 3–5 indicators covering both policy and practice. The UK scored ‘uncommitted’ in nearly all categories.⁵²

The apparent general lack of UK CHMR mechanisms, and gaps in the mechanisms that do exist, should be seen as acute challenges for the UK. The MoD should review, assess and update its civilian protection systems. An obvious opportunity to do this was the 2025 Strategic Defence Review. However, in spite of the ‘root-and-branch’ nature of the review, focused on ‘ruthlessly examining every aspect of Defence’, there was not a single indication that the UK’s civilian protection mechanisms have been examined – or even any mention of the possibility of civilian harm from UK military operations.⁵³ An ongoing MoD review of its approach to human security, meant to be finalized in late 2025, provides another important opportunity to examine this.

In this context, this chapter will examine the UK’s current policies and practices on civilian protection, how these have evolved in recent years, and how the UK should

Figure 2: UK ranking across CPM categories. Source: CPM



48 See DoD, ‘Readout of International Contact Group meeting on Civilian Harm Mitigation and Response’, 24 September 2024.

49 DoD, *Civilian Harm Mitigation and Response Action Plan (CHMR-AP)*, 2022.

50 Ministerie van Defensie, *Aanbiedingsbrief rapport commissie van onderzoek wapeninzet Hawija – Kamerstuk*, 2025.

51 Roseanne Burke and Mark Lattimer, *Reparations for Civilian Harm from Military Operations: Towards a UK Policy*, Ceasefire for Civilians, 2021.

52 *Civilian Protection Monitor*, 7 November 2024. The author is a co-founder of CPM and has been an active participant in advocacy and policy engagements with the DoD, the Dutch Ministry of Defence, and MoD over the last five years.

53 Ministry of Defence, *Strategic Defence Review 2025 – Making Britain Safer: Secure at Home, Strong Abroad*.

strengthen its approach to civilian protection as it examines the possibility of LSCOs. In doing so, the chapter also aims to maintain a focus on the civilians who have been harmed in past UK operations – and those who continue to be harmed in ongoing operations – who are still seeking transparency and accountability.

International law and CHMR

Adhering to IHL is an important foundation for effectively protecting civilians in conflict. Among other things, provisions from the Geneva Conventions and their protocols require parties to a conflict to:

*take ‘constant care’ to spare the civilian population and civilian objects from the effects of their attacks ... by taking ‘all feasible precautions’ in their choice of weapons and targeting practices to ‘avoid ... civilian harm’.*⁵⁴

IHL also requires belligerents to conduct thorough investigations into harm to civilians. This is echoed in international human rights law (IHRL), which introduces an even broader scope of investigative requirements.⁵⁵ In public statements on the UK’s approach to CHMR, the MoD habitually emphasizes the country’s commitment to IHL. Legal compliance has also formed the backbone of much of the UK’s guidance to its troops, including in rules of engagement and targeting guidance. However, a recent report by Ceasefire on the UK’s approach to investigating civilian harm found that:

*the UK’s investigations into civilian harm in military operations have been delayed yet recurrent, well-financed but politically criticized. They have failed to acknowledge the full breadth of international humanitarian law (IHL)’s specified investigatory obligations ...*⁵⁶

The UK’s apparent lack of an effective civilian harm tracking mechanism raises questions on the scope of harm from past military actions and, more broadly, the UK’s ability to fully comply with such requirements to investigate and prevent future harm, making a full analysis of its IHL compliance impossible.

Beyond the legal obligations to mitigate, track and investigate harm, international law (particularly IHRL) also contains some provisions relevant to post-harm responses. When it comes to victims of civilian harm from a violation of international law, international human rights courts and treaties have established an individual right to remedy for victims of violations, with the UN Basic Principles on the Right to a Remedy and Reparation clarifying that this encompasses ‘full and effective reparation’, including restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition.⁵⁷ Beyond this, the International Committee of the Red Cross (ICRC) notes there is ‘an increasing trend in favour of enabling individual victims of violations of international

54 Elizabeth Stubbins Bates and Mae Thompson, ‘Harnessing military investigations as a tool for civilian protection in an “era of rearmament”’, *EJIL: Talk!*, 11 April 2025.

55 Floris Tan, *The Duty to Investigate in Situations of Armed Conflict*, Brill, September 2023.

56 Elizabeth Stubbins Bates, *Strengthening UK Military Investigations into Civilian Harm: Towards Compliance, Mitigation and Accountability*.

57 OHCHR, *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*, UN GA Res. 16 December 2005.

humanitarian law to seek reparation directly from the responsible state.⁵⁸

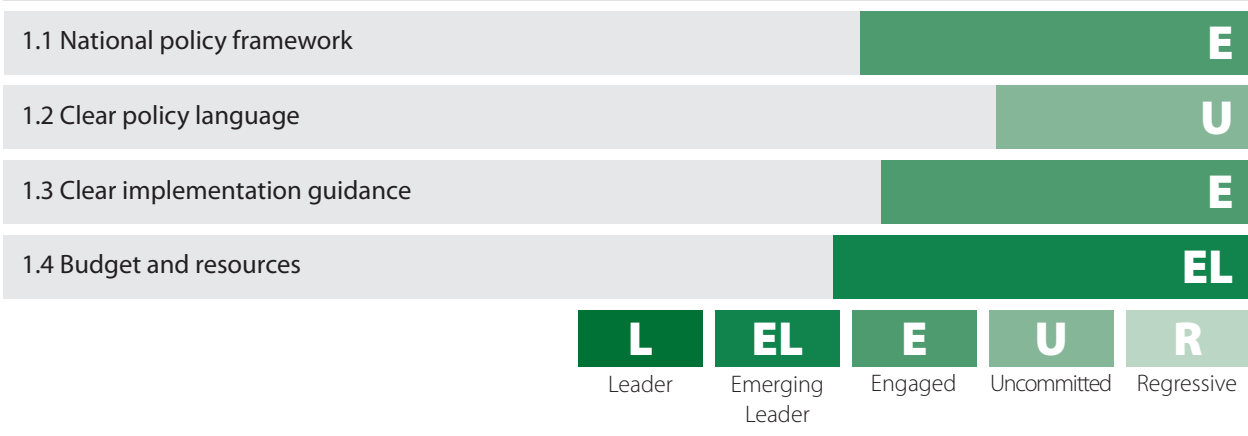
Moreover, compliance with IHL in and of itself does not constitute a comprehensive CHMR approach. This chapter will review both civilian harm that has occurred as a result of military action in compliance with international law and harm that occurred as a result of unlawful actions, because both forms of harm have devastating consequences for the civilians affected. Whether harm occurs from IHL-compliant military operations or not, there is a moral and at times legal obligation for the UK MoD to respond; failure to do so is likely to lead to tactical and operational challenges.

compliance with international humanitarian law in and of itself does not constitute a comprehensive approach to civilian harm mitigation and response

Political framework on protecting civilians from own military actions

The UK has several policies relevant to civilian protection. Most notably, the 2020 UK Approach to Protection of Civilians in Armed Conflict and the 2024 Joint Services Publication 985 on Human Security in Defence (JSP 985) provide important guidance on the UK’s approach to protecting civilians. While each contains areas for improvement, they also include important good practices for allies to learn from; both documents place direct harm to civilians, such as deaths and physical injuries, in the wider context of human security, recognizing that harm can be indirect and reverberate throughout the lives of those affected and their communities for years after military operations, and that different demographic groups have distinct vulnerabilities.⁵⁹

Figure 3: UK scores across CPM national policy indicators. Source: CPM



The MoD has also established a small team in Whitehall specifically focused on human security in military operations and has placed human security advisers in some units throughout the military.⁶⁰ In recognition of these good practices, the UK scored ‘Engaged’ in the CPM’s ‘National policy framework’ category.

58 ICRC, IHL Databases: Customary IHL, Rule 150 – Reparation.
59 MoD, JSP 985: Human Security in Defence, 2024.
60 Ibid.

The strength of the UK's policy framework is limited by three gaps. First, there is an overwhelming focus in both documents on the UK's role as a peacekeeper to protect civilians from the actions of others. Second, where attention is paid to civilian harm from UK actions, for instance in commitments to: 'investigate any credible reports that UK actions may have caused civilian harm', there is no clarity in these documents – or any other publicly available documents – on what this means in practice.⁶¹ It is unclear, for instance, what makes an allegation of harm credible enough to investigate, what methodology will be used to do so, and whether those affected can expect to hear from the MoD.

Third, there is no focus in the JSP 985 or other documents published by the Human Security in Defence policy team in the MoD on the importance of human security – or indeed CHMR – in case of a LSCO. Nor do documents on the UK's approach to LSCOs mention human security in any substantive way; and there is no mention of protecting civilians caught in conflict from UK use of tools that are likely to play a significant role in LSCOs and may present significant risk to civilians, such as AI-supported targeting.⁶² The UK's National Artificial Intelligence Strategy does not mention CHMR or activities related to it, nor does it engage with human security.⁶³ The MoD's 2022 report, *Ambitious, Safe, Responsible: Our Approach to the Delivery of AI-enabled Capability in Defence*, provides a useful and encouraging overview of the general legal and ethical risks the MoD recognizes as it expands its use of AI-supported mechanisms. Yet while the overall commitments are encouraging, the report does not delve into how civilians in conflict will be affected by – and protected from – AI-supported weaponry or other systems that may radically increase the speed and scope of warfare.⁶⁴ The MoD's *Responsible AI Senior Officers' Report*, published in October 2025, states that 'our understanding of AI's benefits, risks, and harms, including those affecting civilians, forms a foundational element of the UK's policy approach'.⁶⁵ However, the report itself neither fully assesses the impact of AI adoption on civilians nor sets out how these will be addressed.

In evaluating how it will prepare for the possibility of LSCOs, the UK should make it a priority to integrate a focus on CHMR. In spite of a plethora of evidence to the contrary, and past acknowledgement by major military powers of its vital importance, CHMR is still often perceived by elements of militaries as a restrictive process that is 'good to have' when possible, but not an integral part of mission success.⁶⁶ It is therefore vital that efforts are made to add clarity on the tactical, operational and strategic value for CHMR in the military and among decision makers in the MoD focused on LSCOs.

61 Gov.UK, *UK Approach to Protection of Civilians in Armed Conflict*, policy paper, 27 Aug. 2020.

62 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems'; Jessica Dorsey and Marta Bo, 'AI-enabled decision-support systems in the joint targeting cycle: Legal challenges, risks, and the human(e) dimension', *International Law Studies* 106, 2025.

63 Department for Science, Innovation & Technology; Office for Artificial Intelligence, Department for Digital, Culture, Media & Sport; Department for Business, Energy & Industrial Strategy, *National AI Strategy*, Guidance, updated December 2022.

64 MoD, *Ambitious, Safe, Responsible: Our Approach to the Delivery of AI-enabled Capability in Defence*, policy paper, June 2022. See also *Government Response to the House of Lords AI in Weapon systems Committee Report*, policy paper, February 2024, which reiterates the MoD's commitment to 'use AI in ways that are safe, legal, ethical and responsible' (p. 4). However, it does not fully assess the impact of AI adoption on civilians nor set out how these impacts will be mitigated, measured or addressed.

65 MoD, *Laying the Groundwork: Responsible AI Senior Officers' Report*, corporate report, October 2025, p. 2.

66 Madison Hunke, 'US military voices speak out in support of civilian protection', Blog, Center for Civilians in Conflict, 1 July 2025.

Policy recommendations

To address gaps in its current approach, the UK MoD should consider the following:

- Introduce policy on the UK's approach to CHMR from its own military operations across multi-domain operations, with clarity on the methodologies that will be used to track, assess, investigate and respond to allegations of civilian harm, and the MoD's approach to learning lessons on civilian harm to adapt iteratively to ongoing and future military operations.
- Address in a public output how the MoD will mitigate and respond to harm to civilians from its own military actions specifically in a possible LSCO, and ensure that the evidence and past lessons on the value of CHMR are integrated into military guidance. It is particularly important that commanders and other leaders in the military share an interest in – and are willing to advocate for – CHMR, if it is to be effective and sustained.⁶⁷
- Ensure that the forthcoming baseline study of the UK's approach to human security includes a focus on CHMR, identifies lessons from harm to civilians from recent UK military engagements, and clarifies the role effective CHMR mechanisms can play in LSCOs.

Tracking harm to civilians

The UK does not appear to have a functional civilian harm tracking mechanism that is able to account for civilians harmed according to a tested methodology. As a result of the lack of transparency and apparent gaps in its methodology, the Civilian Protection Monitor found the UK 'uncommitted' on civilian harm tracking.⁶⁸

Without an effective civilian harm tracking mechanism, the MoD cannot gain an accurate understanding of the strengths – or areas of improvement – of any mitigation mechanisms in place, limiting their ability to adapt and improve.⁶⁹

The UK MoD has acknowledged the value of tracking harm to civilians and committed itself to doing so across several key policies.⁷⁰ When it became a signatory of the 2022 Political Declaration on Strengthening the Protection of Civilians from the Humanitarian Consequences Arising from the Use of Explosive Weapons in Populated Areas (EWIPA Declaration), the UK also recognized:

*the importance of efforts to record and track civilian casualties, and the use of all practicable measures to ensure appropriate data collection. This includes, where feasible, data disaggregated by sex and age. When possible, this data should be shared and made publicly available.*⁷¹

67 Airwars and Article 36, *Report on a Military Workshop on the Use of Explosive Weapons in Populated Areas*, 2024.

68 Lucca de Ruiter et al. *Country Report: United Kingdom 2024*.

69 Erin Bijl, *Recommendations Paper: Civilian Harm Response – PAX Protection of Civilians*, n.d., accessed 12 June 2025.

70 Gov.UK, *UK Approach to Protection of Civilians in Armed Conflict*, policy paper.

71 Political Declaration on Strengthening the Protection of Civilians from the Humanitarian Consequences Arising from the Use of Explosive Weapons in Populated Areas (EWIPA Declaration), November 2022.

Figure 4: UK scores across CPM civilian harm tracking indicators. Source: CPM

2.1 Tracking mechanism	U
2.2 Tracking to reduce harm through analysis	U
2.3 Coordination with investigation mechanisms	U
2.4 Data management	U
	L EL E U R
	Leader Emerging Leader Engaged Uncommitted Regressive

Yet evidence from recent military engagements has made it clear that the UK does not operate an effective civilian harm tracking mechanism. The UK contribution to the anti-ISIS coalition in Iraq and Syria, in particular, casts significant doubt on the existence of – or methodology used by – a civilian harm tracking mechanism. While the UK claims it conducted over 1,700 airstrikes during Operation Shader, killing or injuring 4,315 ISIS fighters, it only admitted a single civilian casualty four years into the conflict, in the midst of substantial political pressure on its lack of transparency on civilian harm.⁷² It has confirmed no other civilians harmed by its actions since then.

Journalists, non-governmental organizations (NGOs), civilians and even members of the armed forces have cast doubt on these numbers, with the latter at times recognizing that rather than being an indication of the actual number of civilian casualties from UK military operations, the low numbers indicate a perceived lack of evidence of civilian harm.⁷³ Yet such evidence of harm is abundant. In addition to the information that the UK MoD will itself hold from its airstrikes, civilians on the ground are often prolific in documenting the harm they have experienced, and the loss or injuries of their loved ones. Organizations such as Airwars, and many members of the Casualty Recorders Network, collate such information according to a systematic, peer-reviewed approach.⁷⁴ On several occasions Airwars has linked this evidence of harm to UK military actions, to pursue accountability and transparency. In early 2023, Airwars and the Guardian newspaper identified eight airstrikes that were alleged to have caused civilian harm, including the evidence linking them to British involvement. During investigations, Airwars staff travelled to Iraq to interview those affected and document evidence. While these findings were sent to the MoD in July 2022, including all the relevant statements and corroborating evidence explaining how the conclusions were reached, and attempts were made over several months to discuss the findings with the MoD, the ministry stated that it had ‘seen nothing that indicates civilian casualties were caused’,⁷⁵ yet declined to review the evidence in detail or discuss individual cases.

72 Jamie Merrill, ‘UK admits for first time it killed civilian in anti-IS campaign’, *Middle East Eye*, 2 May 2018.

73 House of Commons Defence Committee, ‘Oral Evidence – Global Islamist Terrorism – 2 Apr 2019’, Q82.

74 Every Casualty Worldwide, *Standards for Casualty Recording*, 2020; Airwars, ‘Methodology’, n.d., accessed 12 June 2025.

75 Sanjana Varghese et al., ‘The hidden casualties of Britain’s war’, Airwars, 31 March 2023.

This challenge is increased by the apparent dichotomy between the UK and US methodologies on accounting for and tracking civilian harm – which have in fact reached different conclusions on the same incidents on multiple occasions. While the US-led coalition finds civilian harm from a British strike in Mosul in November 2016 ‘credible’, for instance, the UK denies that any harm to civilians occurred as a result of the strike.⁷⁶ The single civilian casualty that the UK had admitted from Operation Shader in Iraq and Syria was also not recognized by the DoD-led team, which found ‘no coalition strikes were conducted in the geographical area that correspond to the report of civilian casualties.’⁷⁷

During a tribunal in late 2023, in which Airwars took the government to court over their refusal to release any details on how they track civilian casualties, the deputy director responsible for operational policy in the Security Policy and Operations department in the MoD admitted being unaware of the standard of proof used by the UK to determine whether allegations of harm from civilians are credible, any written guidance on the methodology that should be used to investigate and assess such allegations, and whether the UK tracks allegations of harm at a systemic level.⁷⁸ This echoes past admissions on the lack of a system to track or investigate allegations of civilian harm in the UK; in 2011, the MoD revealed in response to a request under the Freedom of Information Act (FOIA) that ‘[t]he MOD does not collate figures of civilian casualties because of the immense difficulty and risks of collecting robust, comprehensive data.’⁷⁹

In spite of the MoD’s apparent recognition that there is a gap between civilians harmed by UK actions, and the evidence they are able to use to acknowledge such harm, there has been no clarification in public about how this gap will be addressed, nor how best practices from allies and independent monitors will be reviewed and adopted in the UK. While the UK fails to build a stronger tracking system, the archive of allegations of harm from possible UK military operations continues to grow, most recently in Yemen where the UK contributed to US-led anti-Houthi airstrikes which killed and injured civilians, with no response from the UK MoD on how it engages with evidence of harm. During the time that the UK contributed to these airstrikes, one 52-day period saw as many civilian casualties from US airstrikes in Yemen as in the 23 years preceding it combined.⁸⁰

Systematically collecting and reviewing information on civilian harm allegations will be as important in LSCOs as it has been in the wars of the recent past. It is not an easy task – yet it is far from an impossible one. It is in fact now the norm among several of the UK’s allies.

systematically collecting information on civilian harm will be as important in large-scale combat operations as it has been in recent wars

76 Emma Graham-Harrison and Joe Dyke, ‘Lives torn apart by British airstrikes in Mosul give lie to UK’s “perfect” precision war’, *Guardian*, 21 March 2023.

77 Emma Graham-Harrison and Joe Dyke, ‘Only official civilian victim of UK’s bombing campaign against IS appears not to exist’, *Guardian*, 4 April 2023.

78 Emma Graham-Harrison, ‘Ministry of Defence lacks “effective oversight” of civilian casualties, tribunal hears’, *Guardian*, 30 November 2023.

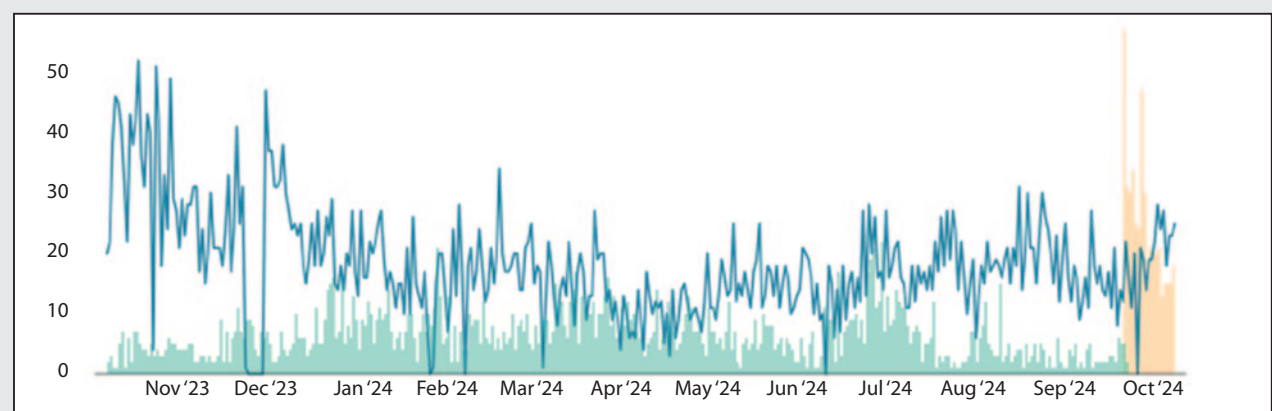
79 Ministry of Defence, ‘FOIA on civilian casualties in Afghanistan’, 9 June 2011.

80 Rowena De Silva et al., ‘The U.S. killed almost as many civilians in 52 days as the previous 23 years of U.S. action in Yemen’, *Airwars*, 18 June 2025.

BOX 1: Tracking civilian harm in Gaza

While Israel's war on Gaza does not constitute a near-peer LSCO, it does give an indication of the process required to effectively track harm in an extraordinarily intense urban conflict in which civilians are being harmed at an unprecedented level. In the month following Hamas' attack on Israel on 7 October 2023, in which some 1,200 people were killed, four times more civilians were killed in Gaza than in any month ever monitored by Airwars in any other conflict. In just 25 days, a minimum of 1,900 children were killed by Israeli military action in Gaza. This is nearly seven times higher than even the deadliest month for children previously recorded by Airwars.⁸¹

Graph 1: Civilian harm incidents monitored in Syria (green line), Gaza (blue line), and Lebanon (orange block) in the months following 7 October 2023. Source: Airwars

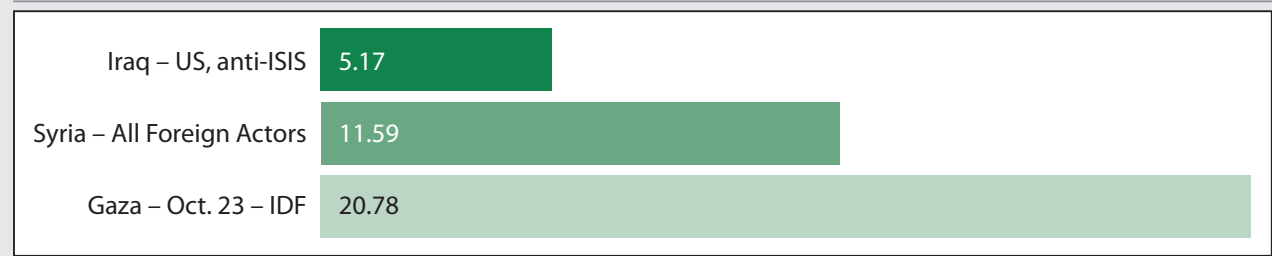


While the level of incidents has been unprecedented, a small team at Airwars, with only a handful of full-time staff and volunteers, has been able to maintain up-to-date monitoring of 11,050 incidents. Airwars' public archive now contains evidence, including photos, videos, witness testimonies, dates, times and locations from over 1000 incidents, many of which have killed over 100 civilians. This information has been referenced by legal teams at the International Court of Justice, by human rights lawyers in the High Court of England and Wales, and by major international media outlets from the *New York Times* to the *Guardian* to *Al Jazeera*.⁸²

In Gaza, as in all other conflicts monitored by Airwars, civilians are prolific and effective in documenting the harm they are experiencing with an average of over 20 sources per incident. This flow of information continues in different ways even where information environments are severely restricted.

This would likely be replicated in a LSCO scenario, with civilians across the world uploading evidence of what has happened to them and their loved ones. The question should therefore not be whether evidence will exist that documents civilian harm, but what systems the MoD will build to ensure it can track, investigate, and assess the evidence available.

Graph 2: The average number of individual sources per civilian harm incident documented by Airwars. Source: Airwars



81 Airwars, *Patterns of Harm Analysis, Gaza*, October 2023, December 2024.

82 Ibid.

Policy recommendations

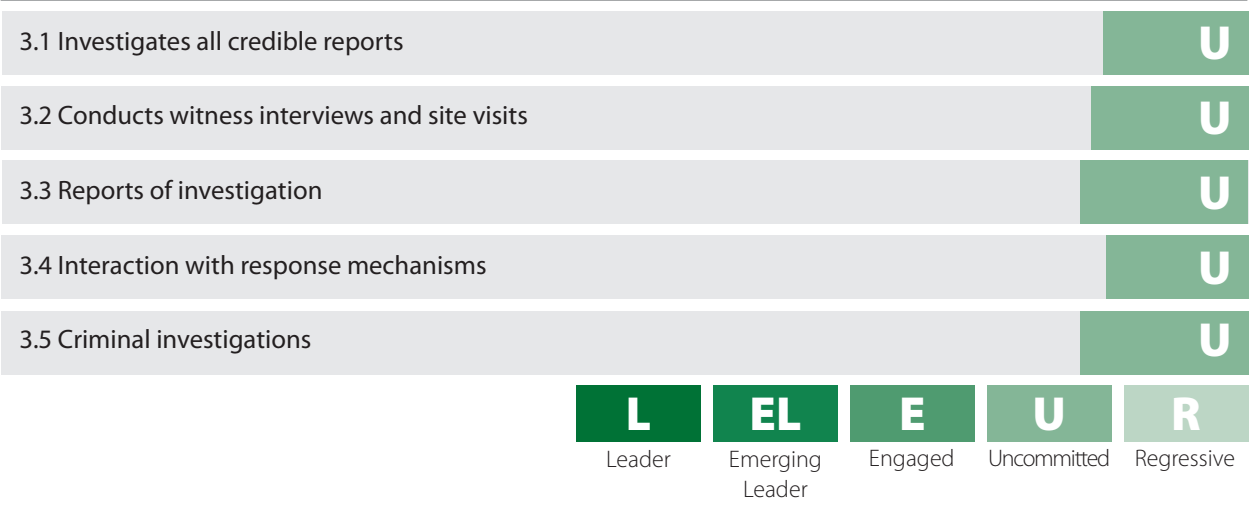
The UK MoD should:

- Build an institutional approach to proactively track civilian harm, and ensure it has the capacity to review open-source information and local reports. The data points gathered by this system should be consistent across operations and theatres and should include the name, sex, and age of those harmed, as committed to in the EWIPA declaration.
- Ensure it has a functional system in place for affected civilians and third-party actors to report allegations of civilian harm, and update those who submit allegations on the progress of their review. Publish clear guidance on what is required to make an allegation of harm ‘credible’ enough to investigate.
- Sufficiently resource a team to both track (and investigate) individual allegations of harm and to analyse trends and patterns across incidents. Ensure lessons are used to adapt and improve tactics to ensure that the UK is only targeting military objectives and to reduce further harm.

Investigating allegations of harm

As with civilian harm tracking, the UK MoD has made commitments throughout its policies and guidance to investigate credible allegations of civilian harm. Yet, in practice, there is no evidence available in the public sphere about the methodology used by the MoD to investigate allegations of harm considered credible enough to warrant an investigation, and what criteria qualifies an allegation of harm as confirmed in the eyes of the UK government. The UK never had anyone investigating allegations of harm on the ground in Iraq and Syria during Operation Shader.⁸³ The apparent lack of a civilian harm tracking system and a centrally collated database of civilian harm also suggests a lack of systematized documentation of the key facts that would trigger an investigation or be useful in the process of an investigation.

Figure 5: UK scores across CPM investigations indicators. Source: CPM



83 Jonathan Beale, ‘RAF strikes on IS in Iraq ‘may have killed civilians’, UK, BBC News, 1 May 2018.

While the UK MoD appears to lack such a system, inquiries have been launched on several occasions, each in the context of significant pressure from civil society, media outlets and – at times – litigation. Notable among these is the Iraq Inquiry, often known simply as the Chilcot review after its chair-person, which examined the decision by then-Prime Minister Tony Blair to join the US-led coalition in Iraq, and the UK's impact on Iraqi civilians during the campaign in Iraq from 2003 to 2009. In its damning 2016 report, the inquiry found that the MoD had spent longer attempting to determine which department should examine allegations of civilian harm, than actually conducting such investigations. It concluded:

*The Inquiry considers that a Government has a responsibility to make every reasonable effort to understand the likely and actual effects of its military actions on civilians. ... greater efforts should have been made in the post-conflict period to determine the number of civilian casualties and the broader effects of military operations on civilians.*⁸⁴

the Chilcot review found that greater efforts should have been made to understand the impact of UK actions on Iraqi civilians

Despite the finding that greater efforts should have been made to understand the impact of UK actions on civilians, nearly 10 years on from the publication of the Chilcot review, it is unclear that this gap has been addressed.

In the years since Chilcot, several other significant reviews have been launched, to examine allegations of war crimes in both Iraq (the Iraq Historic Allegations Team [IHAT]) and Afghanistan (Operation Northmoor). No prosecutions or public admissions of guilt have resulted from either of these and both were closed before their planned end in the context of significant political pressure.⁸⁵ In late 2019, 11 whistleblowers who had worked on IHAT and Northmoor told the BBC that the allegations they were examining amounted to war crimes.⁸⁶

A preliminary enquiry into allegations of war crimes by UK troops in Iraq by the International Criminal Court in 2021, which did not lead to an investigation, found the army's initial investigations were 'inadequate and vitiated by a lack of a genuine effort to carry out relevant investigations independently or impartially'.⁸⁷ The report also found that:

[a]s the UK authorities have admitted, a significant and recurrent weakness in the cases investigated was the dearth of forensic evidence. ... While some of those factors are a common feature in the investigation of crimes of this nature, these results were also in large part due to the inadequacies of the initial investigations conducted by the British military.

84 *The Report of the Iraq Inquiry Report of a Committee of Privy Counsellors*, vol. XII, with John Chilcot, The Stationery Office Ltd, 2016.

85 MoD, 'IHAT to close at the end of June', Gov.UK.

86 'UK government and military accused of war crimes cover-up', UK, *BBC News*, 17 November 2019.

87 International Criminal Court, 'Statement of the Prosecutor, Fatou Bensouda, on the Conclusion of the Preliminary Examination of the Situation in Iraq/United Kingdom', 9 Dec. 2020.

Many of the allegations initially examined during Operation Northmoor are now the subject of a new, ongoing investigation, launched in 2023 following extensive reporting by BBC *Panorama* on allegations of systematic killings of combat-aged civilian men by UK special forces in Afghanistan between 2010 and 2013. The Independent Inquiry relating to Afghanistan (IIA), is also examining allegations of a cover-up, during which senior officials in the MoD allegedly suppressed or failed to thoroughly investigate allegations, even when soldiers themselves were raising concerns.

Each of these inquiries has been narrowly and specifically focused on whether international law has been breached. In other words, they have not examined the question of whether civilian harm has occurred, but whether it is possible that laws were broken. While the UK's allies, including both the US and the Netherlands, have recognized the importance of examining allegations of civilian harm as a whole – separately from the lawfulness of the operations that caused them – this is unfortunately not the case in the UK.

BOX 2: Battle damage assessments

Like its allies, the UK conducts a so-called Battle Damage Assessment (BDA). In many of its public statements on civilian harm, the UK emphasizes that it conducts 'routine and detailed post-strike analysis of all available evidence',⁸⁸ likely meaning their BDAs.

Yet BDAs are not tools developed to monitor civilian harm – and they do not do so effectively. One study on civilian harm allegations found that 'during U.S. military operations in Afghanistan in 2010, air-video battle damage assessments missed civilian casualties that were later discovered during ground-led investigations in 19 of 21 cases – more than 90 percent of the time'.⁸⁹ Concerns about this being the primary tool for tracking civilian harm were also raised by operational staff of several militaries in a closed-door workshop organized by Airwars and Article 36 in November 2023.⁹⁰

BDAs are simply not designed as tools to document civilian harm. They are primarily focused on measuring three things: whether a munition functioned as expected, whether the intended target was struck, and the impact on the adversary targeted. If harm to civilians is observed in the immediate aftermath, this might also be included as a note on a BDA. Yet harm to civilians often only becomes apparent in the hours, days and weeks following military actions, when a BDA will already have been completed. BDAs also often solely rely on visual evidence from fighter jets which may be miles from the target, or high-altitude drones, which cannot hope to capture evidence of civilians caught under structures or rubble – a common occurrence in modern conflict, likely to be replicated in LSCOs.

Conducting BDAs may therefore be a useful tool in terms of measuring effect on an adversary, and may in some cases provide information that should lead to a civilian harm investigation. But they do not, in themselves, constitute a civilian harm tracking or investigations mechanism.

88 Gavin Williamson, Secretary of State for Defence, 'Counter-Daesh Operations: Statement made on 2 May 2018'; accessed 12 June 2025.

89 Michael J. McNerney et al., *Understanding Civilian Harm in Raqqa and Its Implications for Future Conflicts*, Report, Rand, 2022, p. 81.

90 Airwars and Article 36, *Report on a Military Workshop on the Use of Explosive Weapons in Populated Areas*, 2024.

Policy recommendations

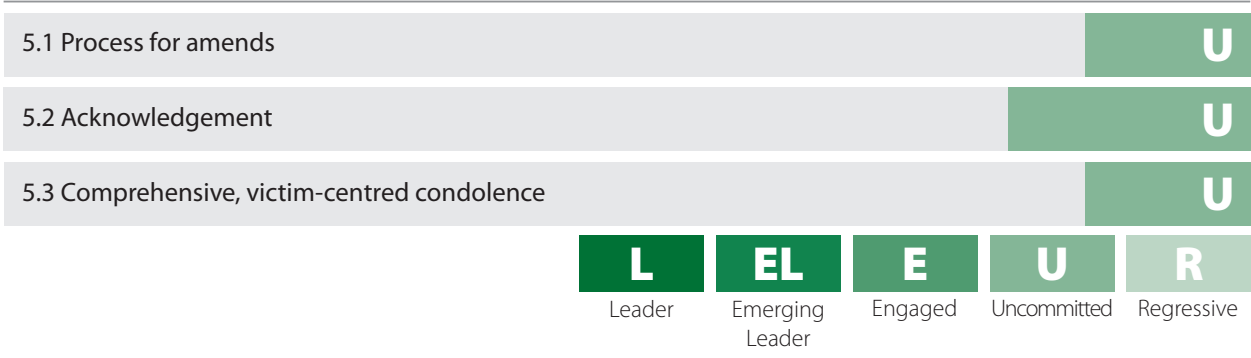
The UK MoD should:

- Establish, standardize and institutionalize a UK methodology to assess and investigate allegations of harm, while ensuring the teams responsible are resourced to carry out this activity. This should include, but never be limited to, analysis of BDAs. Lessons from the last two decades of COIN should form the foundation of this approach, yet it should be tested for use in LSCOs.
- Increase transparency and public reporting. NATO emphasizes in its own policy for the protection of civilians that ‘[e]stablishing a clear communications and public information strategy to address [the protection of civilians] is critical for the credibility of an operation or mission.’⁹¹ The UK should endeavour to implement this in its national practice as well. Public reports should include descriptions of the investigation process, evidence consulted, legal and factual findings and recommendations for preventing future harm as well as a detailed consideration of the possible provision of amends.

Responding to harm

The UK does not have a system in place for providing amends to civilians harmed by its current or future military actions. There are neither policies nor public documents to guide such responses, nor any formal mechanism available to civilians to seek a response.

Figure 6: UK scores across CPM post-harm response indicators. Source: CPM



Responding to harm can range from acknowledging what has happened, to offering an apology, and/or providing a monetary response. Civilians who have been harmed by airstrikes often emphasize their need to understand who caused them harm and to receive an apology from the belligerent responsible.⁹² The UK does not appear to have attempted any such

failure to acknowledge and respond to harm often prolongs it unnecessarily

response during Operation Shader, or more recently in response to allegations of harm from its airstrikes in Yemen. By depriving affected civilians of acknowledgement and any form of material response, the harm caused in

91 NATO, NATO Policy for the Protection of Civilians Endorsed by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Warsaw, 8–9 July 2016, 9 July 2016.
92 Saba Azeem, Lauren Gould, Erin Bijl and Jolle Demmers, *After the Strike: Exposing the Civilian Harm Effects of the 2015 Dutch Airstrike on Hawija*, PAX, Intricacies of Remote Warfare programme, Al-Ghad, 2022.

the initial airstrike is often prolonged unnecessarily, as those affected are unable to pay for medical assistance needed to recover or rebuild destroyed homes and places of livelihood.⁹³

This is a regression from the recent past, in which the UK provided some public liability payments and *ex gratia* payments (voluntary payments that do not represent legal liability by the belligerent) to civilians harmed during campaigns in Iraq and Afghanistan, as well as compensation to civilians who pursued litigation against the state for breaches of human rights law and IHL.⁹⁴ Between 2001 and 2020, the MoD offered some compensation for deaths, injuries, and damage to civilian properties, with Ceasefire finding in 2021 that the UK had paid '£31.8 million from 6,633 cases. This includes £5.4 million in relation to Afghanistan (4,740 cases) and £26.4 million in relation to Iraq (1,893 cases).'⁹⁵

This system largely aligned with those of allies at the time, several of whom had compensation mechanisms in place. Yet while allies have maintained response mechanisms, and have – in some cases – continued to develop these, the UK instead removed reparations from its approach to civilian protection before Operation Shader in Iraq and Syria. In response to a 2016 parliamentary question, the government admitted:

*in Iraq and Afghanistan HM Treasury authorised the Department to make ex gratia payments in theatre in appropriate circumstances to nationals of those countries who had suffered harm or damage as a result of UK military activities.... No such authorisations are currently in force, and any proposal to make ex gratia compensation payments to civilians killed or injured by UK airstrikes would require HM Treasury approval on an exceptional basis. There are currently no such proposals.*⁹⁶

With the introduction of the controversial Overseas Operations (Service Personnel and Veterans) Act in 2021, a six-year limit was imposed on bringing civil claims for harm caused by UK operations.⁹⁷ This represents a significant barrier for civilians caught in entrenched conflicts to seek accountability.

Policy recommendations

The UK MoD should:

- Establish an enduring institutional approach to responding to civilian harm. This should include a range of options that can be adapted based on the context and the wishes of those injured; among other things, this range of options should include acknowledging and apologizing for harm and offering compensation and condolence payments. The MoD should ensure that the options of response remain applicable and available to civilians harmed in mass-casualty events, which are more likely to occur in LSCOs.
- Where environments are not permissive, allow requests to be processed through embassies, online forms, or local intermediaries, as other allies do – including both the US and the Netherlands.

⁹³ Ibid.

⁹⁴ Burke and Lattimer, *Reparations for Civilian Harm from Military Operations: Towards a UK Policy*.

⁹⁵ Ibid.

⁹⁶ UK Parliament, 'Ministry of Defence: Compensation. UIN 54689, tabled on 24 November 2016', accessed 12 June 2025.

⁹⁷ Stubbins Bates, *Strengthening UK Military Investigations into Civilian Harm: Towards Compliance, Mitigation and Accountability*.

Conclusion

Mitigating and responding to harm to civilians from military action in an LSCO scenario will be more difficult, complex and pressurized than in any other modern war. It will require militaries to build on – and improve – systems used over the last two decades. Yet where its allies are increasingly engaging in this process, the UK maintains a seemingly ineffective approach to civilian harm tracking; it has not adopted best practices on investigating civilian harm, relying instead on limited tools built for other purposes; and in 2021 legislation was introduced to severely restrict civilians' access to response-and-accountability mechanisms.

In laying out its priorities for a possible LSCO, the possibility of civilian harm from UK actions has been neither mentioned nor addressed. Yet CHMR will be as important in LSCOs as it has been over the last two decades. It will remain essential morally, legally – and operationally. A recent report by the Center for Naval Analysis (CNA) identified CHMR as a revolution in warfare, one which would be required to provide belligerents with 'an adaptive, data-driven and holistic approach to military operations in which risks to civilians are considered along with risks to mission and risks to force', providing the UK and its allies an advantage in a conflict where every advantage can make a critical difference.⁹⁸ The lack of a well-established CHMR practice in the UK is particularly alarming in this context.

98 Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*, CNA, p. i.

2

Key lessons from the evolution of the US approach to civilian harm mitigation

Dr Larry Lewis

In this chapter, we examine the efforts by the United States regarding civilian harm mitigation over the last two decades, first detailing a chronology of actions and then offering lessons to help guide the United Kingdom and others in their own efforts. We see that the US recognized over time that there were benefits to changing its approach to civilian harm.

The United States regularly stresses how its military complies with international humanitarian law (IHL); furthermore, its military takes a deliberate approach to targeting and consideration of collateral damage. This approach is captured in its No Strike methodology, where the potential effects on civilians and damage to civilian objects (facilities, equipment, or other property that is not a military objective) is estimated, informing the commander's decision to engage as well as weaponeering considerations that can mitigate effects on civilians or civilian objects.⁹⁹ Such efforts were strengthened by US military capabilities supporting precision targeting, such as intelligence capabilities, networks and data links for dissemination of information for collective decision-making, and precision weapons. Collectively, these capabilities and developments were seen as sufficient for compliance with international law; practically they enabled the US military to conduct military operations with a historically lower level of civilian harm than had been seen in previous operations.

At the same time, it became apparent over time that compliance with international law was not the only imperative for US interests. Civilian harm occurring due to US operations seemed to undercut public statements about military precision and that the United States did 'everything possible' to avoid civilian casualties. Over time, civilian harm was seen to cause negative second-order effects that impacted US national, strategic, and operational interests.

Observations from Afghanistan and Iraq

This was seen, for example, in operations in Afghanistan and Iraq immediately following the attack upon the US homeland during 11 September 2001. On 7 October 2001, US forces began combat operations in Afghanistan to capture Al Qaeda leadership and stop the area from being used as a safe haven for terrorists. Just days after operations began,

99 CJCSI 3160.01, No-Strike and the Collateral Damage Estimation Methodology, 13 February 2009.

international media reported incidents of civilian casualties. Several of these incidents occurred in villages where suspected enemy forces were present, underscoring the operational difficulty of engaging adversaries who did not distinguish themselves from the civilian population, such as by wearing uniforms. This neglect of international law requirements complicated the process of establishing positive identification (PID) and contributed to a greater reliance on self-defence determinations based on perceived hostile acts or intent.

Two of the most widely noted incidents during this period were the 21 December 2001 strike on a convoy that the Afghan government stated included tribal leaders, and the 1 July 2002 AC-130 strike in Deh Rawud, central Afghanistan, which struck a wedding gathering. In both cases, US aircraft had observed ground fire and initiated engagement in response to self-defence considerations. After an initial period of military operations in Afghanistan, the operational tempo decreased significantly for several years as the US and others focused on capacity-building for a new Afghanistan government. In the meantime, the US led a coalition operation to replace the Iraqi government.

In March 2003, a US-led coalition launched an operation, Operation Iraqi Freedom (OIF), to set conditions for a new government in Iraq. Over the following three months, during major combat operations in Iraq, military forces had the benefit of being able to readily distinguish the Iraqi military from the civilian population. Iraqi forces were generally located away from civilian areas, and their military equipment and uniforms reduced the ambiguity of engagement decisions relative to those faced by US forces in Afghanistan.¹⁰⁰

That said, the Iraqi military did not always comply with IHL. For example, they purposely violated law of war rules designed to protect the civilian population by employing human shields, misusing protected symbols for impartial humanitarian organizations (e.g. the Red Crescent), and placing equipment in protected sites to deter attacks.¹⁰¹ In addition, Fedayeen Saddam forces did not wear uniforms and fought using irregular tactics, contributing to US challenges in obtaining positive identification.¹⁰²

In contrast, the United States and its allies went to great lengths to minimize collateral damage: in Iraq, most air engagements used precision-guided munitions.¹⁰³ While no Department of Defense (DoD) assessment of civilian casualties during Iraq major combat operations could be found by this author, an independent assessment did find that thousands of Iraqi civilians were killed or injured in the first three weeks of fighting, many from the use of cluster munitions. However, the assessment judged US pre-planned attacks to be relatively effective in minimizing civilian casualties. The main concerns over civilian casualties centred on coalition forces conducting time-sensitive targeting of leadership in urban areas.¹⁰⁴

As insurgencies developed in Iraq and Afghanistan, the United States and its allies were forced to adopt a counterinsurgency (COIN) approach for which they were largely

100 Larry Lewis, *Reducing and Mitigating Civilian Casualties: Enduring Lessons*, Joint and Coalition Operational Analysis Division, April 2013, p. 2.

101 Ibid.

102 Ibid.

103 Ibid.

104 *Off Target: The Conduct of the War and Civilian Casualties in Iraq*, Human Rights Watch, December 2003.

unprepared.¹⁰⁵ With civilian protection being a central feature of COIN, the reduction and mitigation of civilian harm became a key issue in these operations. The issue first emerged in Iraq operations beginning in 2004, where non-combatant casualties were primarily caused by

escalation of force (EOF) incidents at checkpoints and during convoy operations. These incidents resulted in a significant outcry from non-governmental organizations (NGOs) and the media; the shooting of a vehicle containing Italian journalist Giuliana Sgrena and her rescuers during an EOF incident further increased visibility of this issue.¹⁰⁶

civilian protection was a central feature of counterinsurgency and the mitigation of civilian harm became a key issue

In mid-2005, US forces in Iraq adapted and made heightened efforts to reduce civilian harm from escalation of force.¹⁰⁷ This began with the Multi-National Force–Iraq (MNF-I) Headquarters (HQ) instituting mandatory reporting requirements for civilian harm from EOF; MNF-I then tracked these casualties over time and compiled common risk factors, which were then disseminated to operating forces to help them to learn from civilian harm incidents and more effectively avoid them. By 2006, the numbers had decreased, suggesting that the command’s mitigation effort was successful. That said, later in the conflict, MNF-I cited the lack of available non-lethal capabilities and inadequate training in their use as key deficiencies that increased risk to civilians in EOF.¹⁰⁸

Civilian harm affected other aspects of operations in Iraq. For example, significant concerns were raised by international observers about civilian casualties and widespread destruction of civilian infrastructure in populated areas during the two battles in Fallujah in 2004. Facing the need to conduct operations in Ramadi in 2005, the US Army came up with another approach: ‘clear–hold–build’. This three-phase approach began with military forces selecting a small area in which to conduct offensive operations to clear it of ‘threats’ (clear). This led to the deliberate re-establishment of security in that area, including partner forces having security responsibilities (hold). When security was restored, efforts were made to restore governance and essential services (build). These three steps were repeated in additional geographic areas until the city was clear of threats. The use of the clear–hold–build approach was intended to avoid the large-scale civilian harm seen in Fallujah operations; US forces were able to mitigate civilian harm in this and additional urban operations using this approach.

Other adaptations were made in Iraq to mitigate civilian harm. For example, for years, President Maliki had resisted US and coalition operations in Sadr City, an area of Baghdad that had sectarian ties to the President. Finally, in 2008, when the US embassy and other coalition structures received constant indirect fire from insurgents in Sadr City, Commanding General David Petraeus was able to convince President Maliki that US forces could conduct operations in Sadr City with minimal impact to the civilian population. The US Army brigade tasked to lead that operation constructed a wall in the south of Sadr City, effectively cutting insurgents off from their firing bases and from a major source of income

¹⁰⁵ Larry Lewis, *Reducing and Mitigating Civilian Casualties*, p. 2.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid., p. 3.

(a local market). It also integrated organic and echelon-above-division air assets in an unprecedented way to enable responsive and precise fires in urban areas. This enabled US forces to conduct precision airstrikes in Sadr City while also containing the threat to that limited area, thereby stopping the attacks.¹⁰⁹ In this way, the ability to reduce civilian harm led to increased freedom of action for military forces.

Shortly after civilian harm became a strategic issue in Iraq, the issue emerged in Afghanistan. President Karzai made his first public statements regarding civilian harm in 2005, asking the International Security Assistance Force (ISAF) to take measures to reduce casualties to his people.¹¹⁰ ISAF Commanders began putting steps into place to help mitigate civilian harm. For example, the first Commander of ISAF (COMISAF), General McNeil, released a Tactical Directive in 2007 intended to help change the mindset of US and coalition forces. The next ISAF Commander, General McKiernan, released two Tactical Directives in 2008 with the same intent, but civilian harm levels continued to increase. General McKiernan also began tracking external reports of civilian harm in 2008 – because he was convinced that these reports were false, a form of information operations aimed to de-legitimize the coalition. However, the tracking cell determined that many of the reports were in fact substantiated. This tracking cell then became a contributing element of later mitigation efforts.

A May 2009 civilian harm incident in Bala Balouk highlighted the lack of progress by ISAF in addressing the issue of civilian casualties. US airstrikes, called in after Afghan forces were ambushed by the Taliban, killed a large number of civilians. The Bala Balouk incident also served as an impetus for major efforts to reduce CIVCAS (civilian casualties) by both ISAF and the United States. Since mid-2009, ISAF leadership – featuring General Stanley McChrystal – clearly and consistently emphasized the importance of reducing civilian harm, and ISAF modified its policies and procedures to that end.¹¹¹ Similarly, the US Department of Defense mobilized its joint lessons-learned organization – the Joint Center for Operational Analysis (JCOA) – to study the issue of civilian harm and to support ISAF's mitigation efforts through a series of assessments.

These assessments identified why previous ISAF efforts to mitigate harm to civilians had not succeeded: they were focused on risks to civilians associated with collateral damage estimation, considering civilians known to be in the proximity of a military target. But analysis of hundreds – and later thousands – of incidents of civilian harm caused by the US and coalition militaries showed most civilian harm occurred through other mechanisms. For example, over half of all civilian harm incidents were a result of mis-identification, where civilians were mistakenly identified as a threat and attacked in that belief.

Insights such as these, revealing root causes of civilian harm overall and specific to different types of operations (e.g. deliberate air operations, dynamic targeting, self-defence, ground operations, special operations, checkpoints, and indirect fire), led to refined training, guidance, and standard operating procedures. When these changes were put in place, civilian casualties decreased – by 20 per cent in the first year, followed by additional changes over time.

109 For more information on the battle of Sadr City, see [Urban Warfare Project Case Study Series: Case Study](#)

#11 – Sadr City, Modern War Institute at West Point.

110 Larry Lewis, *Reducing and Mitigating Civilian Casualties*, p. 3.

111 Ibid.

Collectively, these dedicated efforts bore fruit: because of improved guidance and training, ISAF forces adapted the way they conducted operations in light of CIVCAS concerns, and ISAF-caused CIVCAS decreased over time.¹¹² Importantly, analysis of available data suggested that these CIVCAS mitigation efforts were a win–win, with no apparent cost to mission effectiveness or increase in friendly force casualties.¹¹³

civilian casualty mitigation efforts had no apparent cost to mission effectiveness

In addition to changes made in-country, concerted efforts on the part of the United States – spearheaded by the US Joint Staff CIVCAS Working Group, originally led by the Chairman of the Joint Chiefs of Staff – aided efforts to improve US pre-deployment training to better prepare US forces for civilian harm mitigation in Afghanistan. While this effort directed changes to military institutions to improve preparation of forces involved in Afghanistan operations, it did not result in significant long-term changes to doctrine, training, or materiel capabilities.

Counter-ISIS operations in Iraq and Syria

Beginning in 2014, the US led a coalition, Operation Inherent Resolve (OIR), to defeat the Islamic State of Iraq and Syria (ISIS), which had taken control of significant parts of Iraq and Syria. In OIR, a multinational coalition worked with partner forces on the ground to regain urban cities held by an irregular and unprincipled force. ISIS disregarded legal requirements per IHL; they also used human shields and held civilians against their will within populated areas that were affected by combat. This context led to difficult trade-offs – for example, the larger strategy was influenced by the need to protect partner forces and to retain partner will to fight, which in some cases led to operations with higher risks to civilians.

Some aspects of civilian harm mitigation developed by ISAF were repeated in OIR, such as a civilian harm tracking cell that collected reports of potential civilian harm and assessed the likelihood of their validity. Likewise, personnel from past operations carried their experiences into this operation and influenced tactics used in operations in Iraq and Syria. However, the data-driven learning approach for civilian harm mitigation was not in place in OIR: there was no mechanism for identifying trends and potential mitigation measures using the data collected on civilian harm. Because of this, when civilian harm rates increased over time, no operational adjustments were made in response to attempt to reduce them.

The result of this tended to be operations that focused on mitigating civilian harm within the planning of a specific attack, but inattention to the larger scale of harm to the civilian population. For example, DoD leadership and international observers visiting the aftermath of operations in Mosul or Raqqa were taken aback by the scale of damage: some observers have said they hadn't seen major cities so devastated by combat since the Second World War. This is a result of tactical-level mitigation efforts that are not accompanied by a higher-level focus on civilian harm at operational headquarters. This is the inevitable outcome unless operational commanders monitor and manage the overall level of civilian harm as part of their command functions.

¹¹² Ibid.

¹¹³ Ibid.

military estimates of civilian harm often diverged significantly from those reported by independent organizations

OIR also raised questions regarding the accuracy of military estimates of civilian harm. OIR regularly released its estimates of civilians killed and wounded by coalition actions in Iraq and Syria. These figures often diverged significantly from those reported by independent organizations, such as Airwars.

The comparatively low military estimates were notable given the predominantly urban character of the campaign and the extensive use of air-to-ground munitions. Past DoD assessments had shown that military estimates of civilian harm can underestimate casualties, just as independent estimates may overstate them, due to inherent challenges in detection. These challenges were particularly evident in Iraq and Syria, where forces frequently targeted buildings and relied on limited ground presence. Under such conditions, US and coalition forces often lacked the means to identify all instances of civilian casualties, and, even when incidents were observed, casualty counts could be incomplete. For example, when buildings are involved, video surveillance often can miss the presence of casualties concealed beneath rubble.

Afghanistan: Operation Resolute Support

In 2015, the ISAF mission shifted to Operation Resolute Support, a train-and-advise mission intended to build institutional capacity for Afghan security forces. While technically a non-combat mission, US forces still conducted operations, both in support of Afghan forces (for example, providing air support to Afghan forces in extremis) and separately in special operations in a counter-terrorism mission. A civilian harm tracking cell continued its activities but, as in OIR in Iraq and Syria, the connection between tracking and command elements in support of operational adaptation was severed. Thus, when civilian harm rates increased over time, no operational adjustments were made in response.

Two civilian harm incidents in Afghanistan were especially prominent in international media. The first tarnished the reputation of the US, while the second proved to be particularly impactful for US policy and practice.

The first incident was early in the campaign: on 3 October 2015, an AC-130 mistakenly attacked a Médecins Sans Frontières (MSF) hospital in Kunduz, Afghanistan.¹¹⁴ In this incident, US forces were embedded with partner Afghan forces, and a Taliban offensive posed danger to Afghan government facilities. US ground forces called for close air support, and an AC-130 responded. The ground controller included details about the intended attack, such as the location in coordinates and the appearance of the facility, a ‘T-shaped’ building. When the AC-130 examined the location of the coordinates, it was an open field. The AC-130 crew found a building 400 metres away that matched the description (T-shaped) from the ground controller and, after further discussion, the ground controller confirmed that the AC-130 crew were cleared to attack. The AC-130 fired 211 105-mm shells at the target, both the building and individuals in the area, during five passes. The overall attack lasted 1 hour and 15 minutes. Only later was it discovered that the building that the AC-130 attacked was not the intended target (an Afghan prison under siege by the Taliban) but a hospital run by MSF. Key contributors included

¹¹⁴ See Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*, CNA, pp. 45–46.

miscommunication between the ground controller and the aircrew, and the absence of civilian environment information for the operators, which could have helped them to recognize that they were mistakenly targeting a hospital. This tragic attack killed 42 civilians and destroyed the area's only trauma centre. MSF and others questioned how a military could have inadvertently targeted a hospital, which was located apart from any potential military objective and was clearly marked with a humanitarian logo on the roof of the building. A DoD report concluded that personnel failed to comply with rules of engagement and the law of armed conflict.¹¹⁵ Sadly, this was one of many cases where humanitarian notification and deconfliction – a communication process where information passed from humanitarian organizations to parties to the conflict for protection – failed and humanitarians were killed as a result.

A second incident occurred during the final withdrawal from Afghanistan.¹¹⁶ During the evacuation of US personnel in summer 2021, a suicide bomber killed 13 US service members and many Afghan evacuees at Kabul airport. The US devoted intelligence collection to finding and disrupting additional threats during the evacuation. Through Remotely Piloted Aircraft (RPA) full-motion video, a vehicle was observed that matched a suspected vehicle type based on intelligence reporting, and its movement through Kabul was correlated to locations of past and suspected threat activity, including a suspected ISIS-K safe house. When the vehicle stopped at a residence, an attack was approved based on an imminent threat of future attacks on the airport. One Reaper RPA conducted the attack with another watching the area for civilians. The attack destroyed the vehicle with the suspected terrorist, and it was assessed as a successful strike. When international media began reporting that civilians were killed, these allegations were dismissed as baseless. However, according to additional information that became available over the following weeks, the US finally acknowledged that the driver was not a threat but rather a humanitarian worker from a US-funded NGO. Tragically, his family members were also killed as they moved toward the car as the missile impacted. The incident resulted in ten civilian casualties, including seven children. Key contributors to the incident included the lack of information regarding the civilian environment and a miscommunication regarding the confidence of the information about the vehicle and driver, leading to the mis-identification of the vehicle as a threat.

Civilian Harm Mitigation and Response Action Plan

After the very public drone strike in Kabul on the humanitarian worker and his family, with international coverage fuelled further by a public denial from DoD spokespeople followed by an admission that civilians were killed, other civilian harm incidents were also reported on by the press with the general theme that the US military has a fundamental problem with civilian harm that it had not admitted or addressed. This was also the conclusion that most internal DoD assessments came to, but no significant institutional actions had been taken to address that conclusion. In this way, the press coverage was able to lead to action in a way that internal assessments had not – at the end of 2021, DoD leadership decided that it was time to make significant investments to strengthen its ability to mitigate civilian harm.

¹¹⁵ US Central Command, *CENTCOM releases investigation on airstrike on Doctors without Borders trauma center*, Release Number 20160429-10, 29 April 2016.

¹¹⁶ See Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*, CNA, pp. 46–47.

In January 2022, this decision was made public. Secretary of Defense Austin announced that he was directing the development of an action plan regarding civilian harm mitigation and response. According to a DoD spokesman, ‘this action plan outlines the steps that the department will take and the resources that will be required to implement appropriate recommendations from recently completed studies of civilian harm – studies that were sponsored by DOD’.¹¹⁷

Completed and released in August 2022, this action plan contains a number of important developments that address lessons identified in past assessments. These include:

- Senior leader governance and involvement: the action plan calls for steering groups to help manage and promote needed progress to help DoD to strengthen its ability to mitigate civilian harm;
- A center of excellence: noting the lack of any office responsible for civilian harm mitigation, including the management and identification of lessons and data regarding civilian harm, a new center was established to help accelerate and sustain progress across the department;
- Civilian environment: the plan includes efforts intended to develop and promulgate the civilian environment, which is the civilian component of the operational environment. The civilian environment is a significant blind spot for militaries; developing the ability to inform operational decisions with a robust civilian environment can significantly enhance a military’s ability to mitigate harm to civilians;
- Strengthening the workforce: the hiring of over 150 personnel across Services, Agencies, and Combatant Commands to create new positions and roles to support civilian harm mitigation in planning and operations; and
- Security cooperation: integrating civilian harm mitigation into advisory efforts, and training, and provision of military equipment to help strengthen the ability of allies and partners to mitigate harm to civilians.

Pivoting to large-scale combat operations

Over the last decade, the Department of Defense has prepared for a shift from low-intensity counter-terrorism and counterinsurgency operations to large-scale combat operations (LSCOs) against near-peer adversaries. Such LSCOs can introduce different challenges that complicate civilian harm mitigation. For example:

- The large scale and tempo of an LSCO can introduce difficulties for the data-driven, learning and adaptive approach of CHM. Since it is difficult to imagine investigations and assessments of civilian harm incidents occurring in a timely way at scale unless major changes to the assessment process are made, the learning and adaptation will need to be more front-loaded, with the military institution experimenting and adapting in advance to be prepared for the specific operational dilemmas introduced in LSCOs.
- Many believe an LSCO will include jamming and denial of capabilities such as GPS, communications, and tactical data links, meaning that coordination will be more difficult and less timely, information about the operating environment – including the civilian environment – will be less complete, and some precision capabilities, such as

117 Jim Garamone, ‘Austin directs DOD to develop action plan on civilian harm mitigation’, DOD News, 27 Jan. 2022.

GPS-guided munitions, may not function properly. These are specific operational dilemmas that militaries should rehearse and train for, identifying alternate tactics and capabilities to promote precision effects and mitigate civilian harm.

large-scale combat operations may introduce new challenges to civilian harm mitigation that militaries must anticipate

A more complete examination of the set of challenges facing militaries as they seek to mitigate harm to civilians is available in Lewis et al., *Preparing for Civilian Harm Mitigation in Large-Scale Combat Operations*.¹¹⁸

Current status uncertain

The Civilian Harm Mitigation and Response Action Plan (CHMR-AP) was an ambitious effort to finally address and institutionalize lessons from two decades of operations within the DoD. It is unclear what the impact of the CHMR-AP will be in the next few years due to changing departmental leadership and priorities. For example, in 2025, most positions hired in support of the CHMR-AP have had their funding eliminated and those personnel have either transferred to other duty positions or left the DoD (now renamed Department of War). The vision of the CMHR action plan – of recruiting a large workforce to advance CHM goals – will be unmet in the next few years.

That said, there are other models that militaries can adopt for advancing CHM – for example, a small internal government team supported by academia, civil society and researchers. It is notable that the CHMR-AP was largely developed by consulting analysis and recommendations developed by research organizations, largely outside of government (though most of the analysis used for the action plan was conducted by federally funded research organizations). With the large-scale downsizing of the DoD CHM workforce, there is an opportunity for other stakeholders to continue to identify lessons and practices that help advance CHM, either through government funding or other contributions. We see evidence that CHM principles are still valued in operations. For example, CENTCOM's (US Central Command) Commander during 2025 Operation Rough Rider in Yemen regularly stressed the importance of his team that focused on civilian harm mitigation, and how they helped US forces to target the right targets while sparing civilians. This suggests a continuing appetite for such support by external organizations, particularly in the context of ongoing operations.

Takeaways for other nations

The US spearheaded the development of civilian harm mitigation. CHM expands on the foundational focus on IHL, targeting, and collateral damage, taking a more comprehensive approach to mitigate the scale and impact of civilian harm from its operations.

Improving civilian harm mitigation is a win-win. Evidence shows that targeting effectiveness is improved with a comprehensive approach to mitigating harm to civilians. CHM can also be thought of as increasing the precision of effects: having better control of the precise effects that are delivered in the use of military force.

¹¹⁸ Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*.

Progress within the US has not been linear. Rather, it has advanced and regressed several times depending on senior leader focus and will. For example, progress was made in Afghanistan around 2010, fuelled by senior leader involvement in the Joint Staff CIVCAS Working Group and JCOA's tasking to support operational forces. But this progress proved to be temporary, with few changes made to doctrine, training, organizations or materiel capabilities. More recently, in support of the CHMR-AP, the DoD aimed to make ambitious changes to strengthen civilian harm mitigation, but many of those changes were not realized in practice and others are being rolled back, or may be in the future, because of changes in leadership priorities.

Learning with CHM has been difficult and uneven. When the US has made advancements in civilian harm mitigation during an operation, the changes have largely stayed within that operation. Sharing lessons between operations and institutionalization of those lessons are less apparent. For example, existing lessons from Iraq regarding EOF did not migrate to Afghanistan, and many lessons from Afghanistan did not influence operations against ISIS in Iraq and Syria. In the most recent operations in Yemen, Operation Rough Rider in 2025, CENTCOM has applied some lessons identified previously and incorporated in CHMR-AP actions, but it is unclear whether those actions will be resourced in the longer term.

Resourcing analysis and lessons identification is important to progress. The US has dedicated more resources than any other country to analysis and lessons regarding its operations – over a dozen assessments of its operations and institution. These assessments have enabled the US to better understand the nature of its challenges and better tailor solutions to be more effective going forward. For example, the CHMR-AP was built on the findings and recommendations of past DoD assessments regarding civilian harm. The specific nature of actions called for in the CHMR-AP were enabled by these previous assessments – if another country were to develop its own version of an action plan for civilian harm mitigation, they would need to first conduct assessments of their own in order to refine what problems they needed to solve.

Blind spots impede progress. US experiences also illustrate how the root causes of civilian harm can in fact be difficult for militaries to grasp. At least in part this is because of 'blind spots' in military doctrine, training and capabilities that increase the risk of civilian harm. Recognizing and addressing those blind spots need to be part of a military's strategy for improving civilian harm mitigation.

From Hawija to Whitehall: Dutch lessons for strengthening the UK's civilian harm mitigation policy

Jessica Dorsey

The protection of civilians is a fundamental responsibility in armed conflict, reflecting both legal obligations and moral imperatives in contemporary warfare. Civilian harm mitigation (CHM) is a particular element of civilian protection within the context of armed conflict.¹¹⁹ It is a vital component of modern military operations, in both asymmetric warfare, where civilians often may live in or near conflict zones, as well as in large-scale combat operations, with a more diffuse civilian environment.¹²⁰ It has been argued that CHM is not only a strategic, legal and ethical imperative; it also reinforces the legitimacy of military operations and contributes to better operational outcomes.¹²¹ Many military professionals increasingly recognize that integrating CHM into operations enhances, rather than hinders, mission effectiveness.¹²²

From a legal perspective, many core CHM measures are already mandated under international humanitarian law (IHL).¹²³ Some of those obligations include compliance with the rules related to distinction, where parties must differentiate between civilians and combatants, and avoid targeting civilians and civilian objects; proportionality, where attacks must not cause excessive civilian harm in relation to the direct and concrete

119 Protection of civilians is defined as 'all efforts taken to avoid, minimize and mitigate the negative effects that might arise from NATO and NATO-led military operations on the civilian population and, when applicable, to protect civilians from conflict-related physical violence or threats of physical violence by other actors, including through the establishment of a safe and secure environment'. North Atlantic Treaty Organization (NATO), *Protection of Civilians Handbook*, 2021, p. 7.

120 Lewis, et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*, p. 8.

121 Michael J. McNerney and Matthew Isler, 'Operational effectiveness and civilian harm mitigation by design', *Military Review Online*, January 2025. See also Matt Isler, 'Operational effectiveness and civilian harm: mitigation advances US interests', *Medium*, 4 March 2025. Here, I highlight the US DoD's issuance of Instruction 3000.17 in December 2023, which institutionalizes CHM practices across all levels of military planning and execution. This instruction mandates the incorporation of CHM considerations into doctrine, training, and operations, ensuring that commanders are equipped with the necessary tools and information to make informed decisions that minimize civilian harm.

122 See e.g. Dan Stigall, 'The EWIPA Declaration and U.S. efforts to minimize civilian harm', *Articles of War*, 22 May 2024.

123 For an in-depth historical look at civilian protection via law, see Oona Hathaway, Azmat Khan and Mara Revkin, 'The dangerous rise of "dual-use" objects in war', 134 *Yale Law Journal* 8, 2025, pp. 2645–3072, at p. 2659 ff.

military advantage anticipated, integrally linked to taking precautions in attack, where parties must do everything feasible to minimize to the greatest extent the anticipated civilian harm, including steps to verify targets, choose the least harmful means and maintain the ability to suspend attacks and issue effective warnings of attacks that will affect civilians, unless circumstances do not permit.

In addition, certain groups of protected persons are specifically safeguarded¹²⁴ and particular methods of war are prohibited, including starvation of civilians, indiscriminate attacks and targeting vital civilian infrastructure. There are also restrictions on certain weapons, which cause unnecessary suffering or indiscriminate harm or superfluous injury.¹²⁵ Humanitarian access is also guaranteed under IHL, and this includes the obligation to ensure humanitarian relief and the free movement of aid personnel. Finally, civilians and those *hors de combat* must be treated with dignity, in accordance with the fundamental guarantees set out in Geneva Convention Common Article 3 and human rights law. These legal obligations form the foundation of CHM and are derived from legal and policy frameworks, including the rules of engagement (ROE) used by NATO and other states.¹²⁶

In recent years, policy debates and advocacy from civil society have underscored the need to reinforce these foundational IHL principles with additional, context-specific mechanisms and practices to augment and monitor CHM.¹²⁷ From a military standpoint, beyond legal obligations, CHM is supported by policy, strategic and moral imperatives, many of which are embedded in military doctrine, for example, the Principles of Joint Operations.¹²⁸ Two principles are particularly relevant: Restraint, which emphasizes the

controlled use of force to prevent excessive violence and its potential political or diplomatic repercussions; and *Legitimacy*, which highlights the importance of maintaining the legal and moral authority of military operations. Adherence to international law and ethical standards is

adherence to international law and ethical standards is critical to enhancing operational credibility and sustaining public trust

124 Particular examples are medical personnel, humanitarian workers, journalists, peacekeepers and those in specially protected areas such as hospitals or specially designated zones

125 Examples of these particular weapons include: nuclear, chemical, biological, incendiary weapons and blinding lasers.

126 Selected references: Geneva Conventions I–IV (12 August 1949); Protocol Additional I and II to the Geneva Conventions (8 June 1977); Amended Protocol II to the Convention on Certain Conventional Weapons, Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996; Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (18 September 1997); Rome Statute of the International Criminal Court (17 July 1998); Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, ICJ Reports 1996, p. 226, and Legality of the Use by a State of Nuclear Weapons in Armed Conflict (Request by WHO), Advisory Opinion, ICJ Reports 1996, p. 66; See also the Preamble to the Charter of the United Nations (26 June 1945), which outlines the object and purpose of the Charter in limiting the lawful use of force in efforts ‘determined to save succeeding generations from the scourge of war’.

127 See e.g. [Civilian Protection Monitor](#); CIVIC and Stimson Center, *Tracking Implementation of the Civilian Harm Mitigation and Response Action Plan (CHMR-AP)*, November 2024.

128 See e.g. *Joint Warfighting*, JP 1, vol. 1, and JP 3-0, *Joint Campaigns and Operations*. This is taken from US Doctrine, but these Principles are also integrated into Dutch Military Doctrine, see e.g. [Nederlandse Defensie Doctrine](#), February 2025.

critical to enhancing operational credibility and sustaining public trust.¹²⁹ Operational legitimacy refers to the extent to which armed forces garner stakeholder support by complying with legal, ethical and policy frameworks, most notably through adherence to IHL and established rules of engagement. It also encompasses broader strategic and moral responsibilities, including the proactive reduction of civilian harm.¹³⁰ Together, these principles reinforce CHM by promoting lawful and ethically guided military conduct. They also help forces align strategic objectives with broader humanitarian imperatives, ensuring that military effectiveness is not achieved at the expense of civilian protection.

The UK's current approach to CHM, largely anchored in a strict interpretation of IHL and other legal obligations, reveals a mix of promising practices and significant systemic shortcomings (as discussed in chapter 1).¹³¹ There has been limited proactive engagement with the notion of civilian harm occurring *even when actions are legally justified*, except in narrowly defined contexts such as human security initiatives and certain humanitarian efforts. This narrow framing has contributed to a reluctance to establish forms of accountability for civilian harm when the harm is deemed legally permissible, effectively pre-judging incidents before a full assessment of facts and consequences can take place.

As a result, opportunities to acknowledge and address unintended harm and to improve operational practices accordingly are often missed. While some policies and recent operational conduct reflect a commitment to civilian protection, such as the endorsement of various political declarations related to civilian protection,¹³² overall transparency remains limited, making it difficult to assess the consistency or institutionalization of these measures.¹³³ Unlike some allies, the UK does not routinely publish investigations or casualty assessments, nor does it maintain a standing mechanism for offering reparations or voluntary compensation.¹³⁴

Recent legislative changes have further curtailed avenues for civilian redress.¹³⁵ These gaps suggest a reactive rather than proactive posture, in which systemic improvements are only considered following significant civilian harm events. However, meaningful reform does not and must not require waiting for a catastrophic incident to occur from one's own military's actions or omissions.¹³⁶ The UK has a clear opportunity to learn from allies in strengthening its CHM approach by institutionalizing good practices, enhancing transparency, and engaging more directly with civil society and independent monitors.

129 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems'.

130 Ibid.

131 Independent assessments, such as the 2024 Airwars/PAX Civilian Protection Monitor have highlighted key gaps in UK practice, particularly in tracking, investigating, and acknowledging civilian harm. See e.g. Lucca de Ruiter et al., *Country Report: United Kingdom 2024*, CPM.

132 Political Declaration on Strengthening the Protection of Civilians from the Humanitarian Consequences Arising from the Use of Explosive Weapons in Populated Areas (henceforth Political Declaration EWIPA), 2022. See also, U.S. Department of Defense, 'Readout of International Contact Group on Civilian Harm Mitigation and Response', 24 September 2024.

133 Lucca de Ruiter et al., *Country Report: United Kingdom 2024*, pp. 30 ff.

134 Ibid., pp. 35 ff.

135 Ibid., p. 36.

136 See also Megan Karlshøj-Pedersen, 'US-UK strikes in Yemen raise questions about commitments on civilian harm mitigation', Just Security, 1 May 2024.

meaningful reform must not wait until a catastrophic incident occurs from military action

Recent developments in Dutch defence policy following the June 2015 airstrike in Hawija, Iraq, highlight a more forward-leaning and transparent approach. Prompted by public outcry and sustained scrutiny, the Netherlands has undertaken several reforms,

including enhancing transparency, opening a reporting portal for allegations of civilian harm, and exploring options to include more robust training or certification in CHM for military personnel.¹³⁷ These steps reflect a broader shift toward acknowledging harm done, even when operations are conducted within legal bounds, and accounting for and responding to harm in ways that build public trust and operational legitimacy.

Methodology

For methodological clarity and disclosure purposes, this chapter is informed by my direct involvement in the civil society and academic consortium that supports and advises the development of the Dutch Ministry of Defence's Protection of Civilians policy. As part of this consortium, I contribute in my capacity as international law expert to the so-called 'Roadmap Process' that shapes the Dutch approach, offering a unique perspective on internal dynamics and policy formation. This necessarily informs my analysis, which is explicitly normative: the chapter does not merely document lessons learned but argues for what the UK Ministry of Defence should take from the Dutch experience in order to advance stronger CHM practices.

Structurally, this chapter proceeds to outline the Dutch response to the Hawija incident as a case study in institutional learning and reform. It explores how the Dutch government has engaged with civil society and implemented systemic changes aimed at reducing civilian harm. In doing so, it offers concrete lessons for the UK, demonstrating how a more proactive, accountable, and transparent approach to CHM can complement existing legal frameworks, improve military effectiveness, and enhance credibility both at home and abroad.

The 2015 Hawija airstrike: Civilian harm, legal accountability, and structural failures

On the night of 2–3 June 2015, two Dutch F-16s bombed a vehicle-borne improvised explosive device (VBIED) factory in Hawija, Iraq, as part of Operation Inherent Resolve (OIR).¹³⁸ The resulting explosion triggered a massive secondary explosion, creating an 11-metre-deep crater and registering 4.3 on the Richter scale. The blast was felt as far as Kirkuk, 50 km away.¹³⁹ In its 2025 findings, the commission the Dutch parliament tasked with investigating the incident, referred to in this report as the Sorgdrager Commission,¹⁴⁰ reported that the strikes killed at least 70 civilians, while

137 Lucca de Ruiter, Megan Karlshoej-Pedersen and Erin Bijl, *Country Report: Netherlands 2024*, CPM, April 2025.

138 Nuhanovic Foundation: Centre for War Reparations, 'Victims of Hawija Bombing vs State of the Netherlands', 2020.

139 Saba Azeem, Lauren Gould, Erin Bijl and Jolie Demmers, *After the Strike: Exposing the Civilian Harm Effects of the 2015 Dutch Airstrike on Hawija*, PAX, Intimacies of Remote Warfare, Al-Ghad, 8 April 2022.

140 Sorgdrager Commission, *Summary Report: Commission of Inquiry into the Deployment of Weapons in Hawija*, January 2025, p. 10. The Sorgdrager Commission is named for the lead investigator, Winnie Sorgdrager.

independent research confirmed at least 85 fatalities and hundreds of injuries.¹⁴¹ At the time, OIR forces were operating under a zero-civilian-casualty policy.¹⁴² The Netherlands Ministry of Defence (Dutch MoD) maintained that a thorough pattern-of-life analysis had been conducted¹⁴³ and that the collateral damage estimate showed minimal risk to adjacent buildings.¹⁴⁴ However, the commission's report revealed critical shortcomings in the intelligence, decision-making and accountability mechanisms surrounding the airstrike,¹⁴⁵ findings paralleled by civil society research and engagement and covered later in this chapter. The main shortcomings highlighted here are the misinterpretation of the target environment, structural failures in intelligence and oversight, issues related to legal and political accountability, and limited reparations in the face of continued demands.

Misinterpretation of the target environment

A key factor contributing to the civilian harm was the coalition's misreading of Hawija's 'industrial zone'. Hawija's zoning integrates residential, commercial and light industrial functions. Many factory owners lived on-site, and the area was home to internally displaced persons at the time of the strike. Dutch forces had requested that the bombing be delayed from 9 p.m. to midnight to minimize civilian presence, but the assumption that the area would then be empty was flawed.¹⁴⁶ The Dutch relied solely on classified intelligence provided by the United States but had no access to the primary sources of information or ability to carry out their own surveillance or verification. The commission noted that such mixed-use characteristics present in the industrial area could have been identified even without classified intelligence.¹⁴⁷ However, the limited and short-term observation of the site prior to the strike because of inadequate surveillance and intelligence resources meant that the pattern-of-life analysis was unverifiable and insufficient.¹⁴⁸

Structural failures in intelligence and oversight

During OIR, the Dutch relied heavily on intelligence from the US and the broader Five Eyes intelligence community.¹⁴⁹ The Dutch military intelligence agency MIVD was not involved in target selection, and the Netherlands had no independent verification capabilities of information received by the US for the Hawija strike.¹⁵⁰ The commission highlighted inadequate staffing at the Combined Air Operations Center (CAOC), where targeting decisions were finalized. Until mid-2015, no Dutch legal adviser or intelligence

141 Azeem et al., *After the Strike*.

142 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, January 2025, at para. 220. See also Scott Graham, 'The non-combatant casualty cut-off value: Assessment of a novel targeting technique in Operation Inherent Resolve', *International Criminal Law Review* 25, 2018.

143 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, para. 449.

144 Ibid., at paras 460–461.

145 Ibid., at Section VI, pp. 259 ff.

146 Sorgdrager Commission, *Summary Report: Commission of Inquiry into the Deployment of Weapons in Hawija*, p. 17.

147 Ibid., p. 5.

148 Ibid., 'Conclusion'.

149 Five Eyes is an intelligence-sharing alliance between the US, UK, Australia, New Zealand and Canada. For more, see: *Five Eyes Intelligence Oversight and Review Council*.

150 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 13.

officer was present at the CAOC, and only one mandated ‘red-card holder’ was in place to assess compliance with ROE and IHL.¹⁵¹

These deficiencies hindered critical oversight. Had adequate staff been deployed, and had US intelligence been shared more transparently, or had the Dutch taken more steps to acquire their own intelligence, the commission concludes that the risks might have been able to have been reassessed.¹⁵² Notably, the Dutch underestimated the effects and the amount of explosive material at the site in combination with the densely populated nature of the surrounding area.¹⁵³

Legal and political accountability

Despite early internal concerns about the likelihood of civilian casualties, Dutch officials failed to report credible evidence to parliament or the public. The After-Action Report (AAR) omitted suspicions of civilian harm, violating Dutch procedures for reporting collateral damage.¹⁵⁴ This omission blocked the triggering of a Dutch investigation procedure and is in and of itself now under investigation by the Dutch MoD. The delayed handover of the AAR to the Public Prosecution Service¹⁵⁵ precluded prompt investigation. Although a US Army investigation (AR 15-6) confirmed credible civilian casualties and was shared with the Dutch MoD,¹⁵⁶ this information was not immediately disclosed to the Public Prosecution Service so that they would be able to decide if further steps were necessary.¹⁵⁷ The commission also repeatedly requested video footage taken by Dutch pilots the day after the airstrikes to visually assess the damage, but the Dutch MoD claimed it had been overwritten and was no longer available.¹⁵⁸ This turned out to be false. After the commission’s report was published, investigative journalists discovered that the video still existed,¹⁵⁹ and a copy of the video was later shown to parliament during a hearing.¹⁶⁰ An internal investigation is currently under way to determine what happened to the video and why it was withheld.¹⁶¹

151 Ibid., p. 262 (paras 984–985). A red-card holder or red-card-holder team, according to NATO Joint Targeting Doctrine, refers to an individual who ‘holds the authority to veto on given missions/tasks according to national directives’, *NATO Standard Allied Joint Publication* (2016). Interestingly, the red-card holder term has been removed from more recent versions of the doctrine. See NATO Standard APJ-3.9 *Allied Joint Doctrine for Joint Targeting* (2021). For more in-depth discussion on the role of red-card holding, see Katja Lindskov Jacobsen and Rune Saugmann, ‘Optimizing coalition air warfare: The emergence and ethical dilemmas of red card holder teams’, 10 *Global Policy* 3, 2019.

152 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 263 (para. 991).

153 Ibid., p. 261 (paras 981–982); Sorgdrager Commission, *Summary Report*, p. 34.

154 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 170 (paras 602–607); Sorgdrager Commission, *Summary Report*, p. 36.

155 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 170 (paras 604–607).

156 Ibid., p. 204 (paras 750 ff.).

157 Dutch Public Prosecutor’s Service (Openbaar Ministerie), ‘Instructie handelwijze bij geweldsaanwending door militairen’ (Instructions for how to proceed with use of force cases), March 2003.

158 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 155 (para. 533).

159 Ben Meindertsma, ‘Defensie vindt alsnog verdwenen video van luchtaanval op Hawija’, *De Volkskrant*, 25 March 2025.

160 Dutch Ministry of Defense, *Videobeelden F-16-vlucht boven Hawija*, 16 April 2025,

161 Dutch Ministry of Defence, ‘Commissie Brouwer doet onderzoek naar gevonden videobeelden’, 11 April 2025.

Meaningful discussion in parliament of the mission and avenues toward accountability for the allegations of civilian harm only began to take shape after media exposure of the strike in 2019.¹⁶² Up until then, there was no public knowledge of Dutch responsibility for the strikes. In 2022, 25 victims and relatives filed a lawsuit against the Dutch state in The Hague District Court, still ongoing at the time of writing, which is the first legal case anywhere concerning coalition airstrikes during OIR.¹⁶³ In this case, the plaintiffs argue that the strike violated the IHL rule of proportionality. They claim the Dutch military either knew or should have known about the effects of the secondary explosions from the VBIED factory and failed to adequately assess the surrounding civilian environment. As a result, Plaintiffs argue the Dutch military did not take sufficient precautions in attack to minimize civilian harm to the greatest extent feasible. In essence, the plaintiffs contend that the Dutch military knowingly accepted an unacceptable risk of disproportionate civilian casualties in relation to the expected concrete and direct military advantage and had a duty to better understand and mitigate those risks.¹⁶⁴

Limited reparations and continued demands

Following parliamentary pressure, the Dutch government allocated €4.5 million in 2021 for reconstruction projects in Hawija, which were completed in 2023.¹⁶⁵ However, affected civilians consider these efforts insufficient given that their participation was not ensured, precluding adequate and effective measures, as outlined by both the Sorgdrager Commission and the civil society consortium. In 2025, Minister of Defence Brekelmans issued an official apology to the mayor of Hawija, acknowledging unintended civilian casualties while reaffirming the legality of the airstrike.¹⁶⁶ Nevertheless, advocacy groups were critical of the Dutch MoD's approach in responding to the strikes. Fieldwork in Hawija by PAX and Utrecht University's Intimacies of Remote Warfare Project emphasized that affected communities seek two core forms of redress: a meaningful public apology and individual compensation.¹⁶⁷ The Dutch government's failure to engage directly with victims, its lack of communication with victims' families, and its choice to provide voluntary, community-level compensation, rather than individual compensation based on legal entitlement, led to ongoing legal action in the Netherlands. This approach

affected communities in Hawija continue to seek a meaningful public apology and individual compensation

162 Jannie Schipper and Kees Versteegh, *De Nederlandse 'precisiebomb' op een wapendepot van IS*, nrc, 18 October 2019; Ben Meindertsmas and Lex Runderkamp, 'Nederlandse luchtaanval in Irak veroorzaakt zeker 79 doden', NOS, 18 October 2019; Airwars, *De weigering van het Ministerie van Defensie om specifieke burgerslachtofferincidenten te identificeren belemmert het natuurlijk verloop van de rechtsgang en staat haaks op de acties van Coalitie-bondgenoten*, October 2019.

163 Prakken d'Oliveira, 'Zitting rechtszaak slachtoffers Hawija bombardement: 24 oktober 2023', 6 October 2023.

164 For more on the Hawija case in English, see the Nuhanovic Foundation coverage.

165 Erin Bijl, *Community-level Responses to Harm: Lessons Learned from Iraq*, recommendations paper, PAX and Ashor Foundation, 4 April 2025.

166 NOS, 'Kabinet biedt excuses aan voor de dood burgerslachtoffers Hawija', 24 March 2025.

167 Azeem et al., *After the Strike*.

resulted in little overlap between those harmed by the airstrikes and those who actually benefited from the projects.¹⁶⁸

The Hawija airstrike is illustrative of how flawed or incomplete intelligence, misinterpretation of local contexts and civilian environments, and institutional shortcomings can culminate in catastrophic civilian harm, even under a stated zero-casualty policy. It also underscores a gap between formal legal frameworks and moral or political accountability.¹⁶⁹ The Sorgdrager Commission's findings, along with legal proceedings and civil society engagement, make Hawija a landmark case in evaluating the conduct and responsibility of states conducting remote warfare.

Findings and recommendations by the Sorgdrager Report and civil society

Intelligence and targeting reforms

The Sorgdrager Commission's report on the Hawija airstrike highlights a costly failure and exposes liabilities in the Netherlands' reliance on US-generated intelligence without adequate independent verification. As outlined earlier, Dutch forces operated under the assumption that the attack on the target (the suspected ISIS VBIED factory) posed minimal risk to civilians, but this judgement was based solely on coalition assessments that the Dutch MoD claimed were not (able to be) independently scrutinized,¹⁷⁰ revealing a structural over-dependence on allies and a lack of robust Dutch capacity or desire for independent validation. The commission recommended embedding Dutch analysts more deeply into coalition targeting processes and enhancing national capabilities to assess intelligence, especially concerning civilian harm and presence.¹⁷¹ These recommendations underscore the need for states to develop their own verification mechanisms, improve intelligence verification and validation measures, and integrate pattern-of-life analysis to more accurately evaluate the civilian environment surrounding military targets in *ex ante* analysis and assessment.

CHM training for targeteers and operational staff

Another key finding was the absence of specialized training and qualifications in CHM for those involved in targeting decisions.¹⁷² The strike on Hawija exposed how decision-making under pressure, compounded by incomplete data and a lack of CHM-specific expertise, can

168 Megan Karlshoej-Pedersen, 'Hawijah: Eight years on, civilians are still waiting for answers', *Airwars*, 5 June 2023, and Azeem et al., *After the Strike*. For the reasons affected civilians found the reconstruction projects insufficient, see Erin Bijl, *Community-level Responses to Harm: Lessons Learned from Iraq*, recommendations paper. Regarding the overlap between those who received Dutch compensation and the civilians actually affected by the strike, the recommendations paper states that this overlap was somewhere between 5 and 15 per cent (p. 3).

169 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems', p. 17.

170 Though the Sorgdrager Commission found that it was possible for Denmark, a small country also participating in OIR comparable to the Netherlands within the Nine-Eyes Intelligence community, with the right staffing to assess intelligence information. Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, pp. 129, 263–4 (paras 401 and 991).

171 Ibid., p. 267 (para. 1013).

172 Ibid., p. 267–8 (paras 1013, 1014).

lead to tragic outcomes. This highlights the need for formal qualifications for targeteers that incorporate CHM as a core competency rather than an afterthought. Such training should include case-based learning, simulations, and ethical scenario planning that stress cognitive awareness, such as the tendency to overlook alternative explanations or underestimate civilian presence. This could be done, for example, in consultation with local or national civil society organizations, an approach NATO has adopted in the past as well.¹⁷³ By embedding CHM into professional military education and adopting a pedagogical approach that fosters ethical reasoning under pressure, armed forces can better prepare their personnel to anticipate harm, apply mitigation measures, and challenge flawed assumptions in real time.¹⁷⁴ The Dutch MoD embraced this recommendation and is exploring ways to add specific CHM training to targeteer qualifications.¹⁷⁵

Transparency and accountability mechanisms

The prolonged delay of nearly five years in acknowledging civilian casualties from the Hawija strike eroded public trust and undermined the Dutch government's credibility.¹⁷⁶ The commission sharply criticized the lack of a systematic post-strike assessment process and called for stronger transparency mechanisms. These include timely and thorough investigations of civilian harm incidents, structured reporting protocols, and public communication strategies that prioritize accountability. The report also highlights the importance of governmental oversight and engagement with civil society organizations, whose persistent inquiries helped bring the truth to light. The Dutch experience demonstrates that transparency is not just a matter of good governance; it is essential to democratic control of military force and the legitimacy of military operations.¹⁷⁷

Establishing regular channels of engagement with parliament, civil society, and affected communities helps embed accountability mechanisms within the system, making it a consistent practice rather than something triggered only by external pressure or isolated incidents.

transparency is essential to democratic control of military force and the legitimacy of military operations

Local project funding as compensation and community response

The aftermath of the Hawija strike also revealed the inadequacy of existing Dutch frameworks for responding to civilian harm.¹⁷⁸ By the time it arrived, the compensation (delivered through community-focused reconstruction projects) was not only delayed, but also failed to provide the symbolic recognition that affected communities sought.¹⁷⁹ As a

173 Daphné Charlotte, D., Francesca Colli and Yf Reykers, 'From policy to practice: How NATO joined forces with NGOs for the protection of civilians', *Cooperation and Conflict*, online first, 2024, <https://doi.org/10.1177/00108367241288082>.

174 McNerney and Isler, 'Operational effectiveness and civilian harm mitigation by design'.

175 Tweede Kamer der Staten-Generaal, *Kabinetsreactie op het rapport Commissie Sorgdragher*, 14 March 2025, p. 13.

176 Azeem et al., *After the Strike*.

177 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems', p. 15.

178 Azeem et al., *After the Strike*.

179 Ibid.

result, many community members do not consider this as compensation at all.¹⁸⁰ The commission recommended institutionalizing mechanisms for compensation payments and ensuring they are accompanied by gestures of public acknowledgement, such as apologies or memorials.¹⁸¹ These steps are crucial for rebuilding trust with the population of the nation where the war is being fought, particularly when harm occurs in the context of counter-terrorism or coalition operations. The report also called for more proactive engagement with victims' families and the communities affected, in order to move beyond compensation toward long-term support for reconstruction and dialogue, and to consider affected communities' needs and desires from the outset.¹⁸²

When properly implemented, meaningful redress efforts can promote reconciliation and signal a state's genuine commitment to minimizing harm and addressing its consequences. This ultimately strengthens the legitimacy of military operations.¹⁸³ However, true accountability requires the acknowledgement of legal responsibility. *Ex gratia* payments fall short in this regard, as they involve no admission of liability, often require victims to waive future claims, and may include non-disclosure agreements. Redress should instead be seen as a process of engagement, both with affected individuals and within the military itself. For victims, this means being treated with respect, having their views and concerns heard, and receiving timely, adequate redress. For the military, it offers an opportunity to understand what went wrong and to adapt practices to prevent similar harm in the future.

Civil society engagement: Roadmap Process

Since 2020, a consortium of academic experts and civil society organizations, in which I have participated since 2022, has engaged regularly with the Dutch MoD in an advisory capacity in efforts to strengthen Dutch policy and practice on preventing, reducing, and responding to civilian harm from military operations, mostly in response to the information made available about Hawija.¹⁸⁴ This collaborative 'Roadmap Process' began in earnest in 2021¹⁸⁵ and gained momentum in 2023–24 through a series of technical exchanges focused on CHM and protection of civilians. The Roadmap Process aims to improve the Netherlands' capacity to mitigate, track and respond to civilian harm resulting from its military operations and was situated within a broader international shift

189 Erin Bijl, *Community-level Responses to Harm: Lessons Learned from Iraq*, PAX and Ashor Foundation. The author highlights that survivors are adamant they don't consider the Dutch-funded projects as constituting compensation. Commenting on this, Bijl outlines: 'Instead, [the Netherlands] chose to initiate two community reconstruction projects. Internationally, these are often regarded as examples of good practice and a blueprint for community-level civilian harm response. However, having interviewed affected civilians and local stakeholders in Hawija, PAX and Ashor Foundation conclude that community-level responses may be practical and desirable from a state perspective, but are often likely to fall far short of survivors' needs and expectations' (p. 1).

181 Sorgdrager Commission, *Rapport Commissie van onderzoek wapeninzet Hawija*, p. 268 (para. 1021); Erin Bijl, *Community-level Responses to Harm*.

182 Erin Bijl, *Community-level Responses to Harm*.

183 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems'.

184 PAX, Center for Civilians in Conflict, Airwars, Utrecht University, Intimacies of Remote Warfare (henceforth Roadmap Process), *Looking Back to Look Forward: Recommendations to Improve the Protection of Civilians in Dutch Military Operations*, 23 May 2024.

185 Airwars, Amnesty International, Center for Civilians in Conflict, Open State, PAX, Intimacies of Remote Warfare, 'After "Hawija": The way forward for the Dutch Ministry of Defence', public statement, 1 July 2021.

among Western states towards enhancing civilian protection in armed conflict, with the most notable example being the United States, which introduced its Civilian Harm Mitigation and Response Action Plan (CHMR-AP) in 2022, followed by a new Department of Defence Instruction in 2023. Both documents incorporate civil society input.¹⁸⁶ This also kickstarted a broader initiative launched on CHM through the participation of the International Contact Group, in which the Netherlands, the US and the UK participate.¹⁸⁷ Similarly, accompanied by input by civil society, in November 2022, 82 states (including the Netherlands and the UK) endorsed the Political Declaration on Explosive Weapons in Populated Areas (EWIPA), committing to restricting or refraining from the use of such weapons, as appropriate.¹⁸⁸

What makes the Roadmap Process unique is its sustained engagement between the Dutch MoD and civil society over the years. In 2021, four in-depth sessions were organized that informed steps the Dutch MoD took to improve its protection of civilians policy. Between 2023 and 2024, the consortium organized bi-monthly technical workshops, convening international experts to explore best practices and tailor implementation strategies to the Dutch operational context.¹⁸⁹ This structured exchange of views represents a rare model of government–civil society interaction in the field of CHM, offering insights that may inform similar initiatives in other contexts. One recent output of this engagement was the list of 16 recommendations by the civil society organizations to the Dutch MoD in May 2024, one of which was to formally institutionalize this cooperation.¹⁹⁰ Many of these recommendations were echoed in the Sorgdrager Commission's report (see *Table 1* on Page 53 for a side-by-side comparison).

During the Roadmap Process, in 2022, the Dutch MoD introduced a 10-step plan to enhance transparency regarding civilian harm during military deployments conducted under Article 100 of the Dutch Constitution, which are missions aimed at upholding the international legal order.¹⁹¹ Before participating in such missions, the government must now include in its *Article 100 letter* to parliament a clear outline of the potential risks to civilians and the steps being taken to reduce those risks.¹⁹² The letter also details how the Dutch MoD will report on Dutch weapons use during the mission. The plan features five core elements:

186 United States Department of Defense, *Civilian Harm Mitigation and Response Action Plan (CHMR-AP)*, 2022; United States Department of Defense, *DOD Instruction 3000.17 – Civilian Harm Mitigation and Response*, 2023. See also, C. Ricci, *U.S. Army General Counsel Speech to the International Society of Military Law and the Law of War*, 12 November 2024. The choice to make CHM policy-oriented leaves these notions to the whims of new political approaches; for example, under the Trump administration, those of Secretary of Defense Pete Hegseth, who does not find CHM a priority. See N. Turse, 'Pete Hegseth is gutting programs that reduce civilian casualties', *The Intercept*, 15 April 2025.

187 The so-called 'International Contact Group' on CHMR includes Austria, Australia, Belgium, Denmark, Finland, Germany, Netherlands, Norway, the United Kingdom, and the United States. For more, see US Department of War, 'Readout of International Contact Group Meeting on Civilian Harm Mitigation and Response', 24 Sept. 2024.

188 Political Declaration EWIPA.

189 Roadmap Process, *Looking Back to Look Forward*.

190 Ibid.; M. Karlshoej-Pedersen and J. Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations: A view from the Netherlands (Part I)', *Opinio Juris*, 24 May 2024; M. Karlshoej-Pedersen and J. Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations: A view from the Netherlands (Part II)', *Opinio Juris*, 24 May 2024.

191 See e.g. Ministerie van Defensie, *Meer openheid over burgerslachtoffers*.

192 Kamerbrief stappenplan burgerslachtoffers bij inzet in kader van artikel 100 Grondwet (Step-by-step plan regarding civilian harm under Article 100 of the Dutch Constitution), 7 April 2022.

- 1 It is now obligatory to address civilian harm risks in all Article 100 letters.
- 2 The Dutch Ministry of Defence will clearly outline in advance the level of transparency it can provide about the use of Dutch weapons, while balancing this with the need to protect the security of personnel, operations and partners.
- 3 Transparency practices are reviewed during missions to ensure adequacy.
- 4 Understanding civilian harm now plays a central role in post-mission evaluations.
- 5 Civilian protection must be integrated into Dutch foreign policy.

In addition to these measures, the Dutch MoD has taken other steps to improve its CHM processes. Over the past two years, the Dutch MoD Protection of Civilians (PoC) team has conducted a baseline study of CHM mechanisms within the Dutch military to identify best practices, gaps, and recommendations for improvement. This marks a significant step forward, aligning with calls from civil society for militaries to critically assess their own practices. Notably, the study is led by respected military personnel rather than external actors, fostering trust and enabling a highly technical, operational discussion on military practice.¹⁹³

In March 2023, the Dutch MoD published a *Database of Dutch Airstrikes during Operation Inherent Resolve*, which provides an overview of all Dutch F-16 weapon deployments as part of the anti-ISIS coalition's air campaign in Iraq and Syria.¹⁹⁴ It covers the period from 2014 to 2016 and the year 2018. The Dutch MoD released this data to promote transparency around its military actions,¹⁹⁵ a step that was welcomed by civil society.

In June 2024, the Dutch MoD announced a mechanism for civilian harm reporting – the first European country to do so; this reporting portal went live in December 2024 and will soon be available in several languages.¹⁹⁶ The platform allows civilians and non-governmental organizations (NGOs) to report suspected civilian casualties or significant material damage linked to Dutch military actions, either current or past (back to 2002). The mechanism aims to improve accountability, monitor the impact of operations, and reduce future harm. It also serves as the central registry for all such reports, including those made internally within the military.¹⁹⁷

There has also been direct engagement with Airwars (a civilian harm monitoring watchdog and participating organization of the Roadmap Process) regarding specific allegations of civilian harm during OIR. This engagement has led to assessments and greater transparency. In March 2025, following sustained dialogue with Airwars, the Dutch MoD published the results of its largest-ever review of civilian harm allegations, assessing 61 incidents linked to possible Dutch airstrikes during the campaign against ISIS.¹⁹⁸ Additionally, as a direct result of the list and engagement with Airwars, an investigation into a Dutch airstrike that is believed to have caused civilian casualties in

193 Karlshøj-Pedersen and Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations (Part I)'.

194 Ministerie van Defensie, *Database Nederlandse luchtaanvallen tijdens Operation Inherent Resolve*, 30 March 2023.

195 Ibid. The downloadable package includes an Excel file listing nearly 2,200 weapon deployments, searchable by date and other key details; a CSV file for use in data-processing software and a PDF explaining the data.

196 For English-language version see: [Reporting civilian harm](#).

197 Ministerie van Defensie, 'Reporting point for suspected civilian casualties opened', 31 Dec. 2024.

198 Airwars, 'Dutch MoD releases results of largest ever assessment of civilian harm allegations from the war against ISIS', 14 March 2025. Per Airwars, of the 61 cases investigated, 39 were excluded for lack of Dutch

Table 1: Sorgdrager Commission and Roadmap recommendations compared

Theme	Sorgdrager Commission findings/recommendations	Roadmap recommendations
Transparency and public reporting	The Dutch MoD failed to transparently report civilian casualties to parliament and public; internal reports deliberately omitted key information. ¹⁹⁹	Establish a public webpage, publish CHM data monthly, and release investigation outcomes; ensure consistent public and parliamentary reporting. ²⁰⁰
Civilian harm investigation procedures	No formal or immediate investigation launched after Hawija strike; only informal fact-finding; Dutch MoD relied passively on US findings. ²⁰¹	Establish CHM Cell with independent capabilities; publish guidance on how investigations are triggered and tracked. ²⁰²
Parliamentary oversight and Article 100 gaps	Parliament was not consistently informed of potential or suspected civilian harm, especially outside Article 100 contexts. ²⁰³	Standardize informing parliament about all missions with potential civilian harm, even outside Article 100. ²⁰⁴
Civil society and expert engagement	NGOs played a key role in urging the Dutch MoD to create civilian harm protocols; their input influenced internal policy development. ²⁰⁵	Institutionalize regular engagement with civil society and academics to address CHMR issues and provide independent input. ²⁰⁶
Broadened understanding of civilian harm	Dutch MoD failed to consider indirect/ reverberating effects of strikes (e.g. populated zones, refugee presence); harm underestimated. ²⁰⁷	Adopt a broader definition of civilian harm beyond casualties, including damage to civilian infrastructure and essential services. ²⁰⁸
CHMR integration in training and operations	Targeting process lacked Dutch intelligence integration; personnel unaware of key CHM procedures; knowledge gaps affected decisions. ²⁰⁹	Embed CHM across all missions and in Armed Forces training, scenario exercises, and career development tracks. ²¹⁰
Communication and support to victims	No communication with victims or their families post-strike; partial compensation years later; no victim engagement protocol. ²¹¹	Establish communication procedures with victims; create national fund for <i>ex gratia</i> payments and ensure context-appropriate responses. ²¹²

involvement raising questions for other allies involved in Operation Inherent Resolve, and a 'further 22 cases were deemed to have "insufficient detail" by the Dutch MoD due to a lack of available information contained in the original Airwars reports that allowed the MoD to cross-check these allegations against their own mission data. This is the first time that the criteria for cross-checking allegations has been made publicly available, in a move that will strengthen independent referrals to the MoD in future operations. Airwars hopes to continue to work with the Dutch MoD to improve the methodology further when it comes to reviewing cases such as these in future.' See also: 'Kamerbrief over stand van zaken intern onderzoek Nederlandse wapeninzet in Mosul, Irak (2016) en rapportage meldingen Operation Inherent Resolve', 14 March 2025.

199 Sorgdrager Commission, *Summary Report*, 21 January 2025, pp. 11, 19, 22–23, 34–38.

200 Roadmap Process, *Looking Back to Look Forward*, Recommendations 1, 7, 10, 11 and 14b. For more in-depth analysis, see Pedersen and Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations (Part II)'.

201 Sorgdrager Commission, *Summary Report*, pp. 13, 22–23, 38.

202 Roadmap Process, *Looking Back to Look Forward*, Recommendations 13, 14, 14a and 14b.

203 Sorgdrager Commission, *Summary Report*, pp. 11, 22–23 and 38.

204 Ibid., Recommendation 10.

205 Ibid., pp. 11, 32–33

206 Roadmap Process, *Looking Back to Look Forward*, Recommendation 3.

207 Sorgdrager Commission, *Summary Report*, pp. 34–36

208 Roadmap Process, *Looking Back to Look Forward*, Recommendation 4.

209 Sorgdrager Commission, *Summary Report*, pp. 13, 17, and 34.

210 Roadmap Process, *Looking Back to Look Forward*, Recommendations 5 and 8.

211 Sorgdrager Commission, *Summary Report*, p. 41.

212 Roadmap Process, *Looking Back to Look Forward*, Recommendations 15 and 16.

Mosul on 22 March 2016 is now taking place and is in its final phase (the Public Prosecution Service has already published its report).²¹³ This marks a concrete outcome of enhanced transparency driven by civil society involvement in CHM efforts.

Table 1 (on previous page) outlines a comparison between the findings and recommendations from the Sorgdrager Commission, which were fully embraced by the Minister of Defence in March 2025,²¹⁴ and the May 2024 Roadmap Process recommendations. The Dutch MoD has already started implementing the first of these recommendations and has committed to exploring and implementing others.

To contextualize this more broadly, when civil society and an official commission independently reach similar findings and recommendations about CHM, it indicates a strong consensus on the issues and solutions needed. This alignment suggests that the problems identified are well-documented and widely recognized, lending credibility and urgency to the recommendations.²¹⁵ It also reflects effective engagement and information sharing between civil society and official bodies, ensuring that policies are grounded in both expert analysis and the lived experiences of affected communities.²¹⁶ Such consensus can increase pressure on authorities to implement changes, as it demonstrates broad-based agreement and reduces the likelihood that recommendations are biased or incomplete.²¹⁷ Ultimately, such engagement with civil society helps states shape military policy in ways that incorporate diverse and important perspectives on CHM, enhancing compliance with the law, transparency, accountability and the legitimacy of military operations.

Comparative lessons and recommendations for the UK

Training and planning

Drawn from the findings of the Sorgdrager Commission's report and the Roadmap Process, it would benefit the UK MoD to prioritize comprehensive integration of CHM into training and operational planning at all levels. One critical step would be to establish a formal certification or qualification process for UK targeteers and operational planners that reflects best practices in CHM, as is currently being explored in the Netherlands. As noted, the Hawija case demonstrates how over-reliance on assumptions, incomplete intelligence and insufficient understanding of civilian presence in target zones can have devastating consequences.²¹⁸ As in the Dutch context, the proposed action of developing a

213 Openbaar Ministerie, 'OM rondt feitenonderzoek af naar burgerslachtoffers door Nederlandse inzet in Mosul', 7 April 2025.

214 'Kabinetsreactie op het rapport van de commissie Sorgdrager over de Nederlandse wapeninzet in Hawija', 14 March 2025.

215 Amnesty, Airwars, Center for Civilians in Conflict, CARE, Human Rights Watch; Humanity & Inclusion, InterAction, Norwegian Refugee Council, Oxfam, PAX, *Civil Society Guidance for the Civilian Harm Mitigation and Response Plan*, July 2022. Karlshøj-Pedersen and Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations: A view from the Netherlands (Part I)'; Roadmap Process, *Looking Back to Look Forward*.

216 Kingdom of the Netherlands, UN, PAX, Center for Civilians in Conflict, *Advancing Civilian Harm Mitigation in UN Peacekeeping*, Summary Report of PoC Week Closed-Door Roundtable.

217 CIVIC and Stimson Center, *Tracking Implementation of the Civilian Harm Mitigation and Response Action Plan (CHMR-AP)*, November 2024.

standardized CHM certification could ensure that personnel involved in targeting decisions possess the necessary expertise to evaluate risks to civilians and the civilian environment, apply mitigation measures, and challenge incomplete or ambiguous assessments. Such a programme would not only professionalize CHM within British military architecture but also signal a clear institutional commitment to reducing civilian harm in modern warfare and demonstrate leadership to other states in the process of improving their own CHM approaches.

Furthermore, CHM must be fully integrated into the entire spectrum of operations, including counterinsurgency as well as LSCO planning and scenario-based exercises. As outlined earlier, the assumption that CHM is less relevant in high-intensity conflict is both outdated and dangerous. The nature of urban warfare and coalition operations makes civilian harm both more likely and more consequential for strategic outcomes. Incorporating CHM considerations like civilian pattern-of-life data, urban infrastructure impacts, and post-strike assessments into LSCO simulations can help to cultivate a mindset in which civilian protection is not a constraint but an integral planning factor.²¹⁹ Doing so will also enable military leaders to identify friction points early, adapt their operational concepts accordingly, and test mitigation strategies under realistic conditions.

Finally, the UK should move to formalize CHM within its doctrinal framework for LSCOs. Current guidance on civilian protection remains fragmented and often tailored to counterinsurgency or stabilization operations, leaving a gap in preparedness for large-scale, high-tempo conflicts.²²⁰ A doctrinal articulation of CHM in LSCOs could help bridge that gap, ensuring that operational units understand not only their legal obligations but also the strategic benefits of mitigating civilian harm.²²¹ It would also align the UK's practices more closely with evolving NATO standards and international expectations, reinforcing its leadership in ethical and effective military conduct.

Intelligence and coalition operations

The British military would benefit in ensuring its independent intelligence verification capabilities within coalition operations to prevent over-reliance on partner assessments. This should also be considered when working in a coalition with allies who are not part of intelligence-sharing alliances. The Hawija case revealed critical shortcomings in the Dutch military's acceptance of US-provided intelligence without sufficient verification of civilian presence or risk. For the UK, this underscores the strategic importance of maintaining sovereign analysis capacity, even in deeply integrated coalitions and while still being part of intelligence-sharing groups like Five Eyes, especially with shifting geopolitical realities.²²²

218 Bijl, *Community-level Responses to Harm: Lessons from Hawija*.

219 Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*.

220 Ibid.

221 The UK's *Strategic Defence Review* contains no mention of civilian harm mitigation while what it does cover pivots towards more remote warfare modalities (drones and increased spending on artificial intelligence). It states, for example: 'Importantly, it [the Strategic Defence Review] sets a new vision for how our Armed Forces should be conceived – a combination of conventional and digital warfighters; the power of drones, AI, and autonomy complementing the "heavy metal" of tanks and artillery; innovation and procurement measured in months, not years; the breaking down of barriers between individual Services, between the military and the private sector, and between the Armed Forces and society' (p. 4).

222 Daniel Flitton, 'Five Eyes alert: Trump is skewing intelligence to suit his priorities', The Interpreter, Lowy Institute, 7 April 2025.

A robust verification framework that includes cross-checking coalition intelligence with UK assets and assessments could help mitigate the risks of flawed targeting data and reinforce accountability. This capability should not only be available at the strategic level but embedded in operational processes to challenge assumptions and elevate caution where needed. When UK-generated intelligence is shared with coalition partners outside formal intelligence-sharing alliances such as Five Eyes, a margin of appreciation should be afforded to allow these partners to assess and verify the intelligence without compromising classified sources or methods. This ensures operational trust while preserving necessary safeguards around sensitive information and allows for all parties involved to comply with their own legal and ethical obligations.

To complement this, the UK should also invest in building dedicated CHM-trained intelligence analysts and expanding pattern-of-life expertise. As the Sorgdrager report makes clear, the absence of detailed pattern-of-life analysis around potential targets was a major factor in the civilian harm that resulted from the strikes. Analysts with specific training in CHM and civilian risk assessment should be embedded within operational headquarters and targeting cells. Their role would be to analyse incoming intelligence through a civilian protection lens, assessing such factors as urban density, displacement patterns, infrastructure dependencies, and timing sensitivities. Experts with cultural knowledge (such as anthropologists) could also contribute, using their understanding of local customs and patterns of life that may be less familiar to military personnel. In parallel, open-source intelligence, civil society and civilian-provided data should be more systematically incorporated into assessments. Independent sources, including satellite imagery, social media, NGO reports, and commercial datasets, can offer critical alternative perspectives that enrich and challenge conventional intelligence streams.²²³

Finally, the UK should institutionalize an iterative approach to intelligence assessment that emphasizes learning and accountability across operations. This includes embedding civilian harm assessments into post-strike analysis, feeding findings back into planning cycles, and engaging civil society actors as part of this feedback loop.²²⁴ NGOs, investigative journalists, and affected communities often surface information that states cannot or do not access through traditional military channels. Engaging with these actors in a structured, secure manner can act as a vital check against blind spots or institutional stagnation. An iterative, inclusive assessment process would not only improve the quality and credibility of UK targeting decisions but also strengthen trust among local populations and international partners – crucial elements for the legitimacy of UK military operations.

sustained engagement with affected civilians can act as a vital check on military blind spots

Transparency and oversight

The Hawija incident and the findings of the Sorgdrager Commission underscore the urgent need for timely and transparent disclosure of civilian harm incidents – the legal

223 Dorsey and Moffett, 'The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems'.

224 See Jessica Dorsey and Marta Bo, 'AI-enabled decision-support systems in the joint targeting cycle: Legal challenges, risks, and the human(e) dimension', 106 *International Law Studies* (forthcoming 2025) for iterative discussion on precautions, which are legally required (pp. 11 and 26).

maxim of ‘justice delayed is justice denied’ is extremely relevant here. Delayed acknowledgement (e.g. the five-year gap between the Hawija strike and the Dutch government’s public admission) only served to undermine public trust, impede accountability, and deny victims recognition and redress. For the UK, adopting mechanisms for timely public disclosure should be a priority. This could include mandated timelines for initial incident notifications, clear protocols for updating information as investigations evolve, and the establishment of a centralized civilian harm reporting platform accessible to the public and parliament. Transparency should align with operational security concerns, but the presumption should shift toward disclosure, not silence.²²⁵

The Dutch government’s eventual engagement with civil society and parliament offers important lessons for strengthening democratic oversight. Coordination with NGOs, legal experts, and victims’ advocates during and after the Sorgdrager investigation helped uncover critical insights and restore public confidence. The UK could benefit from institutionalizing such engagement through formalized consultation mechanisms with civil society actors in both the investigation and policy reform phases. At the same time, parliamentary scrutiny of civilian harm must be enhanced, for example through regular reporting requirements, dedicated oversight bodies and expanded access to classified briefings, where appropriate. Empowering parliament with timely and meaningful information about military operations involving the risk of civilian harm is essential to ensuring that transparency and accountability are not ad hoc or politically contingent, but steadfast features of UK defence policy.

Reparations and community engagement

The UK’s current approach to reparations for civilian harm remains largely ad hoc, lacking a consistent, transparent, or well-communicated framework.²²⁶ As seen in past operations, including in Iraq and Afghanistan, compensation payments or condolence gestures have been sporadically applied, often delayed, and rarely accompanied by meaningful engagement with affected communities.²²⁷ The Hawija case (alongside the Dutch government’s eventual recognition of the victims and commissioning of an independent investigation) highlights how inconsistent recompense, either through *ex gratia* payments or reparations, not only fail to address the needs of those harmed but also can play a big role in undermining the legitimacy of military operations. To align with evolving international norms and expectations, the UK could show leadership in establishing an institutionalized reparations framework that includes a range of responses, from financial compensation and apologies to community rebuilding support. This framework should be coordinated with public diplomacy efforts to reinforce the UK’s commitment to accountability and humane conduct in warfare.

225 Dorsey and Moffett, ‘The warification of international humanitarian law and the artifice of artificial intelligence in decision-support systems’. See also, O. Ben-Naftali and R. Peled, ‘How much secrecy does warfare need?’, in *Transparency in International Law*, ed. A. Bianchi and A. Peters, Cambridge University Press, 2018, pp. 321–364.

226 Stubbins Bates, ‘Strengthening UK Military Investigations into Civilian Harm: Towards Compliance, Mitigation and Accountability’, 26 November 2024.

227 Haim Abraham, Conall Mallory and Steven van de Put, ‘Bridging the accountability gap: Reparations for civilians harmed in armed conflict’, *EJIL: Talk!*, 19 February 2025.

In coalition operations, especially those involving airstrikes in densely populated areas, the UK must also ensure the presence of pre-authorized payment mechanisms to address civilian harm and protocols for community-based engagement. As Megan Karlshoej-Pedersen and I argue elsewhere, waiting for political clearance post-incident delays justice and risks politicizing civilian harm responses.²²⁸ Pre-authorized funds, with clear criteria and oversight, would allow for timely assistance and help de-escalate tensions on the ground. Just as importantly, the UK should contribute to the development of coalition-wide protocols that embed local consultation, community liaison, and culturally appropriate responses into operational planning. These mechanisms should not be reactive, but proactively designed in collaboration with local actors and civil society organizations. When implemented effectively, they not only acknowledge harm but also support stabilization, reconciliation and the strategic success of UK and coalition missions.

Opportunities and recommendations

The Hawija incident and the recent developments around it underscore the importance of a systemic evaluation of the UK's approach to CHM. The UK MoD is currently undertaking a baseline study on the implementation of its human security policy, including an assessment of CHMR capabilities, with findings expected in late 2025. However, at the time of writing, the scope and depth of this study are not publicly known. It remains unclear whether it will take stock of CHM policy and practice in the manner of the Netherlands' baseline study, which undertook a comprehensive mapping of policies, institutional roles, data practices and operational challenges across the CHM spectrum, from targeting procedures to post-strike assessments and reparations.²²⁹ Such an exercise, conducted either within the ongoing human security baseline study or as a dedicated initiative, would enable the MoD to shift from reactive to proactive approaches.²³⁰ As illustrated by the introspection prompted by the Sorgdrager Commission in the Netherlands, a comprehensive CHM baseline study could serve to identify gaps and best practices, and set measurable benchmarks to guide future reforms. It would signal a commitment to transparency, operational effectiveness, and alignment with IHL and human rights standards.

Equally important is the recognition of parliament, NGOs, and international allies as vital agents in driving and sustaining CHM reforms. As the Dutch experience shows, parliamentary pressure and civil society engagement were instrumental in surfacing the truth about Hawija and shaping subsequent policy improvements. The UK should institutionalize avenues for regular consultation with these stakeholders and draw on their expertise in shaping robust, human-centred policy. To support sustained progress, the UK could use the Civilian Protection Monitor, an independent mechanism, to track civilian harm incidents, gauge state practices, and show leadership in promoting accountability across coalition operations.²³¹ By investing in such transparency and collaboration initiatives, the UK would not only improve its own practices but also contribute to raising the standard for responsible military conduct.

228 Pedersen and Dorsey, 'Policy recommendations to meaningfully mitigate civilian harm in military operations (Part II)'.
229 Ibid.

230 Pedersen, 'US-UK strikes in Yemen raise questions about commitments on civilian harm mitigation'.

231 CPM, Airwars and PAX.

Conclusions

The Dutch experience following the 2015 Hawija airstrike offers critical lessons for international partners seeking to strengthen CHM. The comprehensive reforms introduced by the Netherlands in the aftermath, which range from increased transparency and accountability to intelligence-sharing reforms and public apologies, reflect the tangible value of institutional learning, cooperation with civil society and political will. For allies, including the UK, these developments underscore the importance of actively monitoring and learning from one another's policy shifts. The Dutch case underscores that meaningful change is possible, even after significant failures, and highlights how policy responses to civilian harm can be both reflective and forward-looking.

Hawija can and should be seen as a turning point – not only for the Netherlands, but also internationally. The incident catalysed overdue scrutiny of intelligence reliance within coalitions, the lack of transparency in civilian harm reporting, and the disconnect

between affected communities and state-led compensation mechanisms. For the UK, as it continues to operate in complex and coalition-based environments, these lessons from Hawija are highly relevant. It is imperative to take them seriously, not only to avoid repeating similar mistakes, but to strengthen the UK's CHM frameworks through greater transparency, accountability and engagement with those most affected by its military actions. Historically, military and national security stakeholders have expressed concern that CHM might hinder operational effectiveness. CHM is often mischaracterized as mere restraint, by framing it as avoiding actions that pose risks to civilians. In reality, CHM is a comprehensive, adaptive approach that balances risks to civilians, mission and force. When effectively implemented, it supports the achievement of operational and strategic goals while minimizing civilian harm.²³² In sum, CHM should not be seen as a constraint but recognized as a strategic advantage, essential not only for minimizing civilian harm but for enhancing mission legitimacy, operational success and long-term stability in today's complex conflicts.

Hawija should be seen as a turning point for the Netherlands and internationally

232 Lewis et al., *Preparing for Civilian Harm Mitigation and Response in Large-Scale Combat Operations*, p. 8.

Conclusions and recommendations

Civilian harm, in all its forms, is rarely unforeseeable, and affected civilian populations are highly effective in documenting it. Yet it remains a defining feature of modern warfare, often because militaries insufficiently anticipate, prevent or address it. In the post-counterinsurgency era, and in light of emerging methods and means of warfare, including AI-supported weaponry, the risks to civilian populations are increasing. High-intensity confrontations involving states, non-state actors and coalitions are likely to continue in complex, urban environments, making civilian harm not only more likely but also potentially more severe in scale and impact.

At a time when the number of civilian deaths in armed conflict is rising and the normative force of the laws of war is being eroded, states must implement their legal obligations and political commitments to protect civilians. The Chilcot review of the Iraq war also emphasized that ensuring that military operations are seen as legitimate is essential for success. Understanding, mitigating and responding to civilian harm is integral to achieving this. It remains crucial for where civilians were harmed in past UK military operations, in contexts where the UK military is now engaged, including in Iraq, Syria, Yemen, Ukraine and the Baltic states, as well as in planning for future LSCOs. Yet, the UK remains ill-equipped to do so.

Lacking a coherent institutional framework, the UK approach to civilian protection is scattered across a patchwork of ad hoc policies, doctrines and operational practices. It places an overwhelming emphasis on protecting civilians from the actions of other militaries or non-state actors, rather than from its *own* operations. While containing promising practices, this leaves significant gaps and falls short of the UK's rhetorical commitment and obligation to protect civilians in armed conflict.

Until recently, the UK has largely resisted interrogating its approach to civilian harm mitigation and response. Meaningful reform in the UK does not, and must not, require waiting for a catastrophic incident to occur as a result of its actions or omissions. The baseline study currently being undertaken by the UK MoD (expected in late 2025) is an overdue and welcome first step. However, it cannot substitute for systemic reflection, evaluation and corresponding reform to CHMR policy and practice. Without a coherent institutional approach and clear, agile operational guidance, efforts to mitigate and respond to civilian harm risk remaining fragmented and reactive.

The experiences of the US and the Netherlands demonstrate that progress is both possible and necessary. They offer key lessons for UK Defence in designing, developing and implementing an effective CHMR framework applicable across all operational environments, including LSCOs, and in aligning UK practices more closely with those of its allies, evolving NATO standards, and international best practice.

Compliance with IHL represents only a minimal threshold

Compliance with IHL, including the principles of distinction, proportionality and precautions, is not enough to meet the moral and strategic imperative to actively prevent, reduce, and respond to civilian harm. True commitment to protecting civilians requires proactive efforts beyond what IHL strictly demands. Furthermore, relying on passive legal compliance, including failing to recognize indirect and compounding harm, heightens the risk of harm to civilians. A comprehensive CHMR framework can serve as a vital tool to address these gaps.

CHMR reinforces mission effectiveness and operational legitimacy

Protecting civilians is not in tension with military success; it is integral to it. Shifting military mindset to view CHMR not as a constraint, but as a strategic enabler that can build public trust and operational legitimacy, will be key to its effective development and implementation.

CHMR will be equally, if not more, relevant in LSCOs

The assumption that CHMR is less relevant in high-intensity, large-scale conflict scenarios is both outdated and dangerous. The nature of confrontations and their proximity to civilian populations heighten risks to civilians, while the complexity and tempo of LSCOs are likely to create significant challenges to effective CHMR. Embedding CHMR in LSCO planning and training is therefore essential, alongside ensuring that CHMR policies are scalable – a possibility supported by existing thought leadership.

CHMR is strengthened through an institutional approach

Fragmented or ad hoc efforts will always fall short. Achieving systemic change requires embedding CHMR across all aspects of security cooperation and military training, planning and control. Establishing a dedicated office to be responsible for CHMR, including the management and identification of lessons and data regarding civilian harm, is widely considered a promising approach. Strong senior leader governance and involvement are crucial to support buy-in from commanders and tactical units and ensure successful implementation.

Civil society input is both necessary and beneficial

Sustained and meaningful engagement by defence leadership with civil society, both at the policy level and on the ground with affected communities, has proven effective in supporting data collection, identifying lessons, driving meaningful change, and ensuring that responses are context-specific and meet the needs of victims.

A culture of learning, transparency and accountability underpins effective CHMR

Minimizing civilian harm requires a proactive, rather than reactive, approach grounded in both operational and institutional learning as well as adaptive planning. Recognizing that LSCOs may constrain data-driven learning and adaptation, effective preparation may

involve rehearsing, experimenting, and adapting in advance to anticipated operational dilemmas. Beyond learning from civilian harm events and adapting accordingly, publicly acknowledging harm done and taking steps to account for and respond to it are key to building public trust and operational legitimacy, and allowing victims access to remedy and reparations.

Coalition operations require shared standards and cross-verification of intelligence

In coalition-based environments, when responsibility is diffused across partners, accountability can falter. Joint CHMR standards and protocols help ensure clarity and promote accountability. However, over-reliance on partner assessments can increase the risk of civilian harm. Even in deeply integrated coalitions, maintaining sovereign analysis capacity and implementing robust verification frameworks strengthens CHMR.

Recommendations

To the UK government:

- 1 Fund, resource and support the MoD to strengthen its CHMR capabilities, including by establishing a comprehensive CHMR framework that prioritizes operational learning and adaptive planning.
- 2 Facilitate parliamentary oversight of civilian harm, including that resulting from Special Forces operations, for example, through regular reporting requirements, dedicated oversight bodies, and expanded access to classified briefings, where appropriate.
- 3 Consider repealing the Overseas Operations (Service Personnel and Veterans) Act 2021 or, alternatively, amend it to enable civil litigation or criminal prosecution of historic cases where there are credible allegations of violations of international law.
- 4 Establish a statutory civilian harm redress scheme for civilians who have been subject to harm in UK military operations overseas that enables access to holistic reparation, including restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition, and does not place high procedural burdens on victims.

To the UK MoD:

- 1 Ensure that the forthcoming baseline review of the UK's approach to human security includes a focus on CHMR, drawing lessons from civilian harm incidents in recent UK military engagements and clarifying the relevance of CHMR in LSCOs.
- 2 Undertake a comprehensive assessment and systemic evaluation of the UK's current approach to CHMR and its evolution in consultation with all relevant stakeholders, including civil society, which maps policies, institutional roles, data practices and operational challenges across the CHMR spectrum, and which could serve to identify gaps and best practices, and set measurable benchmarks to guide future reforms.
- 3 In line with emerging best practice, establish a dedicated institutional policy framework that embeds CHMR at all levels across training, planning and command structures, across the entire spectrum of operations, including LSCOs, with clarity on the methodologies that will be used to track, assess, investigate and respond to allegations of civilian harm.

- 4 Ensure senior leader governance and involvement to guide reforms and promote progress towards strengthened CHMR capabilities, and foster buy-in across command levels. Establish clear accountability structures for CHMR implementation.
- 5 Recognize parliament, NGOs, academia and international allies as vital agents in driving and sustaining CHMR reforms; institutionalize avenues for regular consultation with these stakeholders; and draw on their expertise in shaping robust, human-centred policy.
- 6 Establish a dedicated CHMR office to both proactively track and investigate individual allegations of harm and to be responsible for the management of data regarding civilian harm, including its root causes, and analyse trends and patterns across incidents to improve practices and reduce further harm.
- 7 Build a qualified and trained CHMR workforce, including by developing a formal certification or qualification process for targeteers, operational planners and analysts.
- 8 Ensure there is a functional system in place for affected civilians and third-party actors to report allegations of civilian harm and update those who submit allegations on the progress of their review. Establish and publish clear and transparent criteria for assessing the credibility of allegations.
- 9 Comprehensively document data on civilian casualties, disaggregating it by sex and age where feasible.
- 10 Invest in expanding pattern-of-life expertise and building dedicated CHMR-trained intelligence analysts to be embedded within operational headquarters and targeting cells. Ensure independent intelligence verification capabilities within coalition operations to prevent over-reliance on partner assessments.
- 11 Incorporate open-source intelligence, civil society and civilian-provided data into intelligence assessments, battle damage assessments, and civilian harm tracking and investigation systems.
- 12 In line with NATO standards, increase transparency through clear public reporting and communications, including timely public disclosure of civilian harm incidents. Public reports should include descriptions of the investigation process, evidence consulted, legal and factual findings, and recommendations for preventing future harm, as well as a detailed consideration of the possible provision of amends.
- 13 Fully integrate CHMR into LSCO planning, ensuring that the evidence and past lessons on the value of CHMR are integrated into military guidance and addressed in a public output, and that CHMR is formalized within the doctrinal framework for LSCOs.
- 14 Rehearse and train for specific operational dilemmas anticipated in LSCOs and endeavour to identify alternate tactics and capabilities to mitigate civilian harm, including by front-loading learning and adaptation.
- 15 Optimize membership and co-leadership of the International Contact Group on Civilian Harm Mitigation and Response by regularly engaging in technical exchanges and knowledge sharing.

Civilian harm mitigation in large-scale combat operations: Lessons for UK defence

In brief

In response to a more volatile world, UK defence has entered a new era, marked by increased spending and a focus on preparing for combat at scale. Yet, despite repeated affirmations of its commitment to the protection of civilians in armed conflict, the UK lacks an institutional framework for mitigating and responding to civilian harm from its own military operations.

As the UK prepares for potential conflict with its adversaries in the form of large-scale combat operations, the systemic evaluation of current civilian protection systems and the development of a comprehensive civilian harm mitigation and response (CHMR) framework is essential to:

- address the protection challenges posed by increasing urbanization and evolving methods and means of warfare that heighten risks to civilian populations;

- evaluate and ensure the UK's compliance with its obligations under international law; and
- reinforce the UK's commitment to civilian protection and display leadership in ethical military conduct.

This report evaluates the UK's current approach to civilian protection and considers how CHMR is conceptualized and implemented within UK military systems. Drawing on lessons from the United States and the Netherlands, it identifies emerging best practices and offers practical recommendations for the establishment of a UK CHMR framework applicable across all operational environments.

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