An increasing number of countries are now seeking drone technology, while evidence of the abusive practices such technology has already facilitated is mounting. States now have a clear and urgent role to play in collectively determining what types of drone use are or are not acceptable for the international community.\(^1\)

Certain current practices in the use of force by states globally have caused serious harm to individuals and communities.\(^2\) At the same time, these practices – and the narratives of justification and impact spun around them – have presented a serious challenge to the existing laws and norms that comprise a rules-based international system. This is especially true in the context of remote warfare and counterterrorism, where drones have been used for airstrikes in ways that have raised legal, ethical and moral concerns and caused death, injury, destruction, and a specific form of psychological impact. Left unaddressed, such uses risk becoming an entrenched practice.

These harms and risks have, to varying degrees, been highlighted by states as well as by multilateral institutions and their offices. In addition to reports by UN special rapporteurs\(^3\) and calls by states in forums including the Human Rights Council and the General Assembly\(^4\), the UN Secretary-General recently included drones in his Agenda for Disarmament under the theme of ‘disarmament that saves lives’, and committed to support states in discussions on common standards for their use.\(^5\)
The UN Institute for Disarmament Research (UNIDIR) has also strongly recommended the initiation of a transparent and inclusive multilateral process on this issue; the EU has urged the promotion of “a UN-based legal framework which strictly stipulates that the use of armed drones has to respect international humanitarian and human rights law”; and the AU’s African Commission on Human and People’s Rights recently called on its member state Niger to ensure respect for international law in the use of drones on its territory.

Developing an international conversation on what constitutes an acceptable role for drones in the use of force, and then engaging further in a process to elaborate standards and delimit state practice, would enable the specific risks of these technologies and the harms caused to be addressed. It would, at the same time, also provide states with the opportunity to strengthen support for those international norms that provide greater protection to communities.

**BACKGROUND & CURRENT PATTERNS OF USE**

Use of remotely operated aircraft (also known as unmanned aerial vehicles (UAVs) or ‘drones’) to undertake airstrikes has dramatically increased over the last decade and a half, as has the acquisition and deployment of drones for other roles in the use of force like surveillance.

At least 14 countries so far are thought to have carried out airstrikes using armed drones, at times assisted by other states that can, through communications, intelligence and surveillance infrastructure, help with the launching of attacks. Some 24 states are now believed to have acquired armed drone capabilities, and three times as many have acquired or developed unarmed drones for military or other use of force purposes such as intelligence gathering and surveillance of targets. The implications are wide-ranging, from immediate harms inflicted on communities to challenges to the legal boundaries of the use of force.

The technological features of certain drones – for example the ability to survey and gather unprecedented amounts of data (which itself has troubling rights-based implications for privacy), and to use force without physical risk to the attacker – have facilitated problematic practices that include the use of airstrikes outside areas of violent conflict for counterterrorism operations. They could also encourage greater resort to the use of force, particularly in areas characterised as ‘ungoverned spaces’ where some states seek to assert influence or respond to perceived threats through military action. The new and critical capabilities of drone technologies offer states an extended reach in their projection of force, enabling leaders to use explosive force against an adversary without the political risk associated with putting their own state’s military lives in peril. Thus the technology allows states, in certain situations – particularly, for example, where air defences are unsophisticated or non-existent – to sidestep traditional concerns around force protection.

The advent of drone technology has also raised questions around how states perceive, and protect, state sovereignty and territorial integrity. Initial research suggests that incursions by drones across borders may be viewed by some states as less serious than those by other military aircraft: drones are relatively expendable and, particularly when used for surveillance purposes, deniable. The technology may thus also allow states to sidestep or minimise the likelihood of international disapproval and accusations of infringing sovereignty that often accompany military action in other states. In the absence of internationally-agreed limits on the use of drones, state responses to drone incursions on their territory have varied and include: the escalation of diplomatic tensions; publicly emphasising the breach of state sovereignty; shooting down drones and/or retaliatory airstrikes; using signal jammers to disable drones; and largely ignoring or even tacitly allowing their continued operation. This level of ambiguity reveals an absence of shared expectations around drone use that only exacerbates the potential for miscalculation and (inadvertent) escalation of tensions between states.

Tied to their specific technological features are the particular ways in which drones have, to date, been used: ways that suggest some states are treating drones as somehow unbound by the accepted legal norms around use of deadly force, or as though new, more permissive rules apply to them. This is extremely problematic, and marks an attempt to pull key concepts that guide the recourse to and use of force – such as the requirement of ‘imminence’ of an attack as the basis for resort to self-defence, questions around where international humanitarian law or international human rights law should be applied or be predominant, or the distinction between civilians and combatants (or ‘fighters’) – away from generally accepted interpretations.

This treatment of drones links in part to underlying assumptions or overt assertions around their precision and accuracy, sometimes referred to as ‘surgical’. These assumptions or assertions often extend far beyond the actual technological capabilities of drone technologies to improve the identification of targets and distinction between these and their surroundings, and are increasingly being challenged by the operational data emerging from drone use, and reports of, for example, extensive misidentifications as well as ‘collateral damage’ as seen in the US drone programme.

It is also linked to an argument – sometimes made explicitly, often implicit – that the actions undertaken by certain non-state armed groups are creating the need for a new legal framework for ‘counterterrorism’, one that, for those few who promote such an idea, appears to exist somewhere between armed conflict and law enforcement.

These developments and the creation of ostensible grey areas in the law tend to enable the encroachment of violence associated with armed conflict into other contexts, something we have seen in certain state practice already. The technological development that armed drones represent means that airstrikes using them are now often taking place in novel contexts for this type of violence. Drones now allow airstrikes “in circumstances and with a frequency that other platforms would not permit.” At the same time, enduring secrecy around the deployment of such weaponry has hampered attempts at a candid examination of patterns of drone use: when, where, and by and against whom.

**PATTERNS OF HARM**

Yet a clear pattern of harm – from casualties and psychological harm to destruction of vital infrastructure across several countries, from Afghanistan and Pakistan to Somalia and Southern Yemen – has emerged. Survivors and affected communities tell of the deaths of family members...
including grandmothers and children, of economic hardships caused by the loss of parents and breadwinners, of the destruction of homes and infrastructure, and of the continued psychological impact. Nevertheless, the full extent of the impact of drone strikes on civilian populations remains relatively, and for some states conveniently, opaque. The identities of most of those killed by the activities of the U.S., for example, and even the precise numbers, remain unknown to the public and even the state – a level of knowledge that is unacceptable and an affront to the dignity of victims, whether it may be considered a function of the technology used or not.

Communities living under persistent surveillance and the threat of strikes have also reported psychosocial impacts including post-traumatic stress disorder (PTSD) and the detrimental interference with attempts to live everyday life. Communities have experienced constant fear and uncertainty, and been compelled to adjust their daily behaviour – including engagement in business activities, weddings and funerals, or buying groceries – to the unpredictable threat of armed drones. Reports document the stress and fear caused to communities by the audible and constant presence of drones, a stress that is compounded by a lack of understanding about who is targeted and why and a sense of powerlessness. Reported symptoms include constant anxiety, insomnia, depression, and anger and frustration towards their own and aggressor states. Such symptoms have been observed in children, who also face disruptions to their education either through injury to themselves or a loved one, or by being withdrawn from school by parents who are fearful for their safety. A U.S. journalist held in FATA by the Taliban described the noise as “a constant reminder of imminent death”, describing the experience as “hell on earth”.

These and other more visible harms are often compounded by the lack of opportunities for redress or assistance. The level and nature of harm also stands in marked contrast with public justifications that emphasise the ‘surgical’ even ‘humane’ precision of such attacks – and the contexts in which they are being carried out, which are not necessarily otherwise subject to these kinds of violence.

**CURRENT INTERNATIONAL ACTION AND DEBATE ON DRONES**

This pattern of harm to communities raises clear legal, ethical and moral concerns. But thus far, at the international level, insufficient attention has been paid by states to the use of drones as a development in weapons technology. Questions around the risks posed by drones – the particular technological features that could facilitate and risk harmful practices, the already-documented harms, and the broader challenges posed to established international norms that protect civilians – as well as how these harms and risks can be addressed, have been notably neglected.
THE WAY FORWARD

In the context of current harmful practices and attempts to normalise these by some states, as well as a recent focus on export and transfer rather than use, a process to discuss what role drones could reasonably play in the use of force, and what specific limits should be placed on their use is urgently needed.

Though drones are still a relatively marginal technology in the deployment of force globally, as more countries acquire drone technologies – and as the applications and implications develop beyond the use of large armed drones in counterterrorism operations – there is now an opportunity for the international community to elaborate clear standards for their use. Without concerted engagement by states to actively define and specify the limits of acceptable use, there is a danger that current harmful practices could be adopted by a broader range of states, or that new unacceptable applications could emerge. And, as developments in automation and other technologies with implications for weapons technologies progress, there is a danger that any permissive space in law and practice opened up around the current generation of drones may come to be populated by a much wider range of remotely operated technologies. A focus on drones could also make a wider contribution to strengthening international standards – at a time when much of the international rules-based system is being challenged.

An international process to define the limits of what is acceptable with respect to the possession and use of drones by states is urgently needed to, at a minimum, set clear and unequivocal standards that resist current attempts to lower the accepted threshold for legal and legitimate state use of force. A broader multilateral conversation on the role of drones in the use of force that goes beyond the general agreement that IHL and IHRL apply to articulate limits to the use of drones will be an important first step in preventing the erosion of existing norms and boundaries through their use, and to prevent arbitrary and unacceptable practices. States can begin this through making statements to relevant international forums, and the development and articulation of more detailed national policies and positions from a broad range of countries. Such a conversation should develop and employ a common language around the problem, the uses that should be stigmatised, and the threat that inaction poses to civilian populations as well as the international rule of law, peace and security.

It should also be the starting point for a more comprehensive and formal process to elaborate international standards that seek to mitigate the risks posed and respond to the harms caused by drone technologies. International processes to address the challenges posed by particular weapons systems can take different forms. Groups of states willing to take a principled approach to creating change can undertake processes to help build stigma against unacceptable activities, for example. Forums also exist within the UN system for consensus negotiation on ways forward. The end results of such processes are similarly diverse, and may range from legal prohibitions, through politically binding codes to conduct, to political declarations that can serve broader purposes.

Inevitably, the end result will hinge on what invested states identify as desirable, realistic and feasible. For drones, a nuanced approach is needed. This should go beyond calls for transparency and accountability to focus on the protection of people and their rights. It should encompass
the harm to communities that has resulted from the use of armed drones and how the rights of affected communities can be addressed, as well as the features of the systems that could facilitate problematic practices, how these implications can be contained, and how limits on use could be described and defined. An end result could contain commitments on policy and practice in key areas of concern such as the scope of military use and surveillance; responding to the rights of victims and the recording of casualties; and transparency, accountability and oversight in order to help mitigate the risks of unacceptable practices and lowered thresholds for the use of force.

CONCLUSION

Restatements of commitments to the law and persistent pressure on certain states has thus far not succeeded in ending attempts to institution- alise and entrench drone use practices that threaten to obfuscate and weaken the international system. The attempted creation of an ambiguous and permissive legal, moral and political space has, in part, been both driven and supported by the development of drone technology. This has much broader implications for the control of violence internationally, as well as for democratic control and oversight, and the rights of victims and their communities.

Current unacceptable practices risk becoming normalised in the absence of clearly defined alternatives or limits. Yet there are clear pathways for states to respond – both within and outwith the structures of the UN. By siphoning off the issues of export controls and of accountability – already the subject of considerable attention – and by taking as a starting point the harm current drone use is causing to communities, states can focus on clearly articulating the role they see for drones in the use of force and, crucially, the specific limits that should be placed on their use. The results of the introduction of drone technologies in to the use of force are not inevitable – states still have a choice as to how they respond. After over a decade of inaction, and as more states acquire drone technologies, international action is urgently needed to address harm already caused, and to prevent unacceptable patterns of harm in the future.

ENDNOTES

1 This paper concentrates on the role of drones in the use of force. The many other applications of drone technologies from photography to agriculture are not considered here, and it is not considered that these would be affected by international agreement on the limits to the role of drones in the use of force


10 For a discussion of the current picture of global drone acquisition and manufacture, see PAX, ‘Unmanned Ambitions: Security implications of growing proliferation in emerging military drone markets,’ 2018 https://www.paxforpeace.nl/publications/all-publications/unmanned-ambitions


13 In February 2018, Israel shot down an Iranian-made RQ-170 in Northern Israel, and subsequently, in a notable escalation of Israel’s involvement in Syria, conducted airstrikes against Iranian assets in Syria who it believed had launched the drone. During these operations, one of its fighter jets was reportedly hit by a Syrian anti-aircraft missile. A Syrian drone which later entered Israeli airspace was also shot down, and followed with retaliatory strikes against Syrian armed forces. Pakistan has also in 2018 reported the shooting-down of an Iranian drone within its airspace.


This was a frequent metaphor used by the Obama administration in the context of US drone policy. See for example NPR, ‘John Brennan Delivers Speech On Drone Ethics,’ 2012 https://www.npr.org/2012/05/01/151778804/john-brennan-delivers-speech-on-drone-ethics?utm_source=npr.org&utm_medium=referral&utm_campaign=Article36


A report by Reprieve showed, for example, that some of the men reported as killed in drone strikes have in fact been reportedly killed multiple times, with reports indicating that each drone strike target ‘died’ on average over three times, with some ‘killed’ as many as six or seven times. This raises questions around not only misidentification in both strikes and the reported deaths incurred. Reprieve, ‘You never die twice: multiple kills in the US drone program’, November 2014, https://bit.ly/2xnDc4E

For a detailed analysis of international law and practice in relation to terrorism and counter-terrorism see Helen Duffy, The ‘War on Terror’ and the Framework of International Law, Cambridge University Press 2015.

Larry Lewis, Rethinking the Drone War, p42.

Investigations and documentation, including by UN special rapporteurs, has shown over the years that some use of drones to conduct airstrikes has caused harm in communities, including casualties, the destruction of property, and particular psychological impacts for those living under drones. See ‘The Humanitarian Impact of Drones’ at https://bit.ly/2jg74su

See, for example, “Death by Drone: Civilian harm caused by U.S. targeted killings in Yemen”, Open Society Justice Initiative, 2015.

The US Director of National Intelligence (ONI) has said noted “the inherent limitations on the ability to determine the precise number of combatant and non-combatant deaths given the non-permissive environments in which these strikes often occur”: https://bit.ly/29J474k

Drone technology has allowed certain states to extend their use of lethal force to areas which have historically been difficult to reach or even, at times, considered impenetrable for traditional military forces.


One of the most comprehensive studies, ‘Living Under Drones’, by Stanford Law School’s International Human Rights and Conflict Resolution Clinic and NYU School of Law’s Global Justice Clinic documents the extensive mental health impacts of drones https://stanford.io/201G0hB

For reports by the Special Rapporteurs on extrajudicial executions, and counter-terrorism and human rights see, for example, A/HRC/25/59 and http://unsrct-drones.com, and A/69/265. For the Human Rights Council’s resolution on drones in 2014, put forward by Pakistan, see A/HRC/RES/25/22. Biennial resolutions on the protection of rights whilst countering terrorism (originating in Third Committee) have also urged states to uphold the law when using remotely piloted aircraft, most recently in 2016 (A/RES/70/148).

See Joint Declaration for the Export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAVs), http://bit.ly/2hG6Yx7


See PAX ‘Unmanned Ambitions: Security implications of growing proliferation in emerging military drone markets’

For more discussion on this, see Article 36, ‘Approaches to Technology and Policy: International Standards and Addressing Armed Drones,’ 2018 http://www.article36.org/publications/