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The Implications of Emerging Lethal Autonomous Weapons Systems for International Peace and Security

Centre for the Analysis of International Conflicts (CARC), University of Kent

Ingvild Bode & Hendrik Huelss

Email: i.b.bode@kent.ac.uk; h.c.huelss@kent.ac.uk

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This policy brief speaks to the military effects of lethal autonomous weapons systems raised in the GGE chairperson's food-for-thought paper (CCW/GGE1/2017/WP1). In particular, it addresses the following questions: *Could the potential deployment of LAWS lower the threshold of use of force? Could it enhance asymmetric deployment of force or covert use of force?*

The brief provides answers to these questions in two steps. First, it argues that international legal regulations governing the use of force, centred around the general prohibition of the use-of force, have played a significant role in maintaining international peace and security in the UN-Charter era. This role is based both on states' shared sense of being bound by these rules and the certainty of expectations they thus provide. Second, the development of LAWS threatens this certainty of expectations because they are likely to introduce more "grey areas" in how states interpret international law.

We argue that LAWS will follow into the "footsteps" of evolving state practice associated with unmanned aerial vehicles (UAVs) or drones. Over the past ten years, state justifications surrounding the use of UAVs have significantly increased the number of "grey areas" (that is contested areas) in international law on the use-of-force by introducing competing readings of such vital standards as attribution, imminence, and necessity. This produces uncertainty in evaluating state conduct, lowers thresholds towards using military force, and hollows out established international legal standards. In short, it threatens the legal-normative order sustaining international peace and security.

Regulations governing the use of force and their effects on international peace and security

A dense network of international regulations governs the use of force. At the heart of this system are provisions in the UN Charter, chief among them the general prohibition on the use of force. This signifies an important commitment of states to refrain from the threat or the use of force in their conduct with each other. The only two exceptions to this prohibition are situations of self-defence and operations mandated by the UN Security Council. While these legal stipulations are imperfect in the sense of not having been consistently observed, they have contributed to significantly reducing the number of inter-state wars after 1945. International law has this effect on international peace and security because it reduces uncertainty when it comes to state behaviour. It provides a framework for state conduct that states have agreed upon voluntarily, and offers a reliable set of clear and specified rules for states to comply with. This provides common standards regulating the use of force, and above all emphasizes that force should only ever be used as a last resort.

Emerging grey areas in the law on the use of force and lowering thresholds

This comparatively clear international legal system has come under strain with the emergence of threats posed by non-state actors. With the emergence of terrorist groups operating across national borders, states sought to apply use of force standards in different, and often more permissible, ways. In particular, this concerns the use of UAVs for the targeted killing of terrorist suspects. Here, states have explicitly and implicitly challenged at least two key standards of international law governing the use of force:

The attribution standard: This affirms that the use of force against terrorist suspects is only legal if there is a clear link of support or sponsorship between the host state and the terrorist suspects. Yet, states have used force against Al Qaeda suspects and the IS on the territory of states that are clearly not linked to the activity of these groups. This is a significant departure from established understandings. Yet, these new interpretations are not uniform. Some states, for example, argue that the use of force is permissible if the “host” state is “unwilling or unable” to counter the threat posed by terrorist actors themselves. But this phrase is by no means consistently used and points to an inherently speculative and subjective mode of assessment.

The imminence standard in the context of self-defence: The UN Charter specifically allows states to use force in self-defence “after an armed attack has occurred” and states have likewise supported self-defence in case of *imminent* armed attacks. In the context

of using military force against terrorist suspects, imminence has been largely separated from its common temporal meaning. Instead, it has been conflated with a group identity of terrorist suspects. In other words, all “members” of terrorist groups count as imminent threats because the modus operandi of terrorist groups is constantly planning attacks. This reading completely de-links imminence (or necessity, another vital principle regulating the use of force) from a case-by-case assessment. Even a case-by-case assessment could, in any case, not be openly contested due to secrecy and the lack of transparency surrounding current targeting practice.

These different readings cannot be captured in the language of international law because they are neither written down nor part of customary international law (there is neither consistent state practice nor a consistently stated belief in the applicability of a particular rule). States have produced justifications for their conduct, typically based on broad interpretations of international law. Taken together, this has led to the emergence of a series of **grey areas** in the international law governing the use of force, putting the framework under a great deal of pressure. There is now considerably less agreement among states about the precise legal content of core standards such as attribution and imminence than 10 years ago. What is clear is that these grey areas lower thresholds towards using force. A lack of clarity results in a highly permissive environment for using force: justifications for its use can more “easily” be found within these increasingly elastic, contested areas of international law.

LAWS in the context of existing legal grey areas

These developments set the parameters in which the current discussion on LAWS takes place. This has four effects that are of interest to the debate on LAWS at the CCW:

First, the emergence of LAWS advances the technological sophistication of UAVs. Considering LAWS along the spectrum of autonomy, systems to be used in air are among the most sophisticated category of LAWS in development. These resemble current UAVs closely but come with more refined autonomous capabilities. **It is therefore likely that such systems will be used in similar ways as UAVs.** They will hence follow into the footsteps of continuing and expanding current use of force practices that have already made the use of force more commonplace. This has significant effects on the general prohibition of the use of force as well as the wider use of force standards it stands for. In a system that makes the use of force more normal and more likely, international peace and security is threatened.

Second, perceived advantages associated with LAWS could exacerbate this development and make the resort to the use of force even more probable. Like UAVs,

using LAWS carries no risk for military personnel. However, unlike UAVs whose communication links make them slow to respond to attacks and at risk of jamming, LAWS could “think” for themselves on the battlefield, rendering them more effective than UAVs could ever be. These effectiveness considerations can become a push factor for deploying LAWS rather than UAVs in counter-terrorist operations. We can therefore assume that use of force thresholds will be further lowered by LAWS in building and expanding on current legal grey areas in their usage. This will make it increasingly difficult to use legal standards in concrete terms and threatens the very tenets of the international legal system.

Third, we have seen how the use of UAVs has shaped and continues to shape the interpretation of legal regulations on the use of force. When states deploy weapons systems with increasing levels of autonomy, this will lead to new considerations about what are “appropriate” readings of current legal standards and, more generally, novel standards of when and how using force is “appropriate”. As we have seen in the context of UAVs, these standards may turn into *de facto* norms evolving outside of legal frameworks and formal processes of norm-setting. **The various potential deployments of LAWS therefore become important sites where *de facto* norms governing the use of force emerge.** Previous weapons technologies, such as submarines, demonstrate this trend. Once established, these *de facto* norms decrease the likelihood of banning LAWS comprehensively but also erode the global normative order by permissively reinterpreting use of force rules.

Fourth, these arguments are of growing relevance when considering the increasing scope of autonomy LAWS may have. **If we assume that more and more functions related to selecting and engaging potential targets for the use of force will be delegated to such systems, this renders decision-making on the use of force increasingly opaque.** Already, target acquisition for UAVs relies heavily on signals generated by intelligence readings based on algorithms scanning masses of data that is not accessible to human reasoning. Autonomous machine solutions are used to sift through the vast amounts of sensory data gathered by UAVs and thereby set the parameters for what military actors do. While humans remain in control of the force release decision, the impenetrable process of generating the data for it makes it hard for experts and decision-makers to question the output. Until the international community agrees on a consensus definition of LAWS, autonomy and/or the degree of acceptable human supervisory control, these developments will continue to go unchallenged.