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Abstract Legal Issues in the Development of Autonomous Weapons

Unlike drones, which are often mistaken for autonomous weapons, truly autonomous weapons (AW's) present a very real challenge for IHL. They will require a fundamental rethinking of how IHL regulates the approval of weapons as well as a much more realistic assessment of actual IHL compliance.

Before examining issues raised by AW's it is necessary to understand why calls for a total ban are unlikely to be effective. This is because the military understanding of the combat process (illustrated by the OODA loop) places a premium on the speed with which information is collected, processed and acted upon on the battlefield. Because AW's can complete all of these tasks more quickly than human beings, their value to the military at all levels of (tactical, operational and strategic) is so great that no major national military will agree to give up their benefits.

This presentation will then address two legal issues. First, what must an AW demonstrate to pass a weapons review that is required of all new weapons under IHL? Generally AW's are not new weapons, but rather represent a new way of delivering existing weapons such as bullets, grenades or bombs. As a result they are not likely to be barred for causing unnecessary suffering. But they will have to demonstrate that they are capable of complying with the core principles of distinction and proportionality. What is unclear is what baseline performance is necessary to demonstrate compliance with these principles. How we think about developing that baseline will probably require a much more candid assessment of current IHL compliance than most theorists are willing to undertake. Once such an assessment is done, it will become clear that AW's *may* be able to demonstrate the capacity to comply with IHL even in some of the more demanding combat environments.

The second issue is how should IHL handle accountability for IHL violations by autonomous weapons? As other commentators have already demonstrated, this is a complex issue that is not easily addressed by the current concepts of legal liability in IHL. After discussing some of the difficulties with developing an accountability regime for AW's this section will conclude with a suggestion that a modified understanding of the command responsibility doctrine is the most likely form that accountability for AW's will take.