The Problem

Over the past decade, the expanded use of unmanned armed vehicles has dramatically changed warfare, bringing new humanitarian and legal challenges. Now rapid advances in technology are resulting in efforts to develop fully autonomous weapons. These robotic weapons would be able to choose and fire on targets on their own, without any human intervention. This capability would pose a fundamental challenge to the protection of civilians and to compliance with international human rights and humanitarian law.

Several nations with high-tech militaries, particularly the United States, China, Israel, South Korea, Russia, and the United Kingdom are moving toward systems that would give greater combat autonomy to machines. If one or more chooses to deploy fully autonomous weapons, a large step beyond remote-controlled armed drones, others may feel compelled to abandon policies of restraint, leading to a robotic arms race. Agreement is needed now to establish controls on these weapons before investments, technological momentum, and new military doctrine make it difficult to change course.

Allowing life or death decisions to be made by machines crosses a fundamental moral line. Autonomous robots would lack human judgment and the ability to understand context. These qualities are necessary to make complex ethical choices on a dynamic battlefield, to distinguish adequately between soldiers and civilians, and to evaluate the proportionality of an attack. As a result, fully autonomous weapons would not meet the requirements of the laws of war.

Replacing human troops with machines could make the decision to go to war easier, which would shift the burden of armed conflict further onto civilians. The use of fully autonomous weapons would create an accountability gap as there is no clarity on who would be legally responsible for a robot’s actions: the commander, programmer, manufacturer, or robot itself? Without accountability, these parties would have less incentive to ensure robots did not endanger civilians and victims would be left unsatisfied that someone was punished for the harm they experienced.

For more information see the Bibliography as well as:

» Losing Humanity: The case against Killer Robots report by Human Rights Watch, 19 Nov. 2012

» Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns, 9 Apr. 2013