Report of the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns, 9 April 2013, A/HRC/23/47

Synopsis by the Campaign to Stop Killer Robots
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The UN Special Rapporteur on extrajudicial, summary or arbitrary executions for the Office of the High Commissioner for Human Rights, Professor Christof Heyns, is due to deliver his report on lethal autonomous robotics to the second session of the Human Rights Council on May 29. The report is available at: http://bit.ly/15SlX8W

The Campaign to Stop Killer Robots welcomes this report and urges all countries to consider and elaborate their policy on fully autonomous weapons, particularly with respect to ethical, legal, policy, technical, and other concerns that have been raised in the report. It urges all countries to welcome the report and endorse and implement its recommendations, including the call for a moratorium on lethal autonomous robotics.

This document summarizes and supports the report's major findings and recommendations.

State of Technology

While noting a lack of transparency on research and development, the report acknowledges that "robots with full lethal autonomy have not yet been deployed." It cautions that "military documents of a number of States describe air, ground and marine robotic weapons development programmes at various stages of autonomy" with "[l]arge amounts of money" allocated. The report lists a number of robotic systems with various degrees of autonomy and lethality that are currently in use by the US, Israel, South Korea, and the UK.

The report acknowledges the "importance of the free pursuit of scientific study is a powerful disincentive to regulate research and development in this area" but warns of "technology creep" over time. It describes the trend towards lethal autonomous robotics as "part of the broader automization of warfare and of the world in general."

The report notes there may be military and other advantages of lethal autonomous robotics over humans, including their swift reaction time, preserving soldiers' lives, and potentially allowing fewer military personnel to do more. It cites human limitations that these weapon could overcome as "they would not act put of revenge, panic, anger, spite, prejudice, or fear" and "would not cause intentional suffering on civilian populations … through torture" and rape.

Chief Concerns

The UN report describes numerous limitations of lethal autonomous robotics compared to humans, not least their "limited abilities to make qualitative assessments that are often called for when dealing with human life."

Chief among the concerns identified in the UN report are that:

- Robots would likely not possess qualities necessary for compliance with international humanitarian law, including "human judgment, common sense, appreciation of the larger picture, understanding of the intentions behind people's actions, and understanding of values and anticipation of the direction in which events are unfolding."

- Because "[r]obots have no moral agency" the UN report states they "cannot be held responsible in any recognizable way" for their actions, which raises the question of "who bears the responsibility?" The UN report lists software programmers and manufacturers, military commanders and subordinates, as well as political leaders among those who could be accountable. It does not conclusively identify who should be legally responsible for the actions of a lethal autonomous robotic weapon and states "[i]f the nature of a weapon renders responsibility for its consequences impossible, its use should be considered unethical and unlawful as an abhorrent weapon."

- Lethal autonomous robotics may "lower the threshold for States for going to war or otherwise using lethal force." The UN report notes that the use of lethal autonomous robotics raises the question of "whether one can still talk about 'war' – as opposed to one-sided killing – where one party carries no existential risk, and bears no cost beyond the economic."

- If permitted, there would likely be a proliferation of lethal autonomous robotic systems as states transfer and sell them. An "arms race … could ensue when only certain actors have weapons technology."

- Lethal autonomous robotics could possibly be used in "a domestic law enforcement situation" and/or "used by States to suppress domestic enemies and to terrorize the population at large." Lethal autonomous robotics could be "intercepted and used by non-State actors, such as criminal cartels or private individual."

- Lethal autonomous robotics are vulnerable to "appropriation, as well as hacking and spoofing" and "[m]alfunctions could occur" with unlikely technical errors that could still be "catastrophic."

Fundamentally, the UN report describes a potential "vacuum of moral responsibility" as it raises the central question of "whether it is not inherently wrong to let autonomous machines decide who and when to kill." It asks if the deployment of lethal autonomous robotics "against anyone, including enemy fighters, is in principle acceptable, because it entails non-human entities making the determination to use lethal force." The UN report describes this as an "overriding consideration" and states that "if the answer is negative, no other consideration can justify the deployment of

[lethal autonomous robotics], no matter the level of technical competence at which they operate." According to the UN report, "[m]achiness lack morality and mortality, and should as a result not have life and death powers over humans."

Recommendations

The UN report finds that new international law on lethal autonomous robotic weapons is urgently needed to reinforce the international legal framework "against the pressure of the future … while it is still possible." The UN report notes "[T]here is wide acceptance that caution and some form of control of States's use of this technology are needed, over and above the general standards already posed by international law."

The 2012 Department of Defense directive by the United States is described in the report as "an important process of self-regulation" by "imposing a form of moratorium" on development and fielding of lethal autonomous robotics unless certain procedures are followed. The UN report commends this "important initiative" and note that it "may open up opportunities for mobilizing international support for national moratoria."

The UN report contains specific recommendations for the United Nations, states, regional and other intergovernmental organizations, NGOs and the ICRC, and developers of robotic systems.

For states, the top-line recommendation calls on states to place a "national moratorium" on at least the testing, production, assembly, transfer, acquisition, deployment, and use of lethal autonomous robotics. It also recommends that states declare their commitment to abide by international law in all activities surrounding robotic weapons, including all stages of development. The UN report recommends that states commit to being "as transparent as possible about internal weapons review processes." Finally, it urges states to participate in international debate on the issue of lethal autonomous robotics.

For the United Nations, the top-line recommendation is that the Human Rights Council "call on all States to declare and implement national moratoria on at least the testing, production, assembly, transfer, acquisition, deployment, and use" of lethal autonomous robotics. The UN report invites the High Commissioner for Human Rights to convene "as a matter of priority" a high-level panel of experts to look at lethal autonomous robotics and report within a year to "propose a framework to enable the international community to address effectively the legal and policy issues." Finally, it urges all relevant UN agencies and bodies to "[e]mphasize the need for full transparency" in the development of robotic weapons systems.

For regional and other intergovernmental organizations the recommendation is to support the proposals outlined for the UN and for states, in particular the call for a moratorium.

For NGOs and the ICRC, the UN report recommends that these actors "raise awareness" about lethal autonomous robotics and "[a]ssist and engage with States" on this issue, including by urging transparency and supporting the hi-level panel of experts.

Finally, the UN report recommends that developers of robotic systems “establish a code or codes of conduct, ethics, and/or practice defining responsible behavior” with respect to lethal autonomous robotics.

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