



# General Assembly

Distr.: General  
28 May 2013

English only

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## Human Rights Council

### Twenty-third session

Agenda item 3

**Promotion and protection of all human rights,  
civil, political, economic, social and cultural rights,  
including the right to development**

### **Written statement\* submitted by Amnesty International, a non-governmental organization in special consultative status**

The Secretary-General has received the following written statement, which is circulated in accordance with Economic and Social Council resolution 1996/31.

[22 May 2013]

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\* This written statement is issued, unedited, in the language(s) received from the submitting non-governmental organization(s).

## **Moratorium on fully autonomous robotic weapons needed to allow the UN to consider fully their far-reaching implications and protect human rights**

Fully autonomous robotic weapons with potentially lethal effects or “lethal autonomous robotics” (LARs) that can by themselves select, attack, kill and wound human targets, doing so without human intervention once activated, raise extremely serious human rights concerns, threatening the right to life and potentially undermining other human rights.

Amnesty International foresees that the use of such weapons would result in unlawful killings and injuries both in situations of armed conflict, where international humanitarian law(IHL) and international human rights law apply, and in law enforcement operations, where human rights law applies to the exclusion of IHL.

Although it is almost impossible to determine how close states and companies are to producing fully autonomous robotic weapons that will be used against human beings in conflict or law enforcement situations, some scientists believe that such weapons could now be developed quickly and deployed by states and even non-state actors before the international community has had a chance to fully consider and address their far-reaching implications.

Weapon systems based on LARs technology are reportedly already deployed by a few states to detect and destroy incoming missiles, rockets and shells rather than targeting human beings. Some developers claim their weapons have some degree of human control and are therefore semi-autonomous, but the exact nature of each and every weapon system and the consequences of its use are unclear.

The development of LARs weapons technology in different countries is being carried out to a considerable degree in secret, so that informed discussion by the international community of the implications and appropriate means of control of such technology and weapons is made very difficult.

Another key problem is that the technology involved in developing robotic weapons for military and law enforcement operations is intertwined with technology used in the development of purely civilian applications. Specific controls on the development, transfer and use of other dual use technologies have been agreed by states, but in the case of LARs weapons technology states have not yet agreed specific laws and mechanisms to exercise such control.

On 9 April 2013 the UN Special Rapporteur on extra-judicial, summary or arbitrary executions, Professor Christof Heynes, published a report elaborating on the danger that LARs could “almost unnoticeably result in a situation which presents grave dangers to core human values and to the international security system.”<sup>1</sup> The Rapporteur is calling on States to impose national moratoria on certain activities related to LARs until effective systems are established to regulate the technology. The previous UN Special Rapporteur on extra-judicial, summary or arbitrary executions, Philip Alston, had also examined LARs in a report published in 2010 (A/65/321) calling *inter alia* for the convening of an expert group to consider robotic technology and compliance with international human rights and humanitarian law.

Serious questions arise regarding the incompatible nature of LARs weapons for use against human targets with the existing obligations of states under international law regarding the

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<sup>1</sup> A/HRC/23/47, at paragraph 49.

use of force and respect for human rights. While robots may have certain technical capabilities that are superior to those of humans, unlike trained human personnel, robots cannot by themselves distinguish between legal or illegal orders, or make decisions regarding the use of proportionate force during the changing course of armed conflict or law enforcement operations. Robots cannot exercise compassion or anticipate the humanitarian or human rights consequences of their action. For example, it would be difficult for robots to establish whether someone is wounded and *hors de combat*, and also whether soldiers are in the process of surrendering.

Professor Heyns notes in his report that: “While robots are especially effective at dealing with quantitative issues, they have limited abilities to make the qualitative assessments that are often called for when dealing with human life. Machine calculations are rendered difficult by some of the contradictions often underlying battlefield choices. A further concern relates to the ability of robots to distinguish legal from illegal orders.”<sup>2</sup>

The rules of distinction, proportionality and precaution in international humanitarian law seek to minimize the impact of armed conflict on civilians, by prohibiting the targeting of civilians, indiscriminate and disproportionate attacks and requiring that all feasible precautions be taken to spare civilian casualties. In situations where the use of LARs weapons cannot reliably distinguish between combatants or other belligerents and civilians, their use will be unlawful. Similarly, for an attack to comply with the rule of proportionality to minimize human casualties, it needs to be assessed on a case-by-case basis before and during the operation, depending on the specific context and considering the totality of the changing circumstances, a set of tasks that requires human judgment even if aided by technology.

Professor Heyns in his report notes: “Their most likely use during armed conflict is in some form of collaboration with humans, although they would still be autonomous in their own functions.”<sup>3</sup> He also points to possible uses in law enforcement, internal security, counter-terrorist operations and suppression of political opponents, creating risks of the arbitrary deprivation of life and of excessive use of force. “The question should therefore be asked to what extent the existing legal framework is sufficient to regulate this scenario, as well as the scenario whereby LARs are deployed without any human counterpart. Based on current experiences of UCAVs [drones], there is reason to believe that States will *inter alia* seek to use LARs for targeting killing.”<sup>4</sup>

This has grave implications for human rights as well as for accountability for violations of international law. “Robots have no moral agency and as a result cannot be held responsible in any recognizable way if they cause deprivation of life that would normally require accountability if humans had made the decisions. Who, then, is to bear the responsibility?” asks Professor Heyns.<sup>5</sup>

Liability under command responsibility requires that the commander knew or should have known that a subordinate individual planned to commit a crime yet the commander failed to take action to prevent it or did not punish the perpetrator after the fact. If the nature of a weapon renders responsibility for its consequences impossible, its use should be considered unethical and unlawful.

LARs technology may malfunction and is vulnerable to hacking and copying. A race to develop, obtain and deploy LARs weaponry could lead to its rapid spread with unforeseen

<sup>2</sup> Ibid at paragraph 55.

<sup>3</sup> Ibid at paragraph 47.

<sup>4</sup> Ibid at paragraph 47.

<sup>5</sup> Ibid at paragraph 76.

negative consequences for the right to life. Self-regulation by each state by itself would not be sufficient to prevent these problems.

Due to the serious danger they pose to the right to life and to other human rights, Amnesty International calls on all governments to publicly support the call by the UN Special Rapporteur on extrajudicial, summary or arbitrary executions to impose a moratorium on the development, transfer, deployment and use of fully autonomous robotic weapons. This moratorium should remain in place at least until full consideration can be given in the appropriate forum to the outcome of a UN High Level Panel of experts convened by the UN Secretary General to examine in detail the ethical, legal, human rights, policy, technical, and other concerns regarding LARs that have been raised in the Special Rapporteur's report to the twenty-third session of the Human Rights Council.

Given the potentially grave consequences of such technology, the onus should be on states that wish to develop and deploy LARs weapons to first demonstrate beyond reasonable doubt that specific uses of each type of weapon can be fully lawful and in particular consistent with international human rights and humanitarian law in operational circumstances.

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