

Written contribution from International Committee for Robot Arms Control to the CCW GGE on LAWS

The International Committee for Robot Arms Control (ICRAC), an international network of concerned scientists, scholars and tech experts, has been actively taking part in the LAWS deliberations within the CCW since the beginning.

In ICRAC's view, existing international law is not sufficient, and by extension, the utility of legal reviews of new weapons is limited. New law is urgently needed to address the range of issues raised by autonomous weapons.

The CCW discussion must now move to negotiating a legal instrument that will provide an adequate normative framework to address the issues raised by autonomy in weapons systems. In our view, the key elements of such a legal instrument would be that:

- It responds to a broad scope of weapons technologies that apply force on the basis of target profiles triggered by sensor input.
- It prohibits systems that directly target human beings.
- It applies positive obligations to ensure that meaningful human control and human responsibility is retained in all phases of the design, development, deployment and use of weapons systems. These obligations should apply to each individual use of force.
- It ensures that weapons systems which are not considered to require a human decision for each use of force (such as anti-materiel defensive systems) will nevertheless be under meaningful human control.

It is ICRAC's opinion that the CCW debate no longer requires a search for "a definition of LAWS". Rather, discussions should focus on meaningful human control through human-machine interaction establishing who or what - human or machine - ought to perform which function, when and where in the decision-making loop for every application of force. In short, the CCW should proceed with an approach focused on the critical functions of the targeting cycle. This *functional perspective* is already an emerging consensus position amongst many States Parties, academic advisory bodies, and the International Committee of the Red Cross (ICRC).

We wholeheartedly welcome the ICRC's new position on the issue of weapons with autonomy in the critical functions of the targeting cycle. We believe this to be a game changer for the process underway in this forum.

ICRAC re-emphasises the following points for consideration:

- Autonomous weapons systems, even if targeting only military objects, can be unpredictable for several reasons. This can occur, for example, when they encounter unanticipated circumstances in conflict or when they interact with enemy weapons systems or with counter weapons. Since enemies will not reveal the operational behaviour of their weapons, any such interaction will be intrinsically unpredictable and therefore compliance with IHL cannot be guaranteed.

- There are global and regional strategic instability risks of allowing “fighting at machine speed”, including arms races and unintended escalations. We agree with the ICRC suggestion to limit the scale of use of weapon autonomy in cases where it is not expressly prohibited. Beyond the time and space restrictions on the operation of individual weapons, we should be concerned with aggregate effects. The speed and scale of mass deployments of autonomous weapons systems would result in the degradation of human supervisory control and increase the risk of excessive harm to civilians and civilian objects.
- While the CCW is primarily concerned with international armed conflict, we should be mindful that autonomous weapons systems could also be used in domestic law enforcement and border control. In establishing new law, even stronger norms should be made legally binding on their use in these applications.
- Beyond prohibiting direct targeting of humans, there remain troubling ethical implications of delegating potentially lethal decisions to machines. ICRAC holds that even the automated targeting of military objects raises questions of moral responsibility due to the presence of humans within the vehicles and buildings deemed military objects.
- While it is important to fully understand the issues and move forward with the proper framework for structuring and articulating new law to regulate autonomous weapons, the threats they pose continue to grow at a rapid pace. The United Nations recently reported on the use of loitering munitions that may have autonomously targeted humans in a recent conflict. Artificial intelligence research continues, with arms manufacturers employing questionable techniques (such as computer vision) in weapons systems, for the purpose of target identification and behavioral analysis.

It is time now for the CCW to leave behind the endless debates about “automation” versus “autonomy,” and speculations about the capabilities of certain technologies. The CCW discussion by now has advanced enough to produce a differentiated, context-dependent analysis of norms in human-machine interaction for weapons systems and apply this in drafting a new legally binding instrument. We hope that the High Contracting Parties will rise to the challenge to move this discussion forward.

In conclusion, ICRAC considers it vital that the CCW moves to the negotiation of an international legal instrument that can establish norms of appropriate behaviour and drive operational approaches in a way that allows us to retain meaningful human control and protect our shared humanity.