



CCW REPORT

Civil society perspectives on the CCW meeting of experts
on autonomous weapon systems
11-15 April 2016



Reaching Critical Will

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The CCW Report is produced by the Reaching Critical Will programme of the Women's International League for Peace and Freedom (WILPF), a member of the Campaign to Stop Killer Robots.

EDITORIAL: THIRD UN MEETING ON AUTONOMOUS WEAPONS SET TO BEGIN AMIDST RISING GLOBAL MILITARY SPENDING

Ray Acheson | Reaching Critical Will of WILPF

The Convention on Certain Conventional Weapons (CCW) begins its third dedicated meeting on lethal autonomous weapon systems (LAWS) on Monday. Since 2014, government officials, international organisations, civil society, and academics have gathered in Geneva to consider crucial issues related to the technical, legal, moral, and ethical dimensions of weapons that kill without meaningful human control. There is a lot at stake in these discussions, and after two years of experts meetings, states need to start taking concrete action on this issue.

This meeting begins just one week after the Stockholm International Peace Research Institute (SIPRI) revealed its findings that global military spending has increased by 1% from 2014 to 2015. It marks the first time that military expenditure has risen since 2011 and is in part due to ongoing conflicts. Some states are already investing in activities aimed at research and development of LAWS. Delegations participating in this week's meeting, which takes place during the 2016 Global Days of Action on Military Spending, should consider what these funds could be spent on instead.

The meeting will seek to cover a lot of ground. Led by presentations by a range of experts, it will begin by "mapping autonomy," looking at current developments and issues of transparency. It will also begin discussions toward a working definition of LAWS, examining critical functions, autonomy, and predictability. It will then consider challenges to international humanitarian law; issues of human rights and ethics; and security issues, including destabilisation, proliferation, and military risks.

Such an agenda should provide states with the scope to set out more clearly their positions and objectives. As a member of the Campaign to Stop Killer Robots, WILPF encourages states to:

- Affirm that meaningful human control must be exercised over the selection of targets and over every individual attack or use of force;
- Support the development of an international prohibition of weapon systems operating without meaningful human control; and
- Call for the CCW Review Conference in December this year to establish a Group of Governmental Experts to begin such negotiations.

Reaching Critical Will, the disarmament programme of WILPF, will provide full coverage of the CCW proceedings through this daily report. It will provide analysis and advocacy, highlights from the expert discussions, and reports on side events. You can subscribe to receive this report by email by going to www.reachingcriticalwill.org. On that website, you can also find statements, documents, archived CCW Reports, and more information.

You can also follow the discussions on Twitter at #CCWUN, #killer-robots, @RCW_, and @BanKillerRobots, among others. For information about the Campaign to Stop Killer Robots, please see www.stopkillerrobots.org. •



CAMPAIGN TO STOP
KILLER ROBOTS



Credit: Campaign to Stop Killer Robots

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CALENDAR OF EVENTS

When	What	Where	Who
10:00-13:00	General debate	Conference Room XVIII	
13:15-14:45	The Weaponization of Increasingly Autonomous Technologies: Understanding Different Types of Risks	Conference Room XXIV	UNIDIR
15:00-18:00	Mapping autonomy	Conference Room XVIII	

HUMAN CONTROL AND AUTONOMOUS WEAPONS— NEW PAPERS BY ARTICLE 36

Thomas Nash and Elizabeth Minor | Article 36

Ahead of the latest round of international talks on autonomous weapons systems, scheduled to take place at the UN in Geneva from 11-15 April, Article 36 has circulated a series of papers providing input to these discussions. While it seems clear that human control over individual attacks will be central to any productive outcome from the current discussions on autonomous weapons, states have approached the predominant framing of **meaningful human control** with varying degrees of openness. However one describes the nature of the human control being exerted, it should be possible for states to set out what is the necessary control over the use of weapons systems and how this is ensured.

With the recognition that human beings are the agents to which international humanitarian law is addressed, a central question will be how the introduction of autonomy in the critical functions of weapons would challenge the structure of the law as it stands. Against this background, assertions that no new law is required on autonomous weapons—or that the concerns are best dealt with through national level reviews of weapons—merit close scrutiny.

Against this background, the four new briefing papers look at: key elements to consider regarding maintaining **meaningful human control** over individual attacks; the limitations of and questions raised by proposing **national legal reviews of weapons** as a response to the concerns raised by lethal autonomous weapons systems; and an **analysis of UK policy** on lethal autonomous weapons systems. In partnership with Dr. Heather Roff of Arizona State University, we are also publishing a paper on **meaningful human control, artificial intelligence, and autonomous weapons**. A summary of the four papers is provided below and they are available online at <http://www.article36.org/autonomous-weapons/ccw-papers-2016/>.

Meaningful Human Control, Artificial Intelligence and Autonomous Weapons

The concept of meaningful human control has emerged as one point of coalescence in international discussions. Primarily, it has been used to describe a threshold of human control that is considered necessary; however, the particulars of the concept have been left open so as to foster conversation and agreement. This paper, produced in partnership with Dr. Heather Roff of Arizona State University as part of a grant from the Future of Life Institute, offers a framework for considering meaningful human control, identifying key elements. The paper discusses how human control needs to be embedded through mechanisms operating before, during, and after use of technologies in conflict. It also addresses how meaningful human control must be applied over at-

tacks at the most basic tactical level of warfighting, rather than just the operational or strategic levels.

Key elements of meaningful human control

Drawing on material developed for the briefing above, this paper provides background for the expert presentation to the CCW by Richard Moyes scheduled for 12 April. The paper proposes that key elements for human control over technology are: predictable, reliable, and transparent technology; accurate information for the user on the outcome sought, operation, and function of technology, and the context of use; timely human action and a potential for timely intervention; and accountability to a certain standard. It notes that the development of autonomy in the critical functions of weapons would risk expanding the concept of “an attack” more and more broadly. The paper argues that without recognising a requirement for human control to be in some way substantial or meaningful, the existing legal framework leaves scope for human legal judgment to be diluted to the point of being meaningless.

Article 36 reviews and addressing lethal autonomous weapons systems

A number of states have suggested that the appropriate way to address concerns about autonomous weapons is to focus on national legal reviews of weapons. Attention to improving and widening the implementation of weapons reviews, and states’ sharing of their procedures is welcome and necessary. This paper provides an analysis suggesting that national reviews are, however, insufficient to deal with LAWS. It argues that multilateral agreement is essential in this area in order to provide clear boundaries for all states on technologies and practices that would fundamentally alter the use of force.

The United Kingdom and lethal autonomous weapons systems

Whilst asserting that its weapons will always be under human control, the UK has not provided an explanation of what would constitute such human control. At the same time, it has suggested a narrow and futuristic concept of LAWS that appears permissive towards the development of autonomous weapons systems. The UK is also arguing that new international law is not necessary in order to prevent the development of lethal autonomous weapons systems. No substantive rationale has been offered for this assertion, although it is consistent with UK posture at the early stages of other international weapons regulation processes. This paper analyses UK statements on the topic of lethal autonomous weapons systems and provides some recommendations. •



CAMPAIGNERS URGE STATES TO TAKE PREVENTATIVE ACTION AND PROHIBIT AUTONOMOUS WEAPONS

Mary Wareham | Campaign to Stop Killer Robots coordinator

This month marks three years since the launch of the Campaign to Stop Killer Robots and in that period the matter of what to do about fully autonomous weapons has shot to the top of the international disarmament agenda and is reverberating around the world. This year alone has seen this topic debated at the World Economic Forum in Davos, discussed in capitals such as Berlin, Ottawa, and Tokyo, and covered by international media.

There is now much greater understanding of the operational risks, legal questions, moral quandaries, and security challenges involved in permitting machines to take a human life on the battlefield or in policing and other circumstances.

Some still say they are confused about what a lethal autonomous weapons system is. These are weapons systems that would select and attack targets without further human intervention. They are often referred to as “human-out-of-the-loop” weapons as opposed to today’s “in-the-loop” and “on-the-loop” versions.

Low-cost sensors and advances in artificial intelligence are making it increasingly possible to design weapons systems that would target and attack without further human intervention. The concern is that if the obvious trend toward ever-greater autonomy continues, humans will start to fade out of the decision-making loop, first retaining only a limited oversight role, and then no role at all.

The Convention on Conventional Weapons meetings on lethal autonomous weapons systems held in May 2014, April 2015, and now, in April 2016, have attracted intense interest as well as strong participation by numerous states as well as UN agencies, the International Committee of the Red Cross, international organizations, and the Campaign to Stop Killer Robots. Expectations are running high that countries are on track to deal with this challenge and we cannot disappoint.

In addition to continuing to build a common base of knowledge this meeting presents an opportunity for states to agree on recommendations to adopt at the CCW’s Fifth Review Conference this December.

Agreement on strong recommendations would be a noteworthy improvement on the previous mandates as it would show that countries are serious about working towards an outcome rather than simply discuss questions raised. A more substantive and outcome-oriented mandate would demonstrate progress and the relevance of the CCW in responding to increasing concerns.

The Campaign to Stop Killer Robots supports continued CCW talks on autonomous weapons systems, but not at any cost. A long, drawn-out process that achieves a weak or no result must be avoided.

States should agree to establish a Group of Governmental Experts at the Review Conference to begin formal negotiations on a new CCW protocol on lethal autonomous weapons systems. New, specific law is warranted, given the multitude of concerns about and the unprecedented and revolutionary nature of these weapons systems.

The campaign urges all countries to affirm the necessity of meaningful human control over the capacity to select and attack targets, as well as over individual attacks. Agree to start negotiating a preemptive ban to draw the line at fully autonomous weapons.

More than 30 countries have specifically addressed the principle or concept of human control in their CCW statements, usually characterizing it as meaningful, appropriate, or effective. Many of these states explicitly support the requirement for meaningful human control and most have called for more in-depth discussions on the approach.

Several countries and manufacturers have now affirmed that they have “no plans” to develop lethal autonomous weapons systems. Such pledges are welcome, but an insufficient answer as they do not provide for a permanent solution. Policy commitments not to develop or use these weapons systems may crumble as soon as opponents acquire them.

It is not an impossible challenge and there is precedent. The CCW’s 1995 protocol banning blinding lasers is an example of a weapon being preemptively banned before it was acquired or used.

Outside of the CCW process, the campaign calls on all nations to develop and articulate national policy on fully autonomous weapons in consultation with relevant actors, including civil society. We urge states to pursue other ways that these weapons can be addressed at the international, regional, and national levels. We challenge states to become champions of the ban call proposed by the campaign and UN rapporteurs. •