



CCW REPORT

Civil society perspectives on the CCW meeting of experts
on autonomous weapon systems
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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: THE UNBEARABLE MEANINGLESSNESS OF AUTONOMOUS VIOLENCE

Ray Acheson | *Reaching Critical Will* of WILPF and Richard Moyes | Article 36

“If we can no longer make sense of violence it is no longer meaningful,” said Maya Brehm of the Geneva Academy of International Humanitarian Law and Human Rights during a panel on the characteristics of autonomous weapon systems.

What gives violence meaning? Anthropologists have described violence as a form of communication. Its meaning then is developed through the social practices that generate all meaning; through the processes of human interaction by which we form moral, cognitive, and conceptual understandings of our world.

What meaning could be derived from violence administered entirely by machine? Without meaningful human control, such machines would not be enacting a human will towards a specific act of violence. Rather they would represent a social acceptance that human beings can be processed or put in harms way simply as objects, subjected to an abstract calculus. Allowing weapons that identify, select, and apply force to targets without human supervision or intervention means relinquishing or dissipating human responsibility. Simultaneously it means dehumanising those we expose to harm. It means an erosion of humanity.

How would our legal, moral, and ethical frameworks be applied to machine-based violence? These frameworks are uniquely human, developed collectively by humans through our social practices and interactions. Accepting that humans can be taken out of the process of choosing which and how other people may be harmed, killed, or put at risk would likely suggest that socially we had found a new capacity to separate ourselves from people elsewhere. That we are prepared to contort legal, moral, and ethical reasoning in order to

allow to be done to others something we would never accept being done to us.

The interplay of these considerations with the discussion on technical issues further solidifies the meaningfulness of the violence of autonomous weapons. Panelists and delegations overwhelmingly presented a grim picture of the potential downsides of such systems. Among other things, they outlined the risk that flaws in programming or software, vulnerabilities to misuse or attack, or inadequate testing could lead to unintended or malicious effects.

What meaning could be derived from violence arising from errors, malfunctions, misuse, exploitation, or dissonance within an autonomous system? What meaning could be derived even if the machine functioned as designed and programmed, if the “choices” of who is attacked and why are determined by a machine? The question of why specific people were attacked would always have one of two immediate answers: either “that is what the machine does in these circumstances” or “something went wrong”. Neither answer means very much.

What restraints might there be on machine-based violence? Echoing concerns voiced by some delegations that autonomous weapons could lower the threshold for the use of force, Elizabeth Quintana of the Royal United Services Institute cautioned that such systems might provide increased capacity for military intervention. The delegation of Palestine argued that autonomous weapons would reduce possibilities for dialogue and peace by removing human engagement from the battlefield.

The concept of meaningful human control is crucial for preventing the inherent

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CAMPAIGN TO STOP
KILLER ROBOTS

Editorial, continued

meaninglessness of machine-based violence as well as the increased potential for such violence. Jason Millar of Carleton University noted that meaningful human control is about maintaining something uniquely human that autonomous weapons would lack. But while he suggested that such control could potentially be administered over some autonomous weapon systems, it is still more important that the concept is collectively developed to establish boundaries against systems and configurations that should not be developed or used. As the civil society group Article 36 explained in an intervention from the floor, requiring meaningful human control over the use of force should provide the foundation for an international prohibition on fully autonomous weapons.

Yet those speaking on Wednesday afternoon's legal panel pushed back on this approach. Dr. William Boothby of the Geneva Centre for Security Policy and Professor Eric Talbot Jensen of NYU Law School rejected calls for a prohibition, arguing that weapons reviews mandated by article 36 of the Geneva Convention's Protocol I are the more "appropriate" way to handle the development of autonomous weapons. While acknowledging potential difficulties of autonomous weapons complying with international humanitarian law, both speakers believed that technology could hypothetically develop to a point where it would be possible to deploy weapons that were fully autonomous.

Most intervening delegations and civil society groups, however, argued that humans must always be involved in the use of force. They largely seemed to agree that the rules of IHL must be applied, by

humans, on an attack-by-attack basis, taking into account the specific circumstances of each attack, and that such assessment could not adequately be left to a machine. As the NGO Article 36 noted, "Processes of calculation and computation in a machine are not equivalent to deliberative human reasoning within a social framework. Machines do not make 'legal judgments' and 'apply legal rules'."

Some speakers and delegations, including the ICRC, also highlighted the problem of leaving the determination of the legality of autonomous weapons up to individual countries through weapons reviews. A multilateral response is necessary, and must not be based on hypothetical technical considerations or varying interpretations of existing legal mechanisms. Rather, as the delegation of Greece argued, our approach to autonomous weapons should be based on the ethical question of whether or not humans should delegate life and death decisions to machines.

The text of the CCW affirms the "need to continue the codification and progressive development of the rules of international law applicable in armed conflict." This recognition that the law is not static and that the general rules of armed conflict are not wholly sufficient to address the problems raised by certain weapon technologies is the cornerstone of the CCW regime. It is by prohibiting fully autonomous weapons that humans can collectively decide to prevent the meaninglessness of machine-based violence. A number of states have claimed that the CCW is the most appropriate forum within which to address this issue—they now need to take steps to justify that claim. •

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CALENDAR OF EVENTS

When	What	Where	Who
10:00-13:00	Overarching issues		
13:15-14:45	Transparency and the weaponisation of increasingly autonomous technologies	Conference Room XXIV	UNIDIR
15:00-18:00	Overarching issues		



EVENT: THE IMPORTANCE OF LEGAL REVIEWS OF WEAPONS

Thomas Nash | Article 36

At a side event hosted by GCSP and UNODA participants considered the topic of legal reviews of weapons, in particular in the context of autonomous weapons systems.

Chaired by Canada, the event featured presentations by Australia and the Netherlands on their national practices with regard to weapons review. The ICRC and the Implementation Support Unit of the CCW described their roles in promoting legal reviews of weapons. At the outset, Dr. Bill Boothby gave an overview of the legal obligation under article 36 of the Geneva Conventions Additional Protocol I of 1977 to review weapons, means, and methods of warfare.

Boothby noted that there is no set format for such reviews—they are based on existing law and there is no requirement to share them publicly. He set out the existing prohibitions and restrictions on weapons as well as suggesting future areas for weapons review, including cyber and autonomous weapons. He suggested that states will not go public about their weapons development, but want to be seen to comply with the rules. Boothby also publicised the GCSP course on article 36 weapon reviews.

Group Captain Henderson explained Australia's national practice, including the need for multiple reviews of weapons throughout their lifecycle. Australia sees no particular reason why legal reviews of weapons would not be sufficient to address any potential concerns related to autonomous weapons.

Martijn described how the Dutch implementation of article 36 works, noting that it goes beyond the review of IHL rules to include broader ethical and political considerations.

Dr. Gilles Giacca outlined the ICRC's expectations for states' legal review of weapons, means, and methods of warfare, including its legal guide to the review of weapons, which is currently being updated. In relation to autonomous weapons, he suggested there could be a substantial shift to the assess their permissibility, from the development of such weapons to their actual deployment. He noted there is poor implementation of the article 36 obligation, with more states referring to their reviews than are actually complying with the rule. This, he said, needs to be redressed.

Hine-Wai Loose of UNODA echoed these views about the lack of implementation of article 36. She also noted the importance of considering human rights obligations in relation to weapon reviews. Referring to a past report by Prof. Tim McCormack, she recalled the CCW's historical engagement with the wider issue of weapons reviews.

During the subsequent discussion, Sweden pointed out that, together with US, it was the first to set up a weapon review system and put it in place before the adoption of Additional Protocol I, based on the general obligation to review weapons. Sweden's review system includes an independent body with decision-making powers. Other points raised during the discussion related to the transparency of article 36 reviews, their lack of standardisation, the varying interpretation of existing international law and, against this background, whether or not such reviews could be considered sufficient as a response to the concerns already raised about the development of autonomous weapons. In response, Loose and Giacca noted that national legal review of weapons would not be a panacea for the problems raised in relation to autonomous weapons. •

NEWS IN BRIEF

Ray Acheson and Mia Gandenberger | *Reaching Critical Will of WILPF*

Characteristics of autonomous weapons

- Professor Pekka Appelqvist said restrictions on AWS would be easy to neglect if they were constructed either on the basis of technology or by defining the allowed specifications of platforms. He suggested progress would lie in agreeing on generic allowed principles in the development, deployment, and operation of AWS.
- Professor Giovanni Sartor identified a possible liability gap that would arise from the use of AWS. Liability for results of actions by AWS would differ from civil applications.
- Jason Millar explored the concept of meaningful human control (MHC) for dual-use technologies. He differentiated between the concept of MHC

and having a human in the loop of decision-making, with the former including something uniquely human.

- He cautioned that when automating critical functions, particular design features such as user interface, etc. could induce psychological effects that result in the erosion of MHC. Therefore, states should identify exemplary cases of meaningful human control and use them as a basis for further study.
- Dr Caitríona McLeish examined lessons learned from the Biological and Toxin Weapons Convention and the Chemical Weapons Convention. Both conventions had been agreed upon in a post-proliferation environment.

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News in brief, continued

- Dr. Sybille Bauer reviewed existing export control regimes for missiles and WMD and suggested that regimes for conventional weapons or UN Security Council resolution 1540 could also provide guidance for the debate on AWS.
- During the Q&A, the US delegation argued that MHC might be too narrow and does not capture the full range of activities.
- Article 36 explained MHC could be seen as a way of structuring debate around the problems that arise from the potential development of autonomous weapons. Additionally, it could support the development of an international prohibition on fully autonomous weapons.
- China and Pakistan raised questions regarding automation and autonomy.
- In that connection, Mr. Millar pointed out that automation refers to specific types of processes/functions within a system, while autonomy relates to the overall system.
- The Netherlands asked at what point human control would be considered meaningful.
- Norway and Belarus raised questions of accountability and responsibility of actions of an AWS.

Possible challenges to IHL

- Dr. William Boothby of GCSP argued that weapons reviews under article 36 of the Geneva Convention's Additional Protocol I are the most appropriate way to address the legality of AWS, stating that a ban on such systems would be "inappropriate".
- He said MHC could be a useful interim policy approach to address shortcomings in current technology but should not be elevated into legal criterion to determine acceptability of weapon system, as it risks weakening existing weapons law and targeting standards by introducing an ambiguous notion.
- Kathleen Law of ICRC said AWS challenge IHL in light of their unique functional characteristics, circumstances of their use, and their foreseeable effects, which may raise questions whether existing law is sufficiently clear or whether we need to clarify it or develop new rules.
- She warned that the assessment of AWS should not be left solely to national legal reviews.
- Professor Eric Talbot Jensen of NYU Law School called for a "legal pause" to allow the development of AWS to occur under current law, arguing that even if the technology for an IHL-compliant AWS does not currently exist, prohibiting their development means we will never achieve this technology.
- During the Q&A, Switzerland questioned if technical and experimental resources to perform adequate tests on AWS to ensure they act predictably

as designed and in compliance with IHL. If not, the Swiss said, such systems should not be fielded.

- China asked why a prohibition of AWS would be "inappropriate" and questioned whether history should be allowed to repeat itself in terms of the development of other weapon systems.
- Poland argued that from a military perspective a human must always be in control over decisions to kill so that the responsibility of the human behind the machine is never removed.
- UK said there must always be human oversight or control over decisions to deploy weapons.
- US supported national weapons reviews for AWS.
- Germany argued that the development of any AWS would require review and that such systems must also be examined under targeting law.
- Cuba and Palestine called for a prohibition on AWS.
- Norway raised several legal, ethical, and accountability gap concerns.
- France asked several questions on accountability and threshold for technical development.
- Russia said human control needs to increase along with autonomy.
- India questioned when a weapon with creeping automation would become "new" and thus subject to review.
- Sweden argued human should never delegate life and death decisions to machines and said responsibility and accountability for use must always remain with human operators.
- Greece said AWS should be addressed ethically rather than legally or technically, as the fundamental question is whether or not humans should delegate life and death decisions to a machine.
- Amnesty International expressed concerns about using AWS outside of armed conflict, noting that weapons used in policing are not subject to article 36 reviews.
- Article 36 argued the law is a human framework; that compliance with IHL must be assessed on a case-by-case basis; that increasing autonomy in weapon systems risks expanding the notion of an attack; and that allowing development of AWS is an active decision to pursue AWS as weapons that some perceive as legitimate.
- Human Rights Watch noted that military lawyers opposed banning landmines and cluster munitions but that doing so has saved hundreds of thousands of lives. It also argued that even if AWS are developed for specific missions, once they are available they are likely to proliferate and be used for a range of missions that won't be constrained or prescribed.