

HOW TO REGULATE AUTONOMOUS WEAPONS

// Steps to Codify Meaningful Human Control as a Principle of International Humanitarian Law

We are, once again, witnessing a technological revolution in warfare: the progressing autonomy in weapons systems. Autonomy refers to capabilities of weapons to operate without human guidance, pertaining to less controversial functions such as navigation and reconnaissance – but also to the alarming prospect of robots making the killing decision. The latter in particular has given rise to fundamental ethical and legal concerns: To what extent is it morally acceptable to use robots in military operations? Are autonomous weapons capable of compliance with International Humanitarian Law? Who can be held accountable for their actions and how? Responding to these concerns, this Spotlight echoes the calls for a ban on killer robots, and proposes to adopt a new principle, which would turn meaningful human control of lethal weapons into an obligation under International Humanitarian Law.



A Chinese military drone, remotely piloted. How can human control for all weapons be preserved? (Photo: Times Asi, Flickr, CC BY 2.0)

by **Elvira Rosert**

Initiated and carried forward by scientists and NGOs, the question of how to regulate *Lethal Autonomous Weapons Systems* (LAWS) has reached the international agenda. Since 2014, LAWS have been discussed within the formal framework of the *Convention on Certain Conventional Weapons* (CCW), with the perspective of adopting another protocol to the Convention, which would ban or at least regulate the use of LAWS. In this debate, “meaningful human control”, a phrase originally introduced by the NGO *Article 36*, has become a key – but contested – concept.

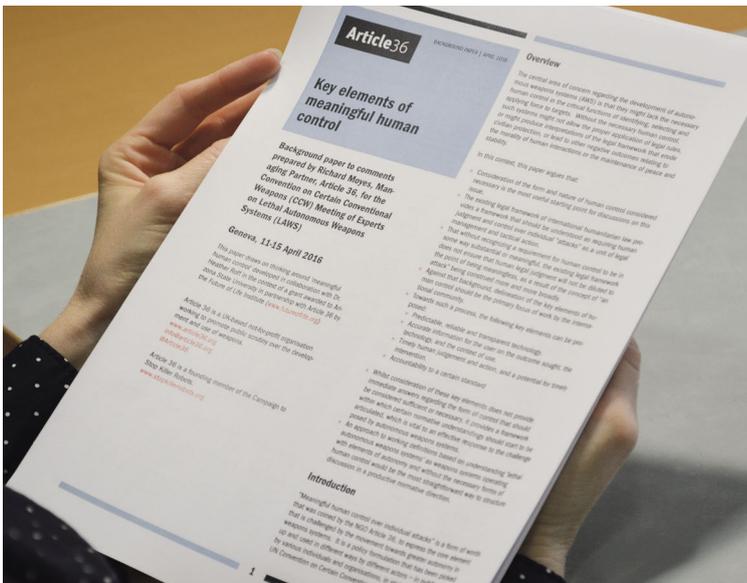
The views on what meaningful human control means differ: Should the human operator have to authorize

specific actions, should he or she monitor them with the option to abort, or is accurate programming sufficient? Neither is there agreement on the definition of autonomy: Should it refer to the weapon system as a whole, to some (critical) functions of those systems such as target selection and attack, or to some sub-steps of those critical functions such as target engagement? The CCW members got bogged down on these definitional issues, and the successful conclusion of the negotiations is in danger – even though there is a broad normative consensus that it would be immoral to allow machines to take decisions over life and death.

In this Spotlight, I stress that the emergence of this consensus is a considerable progress in itself, and make the case for a legal move that would reflect it: I suggest codifying meaningful human control as a basic principle of International Humanitarian Law (IHL). Specifically, I propose to amend *Additional Protocol I to the Geneva Conventions* (AP I) as well as the preamble of the CCW. I argue that this approach could be a way out of the impasse, and sketch out procedural options going forward.

Why Meaningful Human Control Should Be Elevated to a Principle of International Humanitarian Law

First, codifying meaningful human control both in the AP I and in the CCW preamble would increase the normative power of the principle. It would formalize considerations of humanity and the dictate of the public conscience. It would also formalize the long-standing



What is Meaningful Human Control? The NGO "Article 36" proposes key elements. (Photo: PRIF)

A Chronology of How LAWS Became an International Issue

- 2004 The physicists Jürgen Altmann and Mark Gubrud are the first to demand a prohibition of LAWS.
- 2009 The *International Committee for Robotic Arms Control* (ICRAC), a predominantly academic advocacy organization, is founded.
- 2011 The *International Committee of the Red Cross* (ICRC) mentions autonomous weapons in a statement for the first time.
- 2012 *Human Rights Watch* issues a report arguing against the use of autonomous weapons. The *NGO Summit on Humanitarian Diplomacy* commits to pursue a ban on LAWS.
- 2013 The *Campaign to Stop Killer Robots* is launched. The *UN Human Rights Council* and the *First Committee of the General Assembly* debate the issue. The *UN Special Rapporteur on extrajudicial, summary or arbitrary executions* publishes a report on LAWS.
- 2014 LAWS are for the first time being discussed at a meeting of the state parties to the *Convention on Certain Conventional Weapons* (CCW).
- 2016 The *Fifth CCW Review Conference* agrees to install a *Group of Governmental Experts* (GGE) on autonomous weapons.
- 2017 The GGE holds its first session in November 2017, after earlier meetings were cancelled for budgetary reasons.

moral belief that the requirement of controllability of weapons is indispensable. This belief is included in several IHL documents and considered an element of customary law. Moreover, embedding the principle in seminal IHL documents which serve as the basis for the regulation of means and methods of combat would give it the appropriate prominence. It would also allow it to benefit from the strength of other established IHL principles like the principle of distinction and the principle of unnecessary suffering.

Second, a codification would enhance the legal power of the principle. It would generally declare weapons operating without meaningful human control illegal – this stigmatization should prove as an obstacle to their use. Including meaningful human control in AP I would trigger Article 36 obliging all parties to determine whether new weapons are compliant with AP I, i. e. to ensure that new weapons are subject to meaningful human control. Including meaningful human control in the preamble of the CCW would provide additional ground for a subsequent protocol on autonomous weapons, as the preamble lays out the general normative framework, which CCW protocols containing restrictions or prohibitions on specific weapons build upon. Consequently, the lack of meaningful human control would be sufficient for a restriction or prohibition of certain weapons, and it would no longer be necessary to assess whether these weapons conform to the principles of distinction or unnecessary suffering – an assessment that has been controversial in the past.

Third, a codification would circumvent the definition-induced stalemate in the CCW by shifting the substantive level of the debate from a concrete norm to an abstract principle. Adopting basic principles first, and deriving prohibitions of specific weapons from them later is the usual way of how IHL evolves – not least because abstractness has two major advantages: applicability and acceptability.

Abstract norms are easier to apply to various situations. This is crucial in particular with regard to warfare because of its many contingencies and because of the rapid technological changes. Since meaningful human control might require different levels of control for different technologies, codifying it as an abstract principle is vital to retain its flexibility and to allow its meaning to evolve with and to adapt to different weapon systems. Moreover, abstract norms are more likely to be accepted as they offer the actors some room for interpretation and narrow their scope of action less obviously and to a lesser extent.

To be sure, definitions, and precision more generally, are essential to ensure the effectiveness of norms. Thus, a codification is not supposed to resolve defi-

nitional issues. Rather, it would be a first step to buttress the moral agreement that has been reached already while allowing for a specification of the norm in the ensuing legal discourse. Through provisions of military manuals as well as legal commentaries and decisions, we can expect a more precise meaning of “meaningful human control” to evolve.

Finally, a codification in the documents suggested here would require a partial forum shift. This might add new impulses to the debate and change its dynamics. An amendment of the CCW preamble would be negotiated by the same participants who have been debating how to control LAWS – but a conference on the amendment of AP I would attract an additional 60 countries, who are state parties to AP I but not to the CCW. Such

broader participation is desirable as a symbol of the principle’s universality. Moreover, moving the debate from an arms control forum to a humanitarian forum might also have positive effects on the substance.

Amending the Additional Protocol I and the CCW Preamble: Articles and Wordings

Additional Protocol I to the Geneva Conventions, adopted in 1977, includes provisions regarding means and methods of combat and the protection of civilians. I suggest incorporating the requirement of meaningful human control into Articles 35 and 57.

Article 35 – “basic rules”– limits the right of the parties to the conflict to choose their means and methods of warfare, and prohibits the use of weapons which

Amendment Procedures for AP I and the CCW

AP I itself has never been amended (only its Annex was in 1993). Nevertheless, its Article 97 stipulates the amendment procedure: Any contracting party (or several contracting parties) may submit a proposal (consisting of one or several amendments) to the Depositary of the Protocol. The Depositary will consult other contracting parties as well as the *International Committee of the Red Cross* by asking them for written comments, decide on the basis of the comments whether to hold a conference to consider the amendment, and invite the parties to the conference in case of a positive decision.

The CCW has fulfilled its originally envisioned role as a flexible instrument through the adoption of new protocols. Its preamble has so far never been amended, but the general procedures for amendments laid out in CCW Article 8 (1)(a-b) apply: Every party may propose amendments to the Depositary, who will then determine whether a majority of the contracting parties agrees to conduct a conference to discuss the amendment. However, considering the budgetary constraints, an additional conference is not necessarily needed. Instead, according to Article 30 of the CCW Rules of Procedure, amendments can also be submitted to the Chair of the Conference and discussed in one of the regular meetings.



UN Geneva - CCW Informal Meeting of Experts on Lethal Autonomous Weapons Systems, 14 May 2014 (UN Photo, Jean-Marc Ferré, CC BY-NC-ND 2.0)

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cause superfluous injury or unnecessary suffering, or damage the environment. I suggest adding another clause, which could read as follows: “It is prohibited to employ weapons operating without meaningful human control.”

Article 57 – “precautions in attack” – obliges the parties to “take constant care (...) to spare the civilian population, civilians and civilian objects”. Among other precautions, it prescribes to do “everything feasible to ensure that the objectives to be attacked are neither civilians nor civilian objects”. I suggest another clause, which could read as follows: “Meaningful human control shall be ensured in the conduct of military operations at all steps”.

The CCW, adopted in 1980, consists of a framework document and five protocols, each dealing with specific categories of weapons. The preamble lays out the principles that inspire the convention: the obligation to protect the civilian population, and the prohibition of unnecessary suffering. I suggest incorporating the requirement of meaningful human control into the preamble by adding a new clause, which could read as follows: “Declaring that it is prohibited to employ means of warfare operating without meaningful human control”.

Action Points

To codify meaningful human control as a principle of International Humanitarian Law by amending articles 35 and 57 of AP I as well as the preamble of the CCW, the following steps need to be taken: A party or several parties to the AP I and a party or several parties to the CCW (which may be the identical, but do not have to be) should take the lead and launch the amendment initiatives. They should submit proposals to Switzerland, as the Depositary of AP I, and ask to conduct a conference for the consideration of the amendments. They should also submit proposals to the Chair of the next CCW meeting of High Contracting Parties in November 2017 and ask for the consideration of the amendment of the preamble. The leaders of the initiative should also engage in diplomatic efforts to convince other state parties to support the respective amendments. The *International Committee of the Red Cross* as the guardian of IHL, and the steering committee of the *Campaign to Stop Killer Robots* should identify a group of states willing to take the lead, and engage in lobbying to convince other state parties to support the initiative.

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PRIF SPOTLIGHT

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