



# HEED THE CALL

A Moral and Legal Imperative to Ban Killer Robots



INTERNATIONAL HUMAN RIGHTS CLINIC  
HUMAN RIGHTS PROGRAM AT HARVARD LAW SCHOOL



**IHRC**

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The International Human Rights Clinic (IHRC) at Harvard Law School seeks to protect and promote human rights and international humanitarian law through documentation; legal, factual, and strategic analysis; litigation before national, regional, and international bodies; treaty negotiations; and policy and advocacy initiatives. IHRC also engages in innovative clinical education to develop advanced practice techniques and approaches to human rights advocacy. IHRC's Armed Conflict and Civilian Protection Initiative (ACCPI) focuses on humanitarian disarmament and other measures to reduce the civilian suffering caused by armed conflict.

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## Summary

In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.

— Martens Clause, as stated in Additional Protocol I of 1977 to the Geneva Conventions

Fully autonomous weapons are one of the most alarming military technologies under development today. As such there is an urgent need for states, experts, and the general public to examine these weapons closely under the Martens Clause, the unique provision of international humanitarian law that establishes a baseline of protection for civilians and combatants when no specific treaty law on a topic exists. This report shows how fully autonomous weapons, which would be able to select and engage targets without meaningful human control, would contravene both prongs of the Martens Clause: the principles of humanity and the dictates of public conscience. To comply with the Martens Clause, states should adopt a preemptive ban on the weapons' development, production, and use.

The rapid development of autonomous technology and artificial intelligence (AI) means that fully autonomous weapons could become a reality in the foreseeable future. Also known as “killer robots” and lethal autonomous weapons systems, they raise a host of moral, legal, accountability, operational, technical, and security concerns. These weapons have been the subject of international debate since 2013. In that year, the Campaign to Stop Killer Robots, a civil society coalition, was launched and began pushing states to discuss the weapons. After holding three informal meetings of experts, states parties to the Convention on Conventional Weapons (CCW) began formal talks on the topic in 2017. In August 2018, approximately 80 states will convene again for the next meeting of the CCW Group of Governmental Experts.

As CCW states parties assess fully autonomous weapons and the way forward, the Martens Clause should be a central element of the discussions. The clause, which is a common feature of international humanitarian law and disarmament treaties, declares that in the

absence of an international agreement, established custom, the principles of humanity, and the dictates of public conscience should provide protection for civilians and combatants. The clause applies to fully autonomous weapons because they are not specifically addressed by international law. Experts differ on the precise legal significance of the Martens Clause, that is, whether it reiterates customary law, amounts to an independent source of law, or serves as an interpretive tool. At a minimum, however, the Martens Clause provides key factors for states to consider as they evaluate emerging weapons technology, including fully autonomous weapons. It creates a moral standard against which to judge these weapons.

## **The Principles of Humanity**

Due to their lack of emotion and legal and ethical judgment, fully autonomous weapons would face significant obstacles in complying with the principles of humanity. Those principles require the humane treatment of others and respect for human life and human dignity. Humans are motivated to treat each other humanely because they feel compassion and empathy for their fellow humans. Legal and ethical judgment gives people the means to minimize harm; it enables them to make considered decisions based on an understanding of a particular context. As machines, fully autonomous weapons would not be sentient beings capable of feeling compassion. Rather than exercising judgment, such weapons systems would base their actions on pre-programmed algorithms, which do not work well in complex and unpredictable situations.

Showing respect for human life entails minimizing killing. Legal and ethical judgment helps humans weigh different factors to prevent arbitrary and unjustified loss of life in armed conflict and beyond. It would be difficult to recreate such judgment, developed over both human history and an individual life, in fully autonomous weapons, and they could not be pre-programmed to deal with every possible scenario in accordance with accepted legal and ethical norms. Furthermore, most humans possess an innate resistance to killing that is based on their understanding of the impact of loss of life, which fully autonomous weapons, as inanimate machines, could not share.

Even if fully autonomous weapons could adequately protect human life, they would be incapable of respecting human dignity. Unlike humans, these robots would be unable to appreciate fully the value of a human life and the significance of its loss. They would make

life-and-death decisions based on algorithms, reducing their human targets to objects. Fully autonomous weapons would thus violate the principles of humanity on all fronts.

## **The Dictates of Public Conscience**

Increasing outrage at the prospect of fully autonomous weapons suggests that this new technology also runs counter to the second prong of the Martens Clause, the dictates of public conscience. These dictates consist of moral guidelines based on a knowledge of what is right and wrong. They can be ascertained through the opinions of the public and of governments.

Many individuals, experts, and governments have objected strongly to the development of fully autonomous weapons. The majority of respondents in multiple public opinion surveys have registered opposition to these weapons. Experts, who have considered the issue in more depth, have issued open letters and statements that reflect conscience even better than surveys do. International organizations and nongovernmental organizations (NGOs), along with leaders in disarmament and human rights, peace and religion, science and technology, and industry, have felt compelled, particularly on moral grounds, to call for a ban on fully autonomous weapons. They have condemned these weapons as “unconscionable,” “abhorrent ... to the sacredness of life,” “unwise,” and “unethical.”

Governments have cited compliance with the Martens Clause and moral shortcomings among their major concerns with fully autonomous weapons. As of July 2018, 26 states supported a preemptive ban, and more than 100 states had called for a legally binding instrument to address concerns raised by lethal autonomous weapons systems. Almost every CCW state party that spoke at their last meeting in April 2018 stressed the need to maintain human control over the use of force. The emerging consensus for preserving meaningful human control, which is effectively equivalent to a ban on weapons that lack such control, shows that the public conscience is strongly against fully autonomous weapons.

## **The Need for a Preemptive Ban Treaty**

An assessment of fully autonomous weapons under the Martens Clause underscores the need for new law that is both specific and strong. Regulations that allowed for the

existence of fully autonomous weapons would not suffice. For example, limiting use to certain locations would neither prevent the risk of proliferation to actors with little regard for humane treatment or human life, nor ensure respect for the dignity of civilians or combatants. Furthermore, the public conscience reveals widespread support for a ban on fully autonomous weapons, or its equivalent, a requirement for meaningful human control. To ensure compliance with both the principles of humanity and the dictates of public conscience, states should therefore preemptively prohibit the development, production, and use of fully autonomous weapons.

## Recommendations

To avert the legal, moral, and other risks posed by fully autonomous weapons and the loss of meaningful human control over the selection and engagement of targets, Human Rights Watch and Harvard Law School's International Human Rights Clinic (IHRC) recommend:

### To CCW states parties

- Adopt, at their annual meeting in November 2018, a mandate to negotiate a new protocol prohibiting fully autonomous weapons systems, or lethal autonomous weapons systems, with a view to concluding negotiations by the end of 2019.
- Use the intervening Group of Governmental Experts meeting in August 2018 to present clear national positions and to reach agreement on the need to adopt a negotiating mandate at the November annual meeting.
- Develop national positions and adopt national prohibitions as key building blocks for an international ban.
- Express opposition to fully autonomous weapons, including on the legal and moral grounds reflected in the Martens Clause, in order further to develop the existing public conscience.

### To experts in the private sector

- Oppose the removal of meaningful human control from weapons systems and the use of force.
- Publicly express explicit support for the call to ban fully autonomous weapons, including on the legal and moral grounds reflected in the Martens Clause, and urge governments to start negotiating new international law.
- Commit not to design or develop AI for use in the development of fully autonomous weapons via codes of conduct, statements of principles, and other measures that ensure the private sector does not advance the development, production, or use of fully autonomous weapons.

# HEED THE CALL

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Fully autonomous weapons would revolutionize warfare by selecting and engaging targets without meaningful human control. With no specific treaty devoted to their regulation, the weapons should be assessed under the Martens Clause, a rule of international humanitarian law that applies the “principles of humanity” and the “dictates of public conscience” to new situations in armed conflict.

*Heed the Call* finds that the Martens Clause, which sets a moral baseline for judging emerging technologies, demands a preemptive ban on fully autonomous weapons.

Fully autonomous weapons, also known as “killer robots,” would undermine the principles of humanity because they would be unable to apply either compassion or nuanced legal and ethical judgment to decisions to use lethal force. Without these human qualities, the weapons would face significant obstacles to ensuring the humane treatment of others and to showing respect for human life and dignity.

Fully autonomous weapons would also run contrary to the dictates of public conscience. Governments, experts, and the broader public have increasingly expressed their opposition to the weapons. They have widely endorsed the principle of meaningful human control over the use of force.

Partial measures will not fix these deficiencies under the Martens Clause. The clause makes it morally and legally imperative to prohibit the development, production, and use of fully autonomous weapons and to retain human control over the use of force.



*Growing opposition to fully autonomous weapons from various quarters shows how the public conscience supports banning weapons systems that lack meaningful human control.*

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