

GLOBAL SECURITY

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Autonomous weapons systems also known as fully autonomous weapons pose great dangers for international stability and global security. We are already seeing the beginning of an international arms race among the superpowers. One of the most worrying developments is the development of swarm technologies. The idea is that a small number of military personnel could initiate a large scale attack of swarms of tanks, ships or fighter planes.



There are many reasons to be concerned about the safety of civilians across the globe should autonomous weapons ever be developed. Let's look at 10 of the strongest of these concerns that you can use when advocating for a pre-emptive ban on autonomous weapons.

1. PROLIFERATION

Without an international muzzle on the development, testing, and production of autonomous weapons systems, we are likely to see mass proliferation of these weapons and counter weapons and on and on. Not all nations will have the ability to carry out weapons reviews of autonomous weapons systems required under international law. So it is likely that the standards required by international humanitarian law (IHL) could slip.

2. LOWERED THRESHOLD FOR ARMED CONFLICTS

Autonomous weapons systems could lead to more action short of warfare by minimising human military forces in conflict zones. This could enable states to initiate the use of violent force without the consultation procedures required to deploy troops on the ground. Autonomous weapons systems could seduce states into more armed conflicts – at the expense of civilian populations.

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3. CONTINUOUS GLOBAL BATTLEFIELD

Autonomous weapons systems could run on much less energy than existing military vehicles and could easily be recharged with solar panels. Weapons could be left behind – like landmines – to patrol post-conflict zones and thus create a continuous global battlefield. The result could have devastating psycho-social consequences.

4. WARRING AUTONOMOUS WEAPONS SYSTEMS WOULD INTERACT

As more countries employ swarms of autonomous weapons systems and autonomous counter defences, these weapons as well as command and control systems would inevitably interact. When any mobile device controlled by software programs interacts with a competing hostile device controlled by unknown software, the result of the interaction is scientifically impossible to predict. Thus, it would be impossible to calculate the impact on civilian populations.

5. ACCELERATING THE PACE OF BATTLE

It is often said that the pace of battle is accelerating to the point where human decision-making is not fast enough. It is often said that the pace of battle is accelerating to the point where human decision-making is not fast enough. New prototypes of aerial autonomous weapons systems are increasingly being tested at supersonic and hypersonic speeds. This means even faster autonomous response devices that in turn will

require ever-faster weapons. It is not hard to see that such a 'pace race' will eventually equate to humans having little control over the battle-space.

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6. ACCIDENTAL CONFLICT

If the development and proliferation of autonomous weapons systems, particularly swarms, is allowed to continue, supersonic or hypersonic (defence) systems of one state could interact with equally fast autonomous weapons systems from another state. The speed of their unpredictable interaction could trigger unintended armed conflicts before humans had the opportunity to react.

7. MILITARIZATION OF THE CIVILIAN WORLD

We are already seeing the use of new unmanned war technologies in civilian settings. Law enforcement and border control agencies are using unmanned systems for surveillance. Some companies are even arming them with Tasers, pepper sprays and other so-called 'less than lethal' ammunition. With autonomous targeting technology this could lead to violations of human and civil rights by police and private security forces with little possibility of accountability.

8. AUTOMATED OPPRESSION

Autonomous weapons systems would be an attractive tool for the oppression of populations and the suppression of peaceful protest and political change. While soldiers can in principle refuse to turn their weapons on their own people, autonomous weapons systems would be programmed by persons far away from confrontations and then could kill mercilessly on the basis of their coded instructions.

9. NON-STATE ACTORS

We are currently witnessing an unprecedented diffusion of technology. The cost of robotics development is falling, with the required off-the-shelf hardware now widely available. If autonomous weapons development is allowed to continue it will not be long before we see crude copies or grey market exports in the hands of non-state armed actors.

10. CYBER VULNERABILITY

Humans need to be in control of weapon systems to counter many of the potential dangers with entirely computerised and autonomous weapons. The risks of software coding errors, malfunctions, degradation of communications, and especially enemy cyber-attacks, infiltrations into the industrial supply chain, jamming, and spoofing make autonomous weapons systems inherently insecure.