

10 reasons to ban killer robots

Fully autonomous weapon systems, also called killer robots, are weapon systems that can select and engage individual targets, without meaningful human control.¹ There are various concerns regarding these weapons:

Ethical concerns

1. A machine should never be allowed to make the **decision over life and death**. This goes against the principles of human dignity and the right to life. This decision cannot be reduced to an algorithm. Outsourcing this decision would mean outsourcing morality.
2. Due to their nature these weapons would be **highly unpredictable**, especially regarding their interaction with other autonomous systems and if they are self-learning systems.

Legal concerns

3. Fully autonomous weapons will likely not be able to adhere to **International Humanitarian Law**. They will likely not be able to properly distinguish between civilians and combatants, or make a proportionality assessment of acceptable collateral damage.
4. Fully autonomous weapons create an **accountability vacuum** regarding who is responsible if something goes wrong. Who would be responsible, the robot, the developer, the military commander?

Security concerns

5. As the deployment of fully autonomous weapons might lead to less casualties in one's own army, fully autonomous weapons could **lower the threshold to go to war**. Also it reduces the incentive for finding political solutions to end conflicts.
6. This new technology could lead to a new **international arms race** which would have destabilizing effects and threaten international peace and security.
7. These weapons could lead to **rapid escalation of conflict** as they would react to and interact with each other at speeds faster than humans can react or control.
8. In contrast to for example nuclear weapons, the technology would be relatively cheap and simple to copy. This would mean there is a big chance of proliferation. It would be highly undesirable if **dictators, non-state armed actors or terrorists** would be able to acquire these weapons.
9. Only a small number of people are needed to deploy a large number of autonomous weapons, raising concerns of **prevention, oversight and control**.
10. Like with armed drones, deploying fully autonomous weapons instead of human soldiers can be a cause of hatred among the population of the targeted state. The **moral outrage** this creates works against the attacking state's interests.

¹ There are several terms for fully autonomous weapon systems. The Campaign uses the term fully autonomous weapons or 'killer robots'. At the Convention on Conventional Weapons (CCW), the term Lethal Autonomous Weapon Systems (LAWS) is mainly used.

Who has raised concerns and called for a ban?

- A recent IPSOS survey found that **63% (40% strongly oppose) of Belgians** are opposed to fully autonomous weapons.²
- At the Convention on Conventional Weapons (CCW) more than **70 countries** have expressed their concern and **19 countries** have called for a ban.
- **China is the first permanent member of the UN Security Council** calling for a legally binding instrument within the CCW, similar to that of Blinding Laser Weapons.
- The **Iceland** Parliament passed a motion calling for a ban.³
- The **European Parliament** passed a motion calling for a ban.⁴
- More than **3,000 robotics and Artificial Intelligence experts**, including prominent scientists such as Stephen Hawking, Elon Musk (Tesla) and Demis Hassabis (Google), called for a ban.⁵
- **Twenty Nobel Peace Laureates** called for pre-emptive ban.⁶
- Over **160 religious leaders**, including Desmond Tutu, have called for a ban.⁷
- The **Vatican** has called for collective action by the United Nations "to prohibit the development and use of lethal autonomous weapon systems".⁸
- The **Campaign to Stop Killer Robots**, consisting of 61 international, regional, and national non-governmental organizations (including Human Rights Watch, Amnesty and PAX) from 26 countries call for a pre-emptive ban on the development, production and deployment of fully autonomous weapons.⁹
- The **former Secretary-General of the UN Ban-Ki-Moon** said these weapons would be morally unacceptable.¹⁰
- The **UN High Representative for Disarmament Affairs Angela Kane raised** concerns regarding these weapons.¹¹
- **UN Special Rapporteur on Extrajudicial Killings Christof Heyns** called for a pre-emptive ban.¹²
- The **International Committee of the Red Cross** has expressed various concerns.¹³
- The **Vice Chairman of the Joint Chiefs in the United States** reported that these weapons could have serious consequences for humanity.¹⁴
- Sir Roger Carr, **chairman of weapon producer BAE Systems**, expressed his concerns at Davos World Economic Forum.¹⁵
- Johan H. Andresen, chair of the **Ethics council of The Norwegian Pension Fund**, the largest international pension fund, raised various ethical concerns.¹⁶

² IPSOS Survey, (February 2017) <http://www.ipsos-na.com/download/pr.aspx?id=16369>

³ Iceland Parliament Motion (2017) <http://www.althingi.is/altext/145/s/1486.html>

⁴ Joint motion for a resolution, (February 2014) <http://www.europarl.europa.eu/sides/getDoc.do?type=MOTION&reference=P7-RC-2014-0201&language=EN>

⁵ 'Autonomous weapons: an open letter from AI & robotics researchers', (July 2015), <http://futureoflife.org/open-letter-autonomous-weapons/>

⁶ Noble Women's Initiative: 'Nobel Peace Laureates call for pre-emptive ban on Killer Robots', <http://nobelwomensinitiative.org/nobel-peace-laureates-call-for-preemptive-ban-on-killer-robots/#sthash.qXkiskQE.dpuf>

⁷ 'Interfaith Declaration', www.paxforpeace.nl/stay-informed/news/interfaith-declaration.

⁸ 'Vatican warns on autonomous weapons', (April 2016), <https://international.la-croix.com/news/vatican-warns-on-autonomous-weapons/2982>

⁹ Campaign to Stop Killer Robots: <https://www.stopkillerrobots.org/>

¹⁰ Secretary-General of the UN, 'Report of the Secretary-General on the protection of civilians in armed conflict' (November 2013), www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2013_689.pdf

¹¹ 'Killer Robots and the Rule of Law' (July 2013), www.huffingtonpost.com/A-View-from-the-United-Nations-killer-robots-and-the-rul_b_3599657.html;

¹² 'Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions A/HRC/23/47', (April 2013), http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session23/A-HRC-23-47_en.pdf

¹³ 'Autonomous weapon systems: Is it morally acceptable for a machine to make life and death decisions?', (April 2015), www.icrc.org/en/document/lethal-autonomous-weapons-systems-LAWS.

¹⁴ 'The Terminator Conundrum' (January 2016) <http://breakingdefense.com/2016/01/the-terminator-conundrum-vjcs-selva-on-thinking-weapons/>.

¹⁵ 'Delegates at Davos held a meeting about the dangers of autonomous "killer robots"', (January 2016) <http://www.independent.co.uk/life-style/gadgets-and-tech/news/world-economic-forum-davos-killer-robots-discussion-a6833371.html>

¹⁶ Autonomous Weapons, (March 2016), http://etikkradet.no/files/2016/03/Etikkradet_AR_2015_Weapon_criterion.pdf