



The Challenges of Autonomous Weapons Systems

The increased military use of unmanned armed vehicles over the past decade has contributed to what many view as a dramatic change in how we conduct warfare. This development is likely to continue, as countries like the US, Russia, the UK, China, South Korea, and Israel are in the process of developing military systems with steadily increasing levels of autonomy.

Over the past three years, the issue of autonomy in weapon systems has been discussed in informal expert meetings by the State parties to the UN Convention on Certain Conventional Weapons. The purpose of these meetings has been to shed light on what a possible fully autonomous weapon system could look like, and what legal, moral and security implications the development, use and spread of these types of weapons might have. A fully autonomous weapon is, in this context, understood as a weapon system capable of identifying, selecting and attacking a target without human intervention.

While proponents of higher levels of autonomy in weapons point to the increasing need for speed, accuracy and information processing capabilities these systems would provide, opponents claim that lethal, fully autonomous weapons systems, would not be able to comply with international law, would create an accountability gap, and could lower the threshold for policy makers to go to war. Some have also raised the question of whether it would be morally acceptable to outsource a decision to take human lives to a machine. One of the main points raised by civil society organizations like Amnesty International, Human Rights Watch and Article 36, all in favor of an international ban on lethal autonomous weapon systems, is that these types of weapons would not be able to distinguish between civilians and combatants; nor would they be able to judge whether the military advantage achieved by an attack would outweigh the potential civilian casualties caused by the attack.



Among those who have expressed concern regarding the development and use of fully autonomous weapon systems, we find highly regarded scientists, entrepreneurs and executives, including Stephen Hawking, Elon Musk, Noam Chomsky and Stuart Russell.

Many States have already deployed weapon systems with considerable degrees of autonomy, and others are under development. Although fully autonomous lethal systems have, supposedly, not yet been deployed, some roboticists claim that it could only be a matter of years before they are a reality.

Before we arrive at this point, there is a great need for further discussions around the topic. These discussions could benefit from not merely focusing on fully autonomous systems, but also on systems that are already in use, labeled semi-autonomous. Even in these types of weapons it is not always clear what role humans have in the control over the weapon system, and at what point this control ceases to be meaningful. These, and other issues, will be discussed in this workshop organized by the [Norwegian Center for Human Rights at the University of Oslo](#) (Law Faculty [Research Group on Human Rights, Armed Conflicts, and the Law of Peace and Security](#)) and the [Norwegian Peace Association](#).

Date: Wednesday, 19 April 2017.

Venue: [Professorboligen, Karl Johans gate 47, Oslo](#).

Program

08.30 – 09.00 Arrival

09.00 – 09.30 Welcome and introductions

- Welcoming remarks by Gentian Zyberi (Norwegian Centre for Human Rights) and Fredrik Heldal (Norwegian Peace Association).



09.30 – 10.45 Session 1: Ethical and military issues concerning the use of autonomous weapons

- 09.30-09.50 The state of the art of autonomous technology: achievements and challenges. *André Pettersen*, Defense Research Institute of Norway.
- 09.50-10.10 The ethical aspects surrounding the delegation of killing to a machine. *Lars Christie*, University of Oslo.
- 10.10-10.30 Will autonomous weapon systems lead to more/new types of war? *John Olav Birkeland*, University of Glasgow.
- 10.30-10.45 Q&A

10.45 – 11.00 Break

11.00 – 12.15 Session 2: Autonomous weapon systems and international law

- 11.00-11.20 Would a fully autonomous weapon system be able to comply with international humanitarian law? *Sigrid Redse Johansen*, Norwegian Defence Command and Staff College.
- 11.20-11.40 Autonomous weapon systems and international human rights. *Kjetil Mujezinović Larsen*, Norwegian Center for Human Rights.
- 11.40-12.00 Protection of victims under international and Norwegian law. *Daniel Møgster*, Ministry of local government and regional development.
- 12.00-12.15 Q&A

12.15 – 13.15 Lunch

13.15 – 14.15 Panel discussion: The future of autonomous weapons

14.15 – 14.30 Closing remarks by Fredrik Heldal and Gentian Zyberi