WHAT ARE FULLY AUTONOMOUS WEAPONS?

Fully autonomous weapons are weapon systems that can select and fire upon targets on their own, without any human intervention. Fully autonomous weapons can be enabled to assess the situational context on a battlefield and to decide on the required attack according to the processed information.

Fully autonomous weapons would act on the basis of an “artificial intelligence”. Artificial intelligence is created by arithmetic calculations and programming of the robot. It lacks every feature of human intelligence and human judgment that make humans subject and accountable to rules and norms. The use of artificial intelligence in armed conflict poses a fundamental challenge to the protection of civilians and to compliance with international human rights and humanitarian law.

IMPORTANT QUESTIONS RAISED BY THE DEVELOPMENT OF FULLY AUTONOMOUS WEAPONS

Ongoing research and development in the field of fully autonomous weapons have reached a critical stage, requiring in-depth reflection on further technical development of such weapon systems. The debate on fully autonomous weapons raises following fundamental ethical and principle questions:

- Can the decision over death and life be left to a machine?
- Can fully autonomous weapons function in an ethically “correct” manner?
- Are machines capable of acting in accordance with international humanitarian law (IHL) or international human rights law (IHRL)?
- Are these weapon systems able to differentiate between combatants on the one side and defenceless and/or uninvolved persons on the other side?
- Can such systems evaluate the proportionality of attacks?
- Who can be held accountable

These issues put into question whether or not human abilities, such as the assessment of international humanitarian law principles of proportionality, military necessity, and the capability to make distinctions between civilians and combatants, can be transferred to a machine.

WHAT EFFORTS HAVE BEEN TAKEN TO ADDRESS THE DEVELOPMENT AND USE OF FULLY AUTONOMOUS WEAPONS?

Since 2014, the states parties of the Convention on Certain Conventional Weapons (CCW) have discussed how to address the threat of killer robots. In 2016, the Fifth Review Conference of CCW decided to begin a formal process in 2017 to discuss autonomous weapon systems. The meetings since have focused on
building a common understanding about the meaning of human control and the risks of fully autonomous weapons. Most governments, along with the International Committee of the Red Cross (ICRC), the UN Secretary General Antonio Guterres, and the Campaign to Stop Killer Robots, have reached the conclusion that humans must maintain control over programming, development, activation, and/or operational phases of a weapon system.

A growing number of states are calling for a pre-emptive ban on killer robots (currently 28 states). Furthermore, the Non-Aligned Movement, the largest bloc of states operating in the UN, has called for a legally binding instrument stipulating prohibitions and regulations of such weapons; Austria, Brazil, and Chile support the negotiation of “a legally binding instrument to ensure meaningful human control over the critical functions” of weapon system. A few others have expressed their interest in non-legally binding mechanisms, such as a political declaration proposed by France and Germany.

Additional support for a prohibition has also come from thousands of scientists and artificial-intelligence experts. In July 2018, they issued a pledge not to assist with the development or use of fully autonomous weapons. This comes on the heels of broader activism from the scientific and technology community against misuse of technology. For example, 4000 Google employees recently signed a letter demanding their company cancel its Project Maven contract with the Pentagon, which was geared toward “improving” drone strikes through artificial intelligence. Twelve hundred academics announced their support for the tech workers. As a response, Google renounced its work on Project Maven. Furthermore, more than 160 faith leaders and more than 20 Nobel Peace Prize laureates back the ban.

However, a tiny handful of states are opposed to legally binding or political responses to the threats posed by autonomous weapons. Australia, Israel, Russia, and South Korea, the United States have been able to block any moves to stop the development of these weapons.

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