



Background Paper

Committee: Committee on Artificial Intelligence

Topic A: Should Autonomous Weapons Powered by Artificial Intelligence be Banned?

Chairs: Valeria lechuga López and Santiago Gomez Galarza

The concept of automatic or semi-automatic weapons has been around for a while. Innovations such as landmines, cruise missiles, and non tripulated drones have traced the path so that human involvement is almost unnecessary in warfare. However, weapons still require some human interaction to make the final decision in lethal action. The AWS (Autonomous Weapon Systems) took a significant jump in the last decade with the advancement of AI and machine learning technologies. Big military powers such as the US, Russia, and China have heavily invested in AI for military purposes. The first time autonomous systems were put to use was in the early 2000s, with the usage of automated drones with the ability to execute pre-programmed missions. Although these drones still required a human operator to make final targeting decisions. The United Nations has been in discussions since 2014 about the regulations of the AWS. When an alliance of various countries and organizations started raising alarms about “killer robots”, various international efforts have been attempted to address the ethical implications.

The creation and usage of autonomous weapon systems powered by artificial intelligence have come to the surface as one of the most controversial issues in international security and ethics. These systems are capable of identifying and engaging targets without human intervention, this represents new threats to the world whether in wars or acts of terrorism. Machines that automatically decide to take human lives raise big moral, legal, and practical concerns. Far away from ethical debates, AI-powered weapons could destabilize global power dynamics, accelerate weapon races, and impose a major threat to civilian populations.

Addressing this topic is vital for preventing unintentional consequences and making sure that AI technologies are used for the public good, not for destroying it.

At the moment, AI-powered weapons are not widely deployed but are being created by major military powers. This includes drones with autonomous targeting capabilities and AI-driven missile defenses. The United States of America, Russia, and China are leading in AI military research and development, with significant investments dedicated to AI weapons. Meanwhile, there is a growing disquietude over the potential of AI in less transparent regimes. Terrorist organizations could use AWS to make attacks without requiring too much military infrastructure. In conflict zones autonomous weapons could be used to execute missions, giving no importance to civilian security. Moreover, the lack of international standards and regulations for AWS complicates the challenge of addressing the issue on a global scale.

The discussion about banning autonomous weapons powered by AI is desperate for various reasons. First, AWS violates international humanitarian law, which demands the need for human perception of proportionality and distinction in war. Machines, regardless of their innovative capabilities, cannot fully understand the importance of the laws of war. Moreover, the lack of human responsibility in AWS decision-making raises worries about violations of human rights, especially in cases where weapons could malfunction. The development of these weapons terrorizes global security. AI-powered weapons could increase the approach to conflict initiation. States might feel tempted to engage in warfare without having the risk of losing soldiers. This could weaken international relations and potentially precipitate an AI weapons race, where different actors compete to create incredibly advanced AWS. The lack of regulation, paired with the fast innovations in AI technology, increases the risk that such weapons could fall into non-state actors' hands, or be used in terrorist attacks.

International attempts to regulate or ban AWS are still in the early phases. The UN has carried out numerous discussions on the topic, but countries remain divided. Some states, specifically those that heavily invested in AI research for military purposes., argue that a ban would stop innovation and affect national security. Others, particularly smaller countries and civil society groups fight for a preventive ban to look over risks associated with AWS. The campaign "Stop Killer Robots", a union of over 160 non-governmental organizations, has been pushing for regulation on the making and use of autonomous weapons. Several possible approaches to address the problem have been presented, including a treaty banning autonomous

weapons, similar to the bans on chemical and biological weapons. Another approach suggests establishing strict regulations for the use of AWS, assuring that human operators maintain control over all lethal decisions.

The focus of the debate should go around the ethical, legal, and practical implications of AI-powered autonomous weapons. Key questions to look for include: Can AI be trusted to make decisions about life and death in warfare? How can we ensure accountability in the use of AWS, particularly if they malfunction or are used improperly? Another critical aspect of the debate should be on how to regulate AI-powered weapons without restricting technological progress. The potential benefits of AI in defense, such as amplified precision and reduced possibility of error, must be balanced with the ethical and legal challenges they present. Lastly, the international community must consider whether a ban is viable, or if other regulations that encourage the responsible use of AI in warfare are more realistic.

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