Committee: First Committee - Disarmament and International Security (DISEC)

Question of: Lethal Autonomous Weapon Systems and Artificial Intelligence in warfare

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Introduction

The Lethal Autonomous Weapon Systems (LAWS) are those systems of weapons that once they are activated, can select and engage targets with no human intervention as an operator. Nowadays, they are considered a conflict point in terms of technology, humanity and politics, causing important changes in the global community and the proliferation of these types of arms. Due to the advances in hardware, technological systems and artificial intelligence (AI), human beings and specifically states, have been really doing advances in the development of new forms of weapons.

Nowadays, Artificial Intelligence has been one of the key factors to explain how modern societies work. AI can be used in many forms during a combat or armed conflict, from image recognition systems, to autonomous drones and non-human intervention weapons. Modern AI warfare is based on predictive analysis through algorithms that can process a great amount of data and patterns in seconds. There have been international attempts, meetings and resolutions around the LAWS and Artificial Intelligence trying to warn the international community and even to control them. However, due to its newness, currently there is not that much effectiveness of their control.

The discussions around Lethal Autonomous Weapon Systems (LAWS) and Artificial Intelligence (AI) have led to a growing concern regarding the ethical implications and potential risks associated with their deployment. The absence of a strong framework for oversight and control poses challenges in addressing the ethical and humanitarian concerns surrounding autonomous weapons. Moreover, the fast pace of technological advancements often outpaces the formulation of appropriate legal and ethical guidelines.

The Issue

The integration of Autonomous Lethal Systems and Artificial Intelligence in the context of armed conflicts has caused ethical, legal and security challenges. These technological advances have raised concerns in connection with moral to geopolitical dilemmas, raising fundamental questions about the very nature of war.

These systems being able to make lethal decisions without direct human control raises questions about the morality of delegating these actions to machines. This lack of ethics and the inability to understand the decision-making processes in these systems raise concerns.

In legal terms, the lack of clear and specific regulations in international law adds complexity to accountability and responsibilities in case of technical failures. This absence of solid regulatory frameworks makes the effective application of international humanitarian law difficult.

Human supervision

The absence of this supervision raises a series of interrelated ethical dilemmas, since these systems have the capacity to make autonomous decisions without prior direct human intervention. Lack of oversight carries the risk of indiscriminate or disproportionate actions, undermining fundamental principles of humanitarian law. Human supervision is not only crucial to ensure compliance with ethical and legal standards, but is also connected to the need for contextualization and moral understanding in lethal decision making. Evaluating proportionality in the use of force requires human judgement that considers contextual and ethical factors.

Effectively implementing adequate human oversight in the use of these more modern systems and artificial intelligence in warfare becomes a multidimensional challenge. It is necessary to develop clear regulatory frameworks that require the presence of effective human control during all phases of operation, thus guaranteeing responsibility and ethical application in conflict situations.

Proliferation and irresponsible access

The proliferation and uncontrolled access to these technologies represent another crucial challenge. in the context of military use. There are significant risks of access to these tools by non-state actors or irresponsible entities. Unregulated access could lead to the misappropriation of autonomous systems for destructive purposes.

The lack of effective measures to control the proliferation of these autonomous systems could result in an arms race, where multiple actors seek to develop and deploy these technologies without adequate oversight. This dynamic of uncontrolled proliferation would not only increase the chances of indiscriminate use of autonomous systems in conflicts, but would also complicate international efforts to establish regulations and safeguard global security.

Furthermore, the possibility of these tools falling into the hands of non-state actors or being used irresponsibly threatens to destabilise global security, triggering an arms race and generating new forms of conflict with unpredictable long-term effects.

Conflict scale

The introduction of these technologies carries with it the potential to transform the characteristics of war, altering its dynamics and increasing the risk and unforeseen consequences. By operating with autonomous decisions and processing speeds that exceed human capacity, they could precipitate rapid

and disproportionate confrontation situations. Speed and lack of contextual understanding could lead to excessive responses or actions with significant, but unanticipated, repercussions.

The autonomy of these systems to make decisions independently, without direct human supervision, could be manipulated or exploited by malicious actors to attribute aggressive actions to specific entities, generating confusion and triggering unnecessary conflicts. These types of incidents would not only cause negative consequences on trust between nations, but could lead to a rapid escalation of tensions and conflicts, further exacerbating instability in already volatile regions.

Global stability

These technological advances pose direct threats to stability by changing the very nature of armed conflicts and the dynamics between nations. The uncontrolled proliferation of these technologies represents a risk to global stability. The potential for lethal autonomous systems to be accessed or used irresponsibly by non-state actors could trigger uncontrolled escalation of conflict, upsetting the balance of power between nations and threatening international peace and security.

The absence of global standards and the inability to reach meaningful consensus on the regulation of these technologies in the military sphere pose additional challenges. This lack of agreement encourages unbridled competition and, possibly, an arms race in which nations seek to acquire and develop these capabilities without clear limits, causing tensions to increase.

Challenges in verification and control

The ability to verify compliance with international regulations and treaties in relation to the use of these systems presents an immense challenge. Algorithms, often complex and difficult to understand, make it difficult to determine how decisions are made and what criteria are used to select targets. This opacity in relation to the ability to verify whether systems comply with established ethical and legal standards.

Furthermore, the lack of a control mechanism to ensure correct operation and adherence to established regulations leaves a gap in the supervision of these technologies. The absence of strong international standards and the difficulty in monitoring usage in real time raise questions about how to ensure responsible and ethical implementation of these systems.

In conclusion, the concentration of power in the hands of a few state actors or private entities, the potential manipulation or falsification of incidents, as well as the ethical and moral challenges inherent in delegating lethal decisions to autonomous systems, raise profound dilemmas about the equitable distribution of power.

Key Events

Event/Date	Explanation
1954/Autonomous Weapons systems	The first conceptual designs and advances in the automation of military processes.
1957/Sputnik	It marks the beginning of the space race and leads to significant advances in technology and navigation systems.
1969/ARPANET	It is the background to the Internet, established by the United States Department of Defense.
1980/GPS	GPS systems began to be used for military purposes.
1991/Persian Gulf War	This war was the introduction of advanced military technology, including guided weapons systems and advances in electronic warfare.
1999/Drones	The use of unmanned aircraft (drones) became more prominent during the conflict in the Balkans.
2001/Terrorist Attacks (US)	Due to the attacks there was an increased use of defence and security technology in the fight against terrorism.
2003/Iraq Invasion	With the invasion the use of modern weapons systems and technology-based war strategies were used and developed.
2010/Cyber Warfare	The use of cyberwarfare is increasing, with cyber attacks such as Stuxnet, malware designed to sabotage and try to find information about Iran's nuclear program.
2013/report of the UN Special Rapporteur	The report of the UN Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions included concerns about LAWS.
2015/CCW	The UN Convention on Conventional Weapons (CCW) held meetings on autonomous weapons, marking the start of formal international discussions.
2018/WGE	The Working Group of Experts on Autonomous Weapons (WGE) held in Geneva A series of meetings with the purpose of examining the problem and finding possible solutions.

2020/WGE meeting respect LAWS	No significant consensus was reached on the regulation of Lethal Autonomous Weapons Systems during the meeting in 2020.
2022/WGE & UNGA	The next WGE sessions and discussions at the UN General Assembly continue to address the use of autonomous systems in armed conflicts.
2023/Approval of Resolution	First Committee (DISEC) approves a new resolution on Lethal Autonomous Weapons. Attempts to minimise the risk of harm to civilians in conflicts by controlling and marking the AI.

Previous Attempts to Solve the Issue

Previous attempts to solve the problem of using Lethal Autonomous Weapons Systems (LAWS) and Artificial Intelligence (AI) in warfare have been varied and challenging. In recent years, various international conferences have addressed this issue through intense debates in forums such as the Convention on Conventional Weapons (CCW). Member states have sought agreements to establish limits and regulations that prevent the indiscriminate and potentially dangerous use of autonomous weapons.

Despite these efforts, the technical and ethical complexity of regulating LAWS has made it difficult to create concrete agreements, causing stagnation on key issues, such as the very definition of autonomous weapons, legal liability in the event of damage caused by these technologies, and the limits for its development and deployment.

In these attempts to resolve the problem, the possibility of establishing a complete restriction or ban on LAWS has also been explored. Some countries and non-governmental organisations have defended this position by completely stopping the development and deployment of these weapons. However, reaching a global consensus on a complete ban has been a challenge, with significant differences of opinion between nations about the usefulness and potential risk of these technologies. The idea is to establish control and supervision mechanisms that ensure that these weapons are subject to an adequate level of human supervision. However, the practical implementation of these mechanisms has been difficult, as the very nature of weapon autonomy poses challenges.

Ethical frameworks and principles have been proposed to guide the research, design and implementation of these technologies, with the aim of ensuring that their use is consistent with moral and humanitarian norms.

Previous attempts to solve the problem of using Lethal Autonomous Weapon Systems and Artificial Intelligence in warfare have revealed the difficulty of reaching concrete and effective agreements. Technical, ethical, and geopolitical complexity has hindered the creation of global

regulations that comprehensively address the risks and challenges posed by these emerging technologies.

Possible Solutions

For the DISEC committee the use of LAWS and AI must be one of the main points of debate between the international community due to the ethical, legal and strategic challenges. The necessity to find effective solutions that balance technological progress with ethics and global security is important.

- Establishment of ethical norms by promoting an international ethical framework. Due to this, human rights and the principle of humanity are protected.

- Prohibition of certain uses of the LAWS in certain contexts, like indiscriminate attacks or those actions that can cause excessive collateral damages. Basically, during an armed conflict respect the International Humanitarian Law.

- Control and verification mechanisms to comply and respect the regulations that are agreed internationally.

- Promote international cooperation between states to address the ethical, legal and security challenges.

- Achieve pacific alternatives through investigation and development of alternative technologies that can contribute to international security.

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