

FORUM:	Disarmament Commission
ISSUE:	Measures to Establish Normative Frameworks Governing the Deployment of Artificial Intelligence Within Contemporary Warfare
STUDENT OFFICER:	MinSeo Park
POSITION:	Deputy Chair of Disarmament Commission

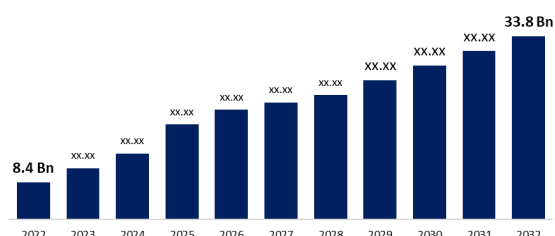
Introduction

The rapid advancement of artificial intelligence (AI) has emerged as one of the most transformative technologies influencing various aspects of society, including the military sector. Its application, including strategic analysis, AI-driven drones, and target identification, is becoming important for modern warfare. These contributions enhance accuracy and speed of the military operations which reduces the risks for soldiers.

However, it raises some significant legal, ethical, and humanitarian concerns. AI systems may incorrectly identify targets which could result in attacks toward civilians. This risk raises significant concern when AI systems make decisions about the use of force. In addition, the increasing number of AI weapons may reduce meaningful human control over military operations. When human rely heavily on AI-generated weapons, it may become difficult to understand fully how attack will occur before it begins. Furthermore, as more countries invest in developing military AI technologies, AI arms race is becoming serious among the countries to achieve military dominance. This problem leads to concerns over global security and imbalance of power among states.

Although the international community has begun to discuss the responsible use of AI in armed conflict, comprehensive international regulations have yet to be established. Therefore, it is essential for countries to cooperate in establishing frameworks to ensure the responsible and accountable usage of AI in military.

Global Artificial Intelligence (AI) in Military Market



Increasing trend in number of artificial intelligence (AI) in military operation

Background

The early application of artificial intelligence (AI) was the Dynamic Analysis and Replanning Tool (DART), introduced in 1991 during the Gulf War for transportation of supplies. It was designed to solve one of the greatest challenges: transporting thousands of soldiers, vehicles, equipment, and fuel to



TIANMUN

various locations. After its launch, DART demonstrated how AI could be used to analyze the complex information and support decision making which made important development in military.

As artificial intelligence continues to develop, its military applications expanded beyond logistics into intelligence analysis, surveillance, and target identification. Project Maven, an artificial intelligence program launched in 2017 to help military analysts, made a large effect to the warfare. It integrated satellite imagery, enemy intelligence, and sensor data through machine learning. It made possible for detecting and classifying objects accurately and quickly. This project demonstrated that AI could support decision-making in battlefield and marked one of the first integrations of AI in modern military operations.

Integration of AI in warfare has been increased after Project Maven. During Russia-Ukraine War, AI-assisted drones have been used for gathering information and target recognition. These developments reflect AI has become to an active part in warfare which increases concerns about human control and accountability. In 2012, the U.S Department of Defense issued the directive on autonomous weapon systems.

Also, in 2017, over 100 AI and robotics experts urged that preventing AI arms race is essential as worldwide. Although discussions have continued under institutions such as Convention on Certain Weapons (CCW), international legal framework issuing AI in warfare has not established yet. Important questions about accountability such as who should be responsible when AI make incorrect decision also remained unresolved.



Deployment of AI drones of Ukraine in Russia-Ukraine War

Problems Raised

Ethical Concerns and Loss of Human Control

Artificial intelligence has become increasingly improved into military decision-making though AI-assisted decision-support systems (DSS) which raises significant ethical concerns regarding the use of force. Military virtues such as courage, and responsibility are relied on human judgement and accountability. However, as the implication of AI is increasing and taking the role in military action, there is a growing possibility about loss of human control over AI based decisions. AI systems may produce may incorrectly identify targets or make inappropriate decisions which makes difficult to determine whether responsibility lies with operator, military leader, or developers of system. These concerns could be serious when AI decisions affect human life and death.



Furthermore, AI systems are not free from limitation. Biases in the training data of AI systems can unintentionally continue or even amplified by themselves. This could result to discrimination based on characteristics such as sex, race, and nationality etc. As a result, assigning reasonability when civilian casualties occur becomes challenging. These concerns led many international organizations such as CCW and the International Committee of the Red Cross (ICRC) to emphasize that excessive reliance on AI in warfare is significant threat to ethical accountability and human dignity.

Lack of Comprehensive International Regulations

The foundational legal framework such as International Humanitarian Law (IHL) provides important principles for the use of force. However, IHL doesn't specifically determine the legality of autonomous weapons. As the use of AI increases, AI system's complex and opaque decision-making processes make difficult for human operators to understand the system's decisions. This opacity creates accountability problems because it can be difficult to determine who should be responsible for its consequences. Furthermore, the unpredictable mechanisms of AI make it difficult to prove the intention or negligence of developers, military leaders, or deployers. Absence of clear framework not only weakens the power of law but also allows warrant punishments not occur.

AI Arms Race and Global Security

The AI arms race refers to the competitive dynamic where countries strive to achieve military dominance through AI technologies. Followed by the rapid development in technologies, Nations began to invest heavily in AI to gain a technical edge which could affect to global power structures. Recently, the world military expenditure continued to record \$2.89 trillion. The development of advanced military programs encourage countries to accelerate their military systems in response to the advancements of other nations. The absence of clear international regulation for AI could encourage countries to accelerate



US military's AI-powered machine guns

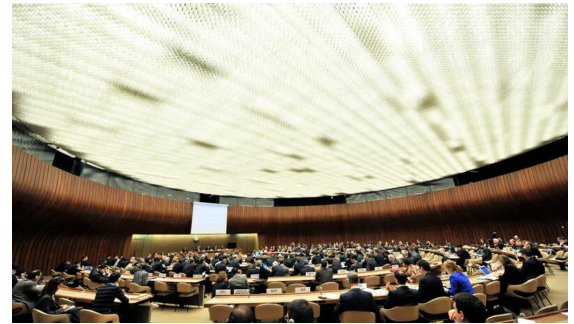
military development which could increase the risk of conflict and create imbalance of power. This intense competition threatens essential civilian infrastructure and causes widespread loss of life. As nations prioritize superiority in technological race, life of innocent civilians could be easily overlooked.



International Actions

Convention on Certain Conventional Weapons (CCW) and the Group of Government Experts (GGE)

The Convention on Certain Conventional Weapons (CCW) has become major international forum for regulation on Artificial Intelligence. Since 2017, the Group of Governmental Experts (GGE) has met regularly to discuss legal, ethical, and humanitarian implications of autonomous weapons. This discussion is focused on



Conference of the Convention on Certain Conventional Weapons (CCW)

ensuring the use of AI in military system with Humanitarian Law (IHL) to maintain the meaningful use of technologies. Although GGE has introduced some principles emphasizing human responsibility and accountability, member states didn't reach to the binding agreement yet. For example, each countries have different view on whether international law is sufficient for regulation of autonomous weapon or whether a new international law is necessary. There are also disagreements over the human control over AI weapons. Differences in perspective in military AI for each nations slowed the progress which left the international community without comprehensive framework.

NATO Artificial Intelligence Strategy

NATO has significant actions to regulate responsible use of artificial intelligence in military and defense. It emphasizes six principles of responsible use (PRUs): lawful, responsibility and accountability, explainability and traceability, reliability, governability, and bias mitigation. It aims to accelerate of AI in



NATO and member state's commitment for responsible AI

defense ensuring technologies reliable and secure.

Furthermore, it focuses on improving AI testing and verification to reduce risks caused by biased data.

However, NATO's AI Strategy is mainly limited to NATO members which has minor influence throughout the whole nations. Also, the strategy is a policy framework rather than regulation which don't have the same legal enforcement as international law.

Key Players

United States

The United States is one of the leading countries in the development of military artificial intelligence. It considers AI technologies as a key component of its national security and military strategy. Rather than restricting the lethal autonomous weapon systems (LAWS), the United States supports its responsible use and development through existing traditional law and national policies. United States continues to invest heavily in AI research and autonomous systems, making key participant in international discussions.

China

China has emerged as a major force in development of military artificial intelligence to transform the capabilities of the People's Liberation Army (PLA). The Chinese government views AI technologies for future warfare and national defense modernization. In response to growing AI national arm race, China has accelerated the integration of AI in military operations. The U.S Department of Defense reported that China is prioritizing AI-enabled capabilities, such as automated target recognition and vehicles. China has also participated in It also emphasizes the importance of international regulations to control and address the potential risks with lethal autonomous weapon systems (LAWS).



AI machine development in China followed by United States

Israel

Israel is a significant actor in the development of military artificial intelligence, particularly because of its advanced defense technology and continuous security challenges. Facing ongoing regional conflicts, Israel has actively integrated AI into warfare to strengthen defense capabilities. Also, through its practical use of AI based technologies, Israel has significant experience in applying AI to modern warfare. At the same time, Israel emphasizes the importance of human responsibility when using AI based weapons by supporting continuing international discussions on lethal autonomous weapon systems (LAWS) under existing international humanitarian law (IHL).

Possible Solutions



TIANMUN

Establishing Meaningful Human Control

Establishment of meaningful human control is one of the most important solutions to address the risks with lethal autonomous weapon systems (LAWS). As autonomous technologies become capable of identifying targets, maintaining human involvement in military decisions is necessary to ensure accountability with International Humanitarian Law (IHL). Human operator should remain responsible for decisions involving the use of force including ability to intervene or deactivate autonomous systems when necessary. This includes ensuring that human operators fully understand capabilities and limitation of AI systems before deployment of automated decisions. By preserving human judgement in critical situations, nations can reduce the risks of unintended consequences and loss of accountability in warfare while continuously benefit from advancements of AI in warfare.

Creating International Legal Frameworks

The development of international legal frameworks is essential to address the challenges by rapid advance of autonomous weapon. Current differences in national policies about autonomous technologies shows that establishing clear international regulations is crucial to define limits and to ensure that states remain accountable for their actions. Through international forums such as United Nations Convention on Certain Conventional Weapons (CCW), nations should work together to develop standards based on deployment of autonomous weapon systems. This framework should address issues such as such as responsibility and accountability to reduce misunderstanding between nations.

Enhancing Transparency and Verification Mechanisms

Enhancing transparency and verification mechanisms is essential for building trust among states. The lack of transparency regarding autonomous weapons' capabilities increases mistrust and risk to global stability. For instance, states could improve transparency by sharing information about AI-assisted weapons policies and safety measures. States could also establish verification mechanisms such as regular testing to confirm that AI-assisted weapons meet safety standards. This will allow other nations to reduce the uncertainty about their potential risks. Improved transparency will encourage responsible innovation and reduce misuse of autonomous weapons.

Glossary

Lethal Autonomous Weapon Systems (LAWS)

Autonomous weapon systems that are identify and engage targets without direct human control

Artificial Intelligence (AI)



TIANMUN

A technology that enables machines to perform tasks that typically require human intelligence including learning and decision-making

International Humanitarian Law (IHL)

A body of international rules that applies during armed conflicts to regulate usage in warfare and protect individuals affected by conflict

AI Decision-Support Systems (DSS)

AI-based systems that analyze information and provide recommendations to support human decision-making processes

Convention on Certain Conventional Weapons (CCW)

An international treaty that regulates the use of certain conventional weapons that could lead to cause of excessive harm

Group of Governmental Experts (GGE)

A group of government representatives established to discuss issues related to military technologies and their potential regulation

AI Arms Race

A competition among countries to develop and improve artificial intelligence technologies for military purposes

Sources

- Abraham, Yuval. “‘Lavender’: The AI Machine Directing Israel’s Bombing Spree in Gaza.” +972 Magazine, 3 Apr. 2024, <https://www.972mag.com/lavender-ai-israeli-army-gaza/>.
- Advisory Service. https://www.icrc.org/sites/default/files/document/file_list/1980-convention-on-certain-conventional-weapons-icrc-eng.pdf.
- Bakar, Ergun. “Artificial Intelligence Arms Race: Definition, Conceptual Context & Why It Matters - TRT World Research.” TRT World Research Centre, 21 May 2026, <https://researchcentre.trtworld.com/dictionary/artificial-intelligence-arms-race/>.
- Berliner, Jeffrey, et al. Dynamic Analysis and Replanning Tool (DART) System/Subsystem Specification Eric Tiffany, Ascent. 1993, <https://archive.computerhistory.org/resources/access/text/2023/08/102805225-05-01-acc.pdf>.
- Fitchew, Charles. “How AI Is Rewriting the Rules of Modern Warfare.” Vision of Humanity, 22 Apr. 2026, <https://www.visionofhumanity.org/how-ai-is-rewriting-the-rules-of-modern-warfare/>.
- International Committee of the Red Cross. “What You Need to Know about Autonomous Weapons.” Wwww.Icrc.Org, July 2022, <https://www.icrc.org/en/document/what-you-need-know-about-autonomous-weapons>.
- Klaus, Matthias. “Transcending Weapon Systems: The Ethical Challenges of AI in Military Decision Support Systems.” Humanitarian Law & Policy Blog, 24 Sept. 2024, <https://blogs.icrc.org/law-and-policy/2024/09/24/transcending-weapon-systems-the-ethical-challenges-of-ai-in-military-decision-support-systems/>.
- Kirichenko, David. “Artificial Intelligence’s Growing ROLE in Modern Warfare.” War Room - U.S. Army War College, 21 Aug. 2025, <https://warroom.armywarcollege.edu/articles/ais-growing-role/>.
- Kraus, Jakub. “How the U.S. Military Learned to Embrace AI Warfare.” Lawfare, 2026, <https://www.lawfaremedia.org/article/how-the-u.s.-military-learned-to-embrace-ai-warfare>.
- Mandilara, Sofia. “AI at War: Five Things to Know about Project Maven.” Euractiv, 5 Apr. 2026, <https://www.euractiv.com/news/ai-at-war-five-things-to-know-about-project-maven/>.



“AI in Warfare and Military Applications.” TE Connectivity, <https://www.te.com/en/industries/defense-military/insights/ai-in-warfare-and-military-applications.html>.

“China and AI-Military Integration: Perspectives, Opportunities, and Challenges | Asia-Pacific Leadership Network.” Apln.Network, 2026, <https://www.apln.network/analysis/policy-briefs/china-and-ai-military-integration-perspectives-opportunities-and-challenges>.

“ICRC Position on Autonomous Weapon Systems.” International Committee of the Red Cross, 12 May 2021, <https://www.icrc.org/en/document/icrc-position-autonomous-weapon-systems?>

“The Proliferation of AI-Enabled Military Technology in the Middle East.” IISS, 2026, <https://www.iiss.org/online-analysis/charting-middle-east/2026/04/the-proliferation-of-ai-enabled-military-technology-in-the-middle-east/>.

“Summary of NATO’s Revised Artificial Intelligence (AI) Strategy.” NATO.Int, 2025, <https://www.nato.int/en/about-us/official-texts-and-resources/official-texts/2024/07/10/summary-of-natos-revised-artificial-intelligence-ai-strategy>.

Österreich, Außenministerium der Republik. “Autonomous Weapons Systems.” Www.Bmeia.Gv.At, <https://www.bmeia.gv.at/en/european-foreign-policy/disarmament/conventional-arms/autonomous-weapons-systems>.

bhl6. “AI & The Future of Conflict | GJIA.” Georgetown Journal of International Affairs, 12 July 2024, <https://gjia.georgetown.edu/conflict-security/war-artificial-intelligence-and-the-future-of-conflict/>.