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Committee: GAI

Issue: Measures to implement

mitigate AI weaponization.

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INTRODUCTION

As artificial intelligence continues to evolve and integrate into various sectors, the potential for its weaponization raises significant ethical, security, and societal challenges. The rapid advancement of AI technologies has outpaced the development of regulatory frameworks, making it crucial to establish effective measures to mitigate the risks associated with their misuse. This discussion will explore the critical strategies and policies needed to address the threat of AI weaponization, highlighting the importance of international collaboration, ethical standards, and proactive governance to ensure that these powerful tools are used for the benefit of humanity rather than its detriment.

Background Information

Definition: All weaponization refers to the use of artificial intelligence technologies to create or enhance weapon systems and military operations. This can include automated drones, automated weaponry, cyber warfare tools, and decision-making algorithms that could potentially be used in conflict situations.

Emergence of AI in Warfare: The rapid progress of artificial intelligence (AI) technology has altered military operations, improving capabilities in areas such as surveillance, logistics, and combat decision-making. While AI can improve combat efficiency and effectiveness, its employment in weapon systems raises serious challenges, including moral dilemmas, accountability issues, and the risk of misuse. As autonomous systems become more integrated into military strategies, there is an urgent need to establish steps to reduce the hazards connected with AI weaponization.

Need for Mitigation:-

1. Escalation of conflict:

Autonomous weapons can decrease the threshold for military participation, leading to quick decision-making and unintentional conflicts. The speed of Al-powered technologies may worsen existing tensions between states.

2. Humanitarian Risks:

Autonomous systems may struggle to distinguish between combatants and non-combatants, increasing the danger of civilian casualties. The risk of misidentification creates ethical questions about the protection of human life during wars.

3. Global Security Threats:

The expansion of AI technologies has the potential to empower non-state actors, such as terrorist organizations, generating new security risks and challenging traditional military responses. These advances may destabilize regions and contribute to global insecurity

Background Information

Challenges to Effective Mitigation

- Rapid Technological Advancement:
 - The rapid progress of AI technologies complicates the establishment of regulations that can keep up with emerging capabilities.
 - Development comprehensive governance structures becomes increasingly challenging.
- Competing National Interests:
 - Differing military policies and technological priorities among nations makes it difficult to reach a regulatory consensus.
 - Nations may prioritize their competitive benefits over collaborative efforts to ensure responsible use of Artificial Intelligence.

Conclusion

To address the multifaceted challenges posed by AI weaponization, a comprehensive and collaborative approach is essential. By fostering international cooperation, establishing ethical standards, encouraging transparency and improving education the global community can work toward mitigating the risks associated with autonomous military systems. Ongoing debates and discussions among nations will be vital in developing strong frameworks that support ethical AI use while also protecting global security.

Relevant Treaties or Past Solutions

1. CCW:

Aim: The CCW is intended to ban or restrict certain conventional weapons considered unacceptably injurious and/or have indiscriminate effects, with the view that they can protect human rights of both civilians during times of war (Jus in bello) as well as combatants.

Key Protocols: CCW governs specific weapons including anti-personnel land mines, incendiary weapons and blinding lasers. It also covers the problem of superfluous injury and dangers from unexploded ordnance, so as to protect civilians and limit civilian suffering.

Parties Involved: The CCW had since grown to 125 States Parties, and included most military powers as well as many other governments. Some countries participate in the debates and actively implement it, while others have not yet ratified the pact.

2. Arms Trade Treaty:

Focus: The Arms Trade Treaty is a treaty that opened for signature on 3 June and seeks to regulate the international trade in conventional arms by requiring states parties, among other things, not to export weapons if they will be used for human rights abuses.

Parties Involved: The ATT has 110+ States Parties world wide, including leading arms-exporting and importing countries as well many states from all regions.

Key Protocols: The ATT itself consists of provisions rather than separate protocols, outlining:

- Criteria for assessing arms exports, including considerations for human rights and humanitarian law.
- Obligations for reporting and transparency in arms transfers.
- Measures to prevent diversion of arms to unauthorized users.

Ongoing Discussion: Current discussions include the improvement of compliance and implementation mechanisms, issues such as arms diversion, and enlarging scope of treaty to cover emerging technologies/non-state actors in arm trade. There is also an ongoing conversation about whether the treaty has actually prevented illicit arms transfers and fostered accountability.

Relevant Treaties or Past Solutions

3. UN Secretary-General's Disarmament Agenda

Once in force, the agenda contributes to disarmament and security at a global level by tackling evasion methods of new technologies such as armed robots based on artificial intelligence.

Underlines the call for regulation of AI weaponry, adherence to international humanitarian law and avoiding 'accidental' autonomous systems

This effort drives home the imperative necessity for international discussion and dialog to maintain safeguards on how we harness AI, particularly in battle landscapes, with an eye toward frameworks that assure human oversight integrates at every stage of implementation.

4. Geneva Convention Article 12

One of the provisions of the Geneva Convention is the guarantee of the protection of people who are not involved in hostilities during armed conflicts.

Key Points:

- Protection of Non-Combatants: It assures the ethical care of civilians and those hors de combat (out of the fight), also including the wounded, sick, and shipwrecked, without any adverse distinction.
- Prohibition of Violence: The article forbids conduct that is brutal to civilians, thereby underscoring the need to establish and preserve their rights and dignity during the conflict.

On the whole, Article 12 represents the Geneva Conventions' commitment to safeguarding those who are not fighting and living up to the humanitarian principles of war.

POSSIBLE SOLUTIONS

Ethical Guidelines:

- Principles: Create clear descriptions of the primary ethical standards, for example:
 - 1. Human Oversight: To have the human decision-makers with the final say in life-or-death situations.
 - 2. Accountability: Setting up the defined lines of responsibility for Al-based systems.
- Implementation: It is solicited that the area of military operations and AI developments be affected in the way by the ethical principles.

Encourage Responsible Development:

- Transparency: It is recommended that AI algorithms and decision-making processes be open to public scrutiny and confident that public confidence is maintained.
- Stakeholder Involvement: It is suggested to include ethicists, engineers, military personnel, and even the general public who can contribute significantly to a variety of aspects to ethical decision-making in AI system development.

Collaboration with the public:

- Engagement with NGOs: NGOs and other pressure groups may cooperate as lobbyists for the ethical aspects of the society, which may help in formulating laws fitting the society's positions and ethical considerations.
- Public knowledge Campaigns: Unveiling the secret of autonomous weapons leads to the formulation of informed public conversation and policy decisions.

APPENDICE

1. UNODA Al and Autonomous Weapons

https://www.un.org/disarmament/convention-on-certain-conventional-weapons/ai-autonomous-weapons/

This page discusses international efforts and frameworks related to autonomous weapons.

2. ICRC and Autonomous Weapons

https://www.icrc.org/en/law-and-policy/autonomous-weapons

The ICRC provides insights on humanitarian law and the implications of AI in warfare.

3. United Nations Institute for Disarmament Research (UNIDIR)

https://unidir.org/publication/unidir-on-lethal-autonomous-weapons/

https://unidir.org/publication/the-weaponization-of-increasingly-autonomous-technologies-autonomous-weapon-systems-and-cyber-operations/

This report discusses the challenges and considerations surrounding autonomous weapon systems, emphasizing the need for international dialogue and regulation.