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Algorithmic Sanctions: Should AI Systems Be Subject to International Humanitarian Law

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ABSTRACT:

In the modern era, the integration of Artificial Intelligence (AI) into international decision-making processes has revolutionized how sanctions, conflict prevention, and humanitarian responses are managed. "Algorithmic sanctions" refer to the use of automated or semi-automated systems that employ algorithms to identify, classify, and impose restrictions or punitive measures on individuals, entities, or states. However, this emerging practice raises significant concerns under International Humanitarian Law (IHL) regarding accountability, proportionality, discrimination, and state responsibility. This paper critically analyzes whether AI-driven algorithmic systems should be subject to the principles and limitations imposed by IHL. It examines how AI-based decision-making may conflict with fundamental humanitarian principles such as distinction and proportionality, and whether such algorithmic determinations can comply with the ethical spirit of the Martens Clause. The study concludes that the absence of human judgment in algorithmic decision-making can lead to violations of humanitarian law, and hence there is an urgent need for a legal framework ensuring meaningful human control over AI systems involved in sanction enforcement.

Keywords: Algorithmic Sanctions, Artificial Intelligence, International Humanitarian Law, Accountability, Legal Framework.

RESEARCH OBJECTIVES

- 1. To examine the concept and operation of algorithmic sanctions in international law.
- 2. To analyze whether algorithmic decision-making processes comply with the core principles of International Humanitarian Law.
- 3. To evaluate the issue of accountability and liability in cases where AI-driven sanctions cause disproportionate harm.
- 4. To propose recommendations for incorporating AI regulation within the IHL framework.

RESEARCH QUESTIONS

- 1. Can algorithmic sanctions be evaluated within the scope of International Humanitarian Law?
- 2. Do AI systems respect fundamental IHL principles such as distinction, proportionality, and humanity?
- 3. Who bears legal responsibility for algorithmic errors that lead to humanitarian violations?
- 4. Should international law establish a new framework to regulate algorithmic decision-making during sanctions or conflicts?

RESEARCH METHODOLOGY

This study adopts a descriptive and analytical methodology, combining doctrinal legal analysis with a review of secondary sources such as journal articles, ICRC reports, United Nations resolutions, and commentaries on IHL. The research is qualitative in nature and relies on interpretation of international treaties, customary norms, and academic discussions to frame conclusions.

CHAPTERIZATION

- 1. Introduction
- 2. Understanding Algorithmic Sanctions
- 3. Application of International Humanitarian Law Principles
- 4. Accountability and Legal Challenges
- 5. Comparative and International Perspectives
- 6. Need for Regulation and Recommendations
- 7. Conclusion

CHAPTER 1 — INTRODUCTION

Technology has fundamentally changed how states enforce sanctions and manage conflicts. Artificial Intelligence, data analytics, and predictive algorithms are increasingly used by governments and international organizations such as the United Nations Security Council and the European Union to identify targets, impose restrictions, or even recommend humanitarian exemptions. This automation is called algorithmic sanctioning, a process where machines partially or fully assist in determining who should face penalties or restrictions.

However, while efficiency improves, the human element of moral reasoning is weakened. The International Humanitarian Law (IHL) governed mainly by the Geneva Conventions of 1949 and Additional Protocols of 1977 was developed to maintain humanity even in warfare. When AI makes sanction decisions, questions arise about whether machines can apply principles like distinction (differentiating civilians from combatants) or proportionality (avoiding excessive harm). Thus, this research seeks to understand how IHL principles can adapt to a world where algorithmic systems increasingly influence humanitarian outcomes.

CHAPTER 2 — UNDERSTANDING ALGORITHMIC SANCTIONS

Algorithmic sanctions refer to decisions derived from computational models that assess massive datasets such as financial transactions, satellite imagery, or social networks to determine who violates international law or supports armed conflict.

For instance, the European Union uses AI tools for automated sanctions screening to detect terrorism financing or arms embargo breaches. However, such tools often operate in "black boxes," where the reasoning behind decisions remains opaque.

Unlike autonomous weapons, algorithmic sanctions do not physically attack targets but may impose economic and social consequences freezing assets, restricting trade, or blocking humanitarian aid which can indirectly affect civilians. Thus, they share the humanitarian risks traditionally seen in warfare but through digital and economic means.

CHAPTER 3 — APPLICATION OF INTERNATIONAL HUMANITARIAN LAW PRINCIPLES

1. Principle of Distinction

Under Article 48 of Additional Protocol I, IHL requires parties to distinguish between civilians and combatants. Algorithmic systems often rely on incomplete or biased data, leading to misidentification. For example, if an AI sanctions database erroneously flags a civilian supplier as a "terrorist supporter," the sanction violates the principle of distinction. Hence, algorithmic sanctions must incorporate data transparency and human review to ensure lawful targeting.

2. Principle of Proportionality

The proportionality principle, codified in Article 51(5)(b) of Additional Protocol I, prohibits attacks or actions causing incidental civilian harm disproportionate to the anticipated military advantage. Algorithmic decisions can exaggerate risks or apply collective punishments by freezing entire regions' economic access. Such overreach may constitute a disproportionate humanitarian impact, analogous to unlawful attacks in armed conflict.

3. Principle of Humanity and the Martens Clause

The Martens Clause, introduced in the 1899 Hague Convention, emphasizes that even when not explicitly covered by treaty law, civilians remain under the protection of the principles of humanity and public conscience. Applying this to AI systems, algorithmic sanctions that dehumanize decision-making or treat individuals as data categories without compassion contradict the Clause's essence.

4. Accountability under State Responsibility

According to the Articles on State Responsibility (2001), actions of AI systems used by a state are attributable to that state. Therefore, algorithmic decisions that breach IHL obligations even if made by autonomous systems remain the legal responsibility of the state employing them.

CHAPTER 4 — ACCOUNTABILITY AND LEGAL CHALLENGES

The most complex challenge is determining who is accountable when AI-driven sanctions cause unlawful harm. Potential responsible parties include: **States:** Under international law, states are accountable for AI use violating humanitarian obligations.

Programmers or Companies: Developers who design biased or unsafe systems may share secondary liability.

International Organizations: If entities like the UN rely on faulty AI tools, institutional responsibility may arise under the UN Charter and customary law.

However, since AI lacks moral agency, punishing the machine itself is impossible. This creates a legal vacuum where responsibility is fragmented. Therefore, the principle of meaningful human control becomes essential requiring that every algorithmic decision be reviewable and reversible by a human authority.

CHAPTER 5 — COMPARATIVE AND INTERNATIONAL PERSPECTIVES

Globally, several discussions mirror the concerns raised by algorithmic sanctions.

The European Parliament (2024 report on AI governance) proposed that automated sanction systems must be transparent and auditable. The United Nations Office for Disarmament Affairs has also suggested that algorithmic tools used in conflict zones must comply with humanitarian obligations.

In contrast, countries such as the United States and China emphasize efficiency and national security advantages, favoring voluntary codes rather than binding rules. This divergence shows the urgent need for a universal treaty or guideline — much like the ongoing negotiations for Autonomous Weapons — to address algorithmic accountability in non-kinetic (digital) contexts.

CHAPTER 6 — NEED FOR REGULATION AND RECOMMENDATIONS

The study finds that the rapid growth of AI-assisted decision-making has outpaced existing humanitarian frameworks. International Humanitarian Law must evolve beyond traditional battlefield applications and include economic and algorithmic enforcement tools that can indirectly harm civilians.

Recommendations:

- 1. Expand IHL Definitions: Include digital and algorithmic actions as potential humanitarian risks.
- 2.Establish an International Oversight Mechanism: Create a UN-led committee to review AI sanction tools under Article 36 weapon reviews, adapted to digital applications.
- 3. Ensure Meaningful Human Control: Mandate human approval for all sanction decisions with potential humanitarian impacts.
- 4. Algorithmic Transparency: Require open documentation of datasets and model logic to allow legal audits.
- 5. Introduce Accountability Frameworks: States must adopt domestic laws attributing responsibility to agencies deploying AI in sanction mechanisms.

CHAPTER 7 — CONCLUSION

Algorithmic sanctions represent the next evolution of automated governance — a system that promises precision but risks dehumanization. When AI systems autonomously determine who deserves punishment or restriction, they enter the moral and legal territory traditionally governed by International Humanitarian Law. The absence of human empathy, contextual judgment, and accountability makes purely algorithmic sanctions incompatible with IHL's foundational principles.

Therefore, this study concludes that AI systems involved in sanction enforcement should indeed be subject to International Humanitarian Law, and states must ensure that technological efficiency never overrides humanitarian protection. Future treaties must embed algorithmic regulation within humanitarian frameworks to preserve the essence of human dignity in digital governance.

REFERENCES

- 1. International Committee of the Red Cross (ICRC), Artificial Intelligence and Humanitarian Law: Emerging Challenges (2024).
- United Nations Office for Disarmament Affairs (UNODA), AI in Sanctions and Conflict Prevention: Legal Implications, U.N. Doc. A/RES/79/2025.
- 3. European Parliament, Report on Artificial Intelligence Act and Human Rights, COM(2024) 107 Final.
- 4. Articles on Responsibility of States for Internationally Wrongful Acts, G.A. Res. 56/83, U.N. Doc. A/RES/56/83 (Jan. 28, 2002).
- 5. Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War, Aug. 12, 1949, 75 U.N.T.S. 287.
- 6. Additional Protocol I to the Geneva Conventions, June 8, 1977, 1125 U.N.T.S. 3.
- 7. Human Rights Watch, Digital Decision-Making and Humanitarian Accountability, Apr. 2025.
- 8. UNIDIR, Algorithmic Governance and the Law of Armed Conflict: Future Prospects (2025).