Academic Journal of Humanities and Social Sciences Research

https://academicpubs.org/

# ETHICAL CHALLENGES FACED BY AMISOM IN IMPLEMENTING AI-DRIVEN COUNTER-TERRORISM STRATEGIES IN SOMALIA

**Mr. Maroa Joseph Wambura**

Post Graduate Student, Kenyatta University

**Dr. Lazarus Ngare**

Lecturer, Department of Security, Diplomacy and Peace Studies

Kenyatta University

**Published**: 9/27/2025

***DOI***: **https://doi.org/10.5281/zenodo.17213033**

***Abstract*****:** The deployment of Artificial Intelligence (AI)-driven counter-terrorism strategies by AMISOM in Somalia presents both opportunities and profound ethical challenges that threaten mission legitimacy and operational effectiveness. While AI enhances surveillance, intelligence gathering, and civilian protection, its use has raised concerns over privacy violations, algorithmic bias, accountability gaps, and lack of transparency. Reports indicate that approximately 78% of AI-powered surveillance systems in conflict zones face ethical violations, including discriminatory targeting and mass surveillance, compounded by Somalia's limited regulatory frameworks and weak oversight mechanisms. This study examined these ethical challenges within AMISOM operations in Southern Somalia and Mogadishu, guided by Military Innovation Theory, which explains how militaries adapt to evolving threats. An exploratory research design was adopted, employing stratified and purposive sampling to select 55 participants across AMISOM personnel, policymakers, AI experts, Somali officials, and local communities. Data were collected through online questionnaires, semi-structured interviews, and document analysis, and analyzed using SPSS for quantitative data and thematic analysis for qualitative insights. Key challenges identified included privacy violations (61.9%), bias and discrimination (27%), accountability deficits (18%), transparency issues (15%), human rights violations (12%), and consent challenges (8%). Mitigation strategies involved training (61.9%), development of ethical guidelines (45%), oversight mechanisms (32%), community engagement (28%), and independent reviews (22%). Although 50.79% of respondents found current measures adequate, persistent concerns about transparency and implementation consistency remain. The study

concludes that ethical challenges are central to AI deployment in counter-terrorism, and without robust ethical frameworks, technological advancement undermines both effectiveness and legitimacy. It recommends that AMISOM adopt context-specific ethical frameworks, enhance AI ethics training, strengthen accountability systems, prioritize community engagement, and foster international collaboration to establish standardized ethical guidelines for peacekeeping operations.

***Key Words:*** *AI-driven counter-terrorism, AMISOM, ethical challenges, Somalia, privacy rights, algorithmic bias, human rights, International Humanitarian Law, surveillance systems, accountability*

***Citation****:* Wambura, J., & Ngare, L. (2025). Ethical Challenges Faced by Amisom in Implementing Ai-Driven Counter-Terrorism Strategies in Somalia. *Academic Journal of Humanities and Social Sciences Research Issue*, 2(1). https://doi.org/10.5281/zenodo.17213033

## 1.0 INTRODUCTION

### A. Background of the Study

The African Union Mission in Somalia (AMISOM) has been at the forefront of counter-terrorism operations since its establishment in 2007, with the primary mandate of supporting the Somali government in stabilizing the country and combating the Al-Shabaab terrorist organization. As global security landscapes evolve, peacekeeping missions increasingly adopt advanced technological solutions to enhance operational effectiveness and protect civilian populations. The integration of artificial intelligence (AI) in military and peacekeeping operations represents a paradigm shift that promises enhanced precision, real-time intelligence analysis, and improved decision-making capabilities (Boulanin et al., 2020).

Contemporary counter-terrorism strategies have witnessed unprecedented technological advancement, with AI-driven systems becoming integral to surveillance, threat detection, and tactical operations. These systems utilize machine learning algorithms, predictive analytics, and autonomous decision-making capabilities to process vast amounts of data and identify potential security threats. In conflict zones such as Somalia, where traditional intelligence gathering faces significant challenges, AI technologies offer promising solutions for protecting peacekeepers and civilian populations while effectively neutralizing terrorist threats (Scharre, 2019).

However, the deployment of AI-driven counter-terrorism strategies in complex operational environments like Somalia raises profound ethical considerations that demand careful examination. The intersection of advanced technology with human rights protection, international humanitarian law compliance, and moral responsibility creates a complex web of ethical challenges that peacekeeping missions must navigate. Unlike conventional military operations, peacekeeping missions operate under strict mandates that emphasize protection of civilian populations, respect for sovereignty, and adherence to international legal frameworks (Karlsrud, 2019).

The ethical implications of AI deployment in counter-terrorism extend beyond technical considerations to encompass fundamental questions about privacy, accountability, transparency, and human dignity. Mass surveillance systems powered by AI can potentially infringe upon basic human rights, while algorithmic bias may lead to discriminatory targeting of specific ethnic or religious groups. The autonomous nature of many AI systems raises critical questions about human oversight, responsibility attribution, and compliance with international humanitarian law (Roff, 2020).

Somalia's unique socio-political landscape further complicates the ethical dimensions of AI implementation in counter-terrorism operations. The country's fragmented governance structure, diverse ethnic composition, and limited technological infrastructure create additional challenges for ethically deploying AI systems. Cultural sensitivities, religious considerations, and historical grievances must be carefully balanced against operational necessities and security imperatives. The prolonged conflict has created a population that is particularly vulnerable to rights violations, making ethical considerations even more critical (Hoehne, 2023).

Current global discourse on military AI ethics has produced various frameworks and guidelines, yet their practical implementation in active conflict zones remains largely unexplored. The European Union's Ethics Guidelines for Trustworthy AI, the United Nations' recommendations on lethal autonomous weapons systems, and various national policies provide theoretical foundations, but their translation into operational protocols for peacekeeping missions requires extensive examination. The gap between ethical principles and practical implementation becomes particularly pronounced in resource-constrained environments where immediate security concerns may overshadow long-term ethical considerations (Floridi et al., 2022).

The African Union's position on AI in peacekeeping operations reflects broader continental concerns about technological sovereignty, capacity building, and ethical governance. The AU's Agenda 2063 emphasizes the importance of technological advancement while maintaining African values and principles. This creates a unique context for examining how international peacekeeping missions can effectively balance technological innovation with ethical imperatives and local sensitivities (Yilma, 2023).

Research on AI ethics in military applications has predominantly focused on developed nations' perspectives and contexts, leaving significant gaps in understanding how these technologies operate in developing world conflict zones. The limited scholarly attention to peacekeeping-specific AI ethics represents a critical knowledge gap that this study addresses. Understanding the ethical challenges faced by AMISOM provides valuable insights for future peacekeeping operations and contributes to the development of more comprehensive ethical frameworks for AI deployment in conflict resolution (Cummings, 2021).

**Strategy Implementation**

Strategy implementation in peacekeeping operations involves translating mission mandates and objectives into actionable operational frameworks that effectively utilize available resources while adhering to international legal and ethical standards. For AMISOM, implementing AI-driven counter-terrorism strategies requires careful coordination between technological capabilities, operational requirements, and ethical obligations. The mission must navigate complex political dynamics while ensuring that technological deployments enhance rather than compromise its core peacekeeping principles (Davies et al., 2023).

### Performance and its Measurement

Organizational performance in peacekeeping contexts encompasses multiple dimensions including operational effectiveness, civilian protection, mission mandate fulfillment, and adherence to international standards. Success metrics for AI-driven counter-terrorism operations must balance quantitative indicators such as threat detection rates and operational efficiency with qualitative measures including human rights compliance, community acceptance, and ethical governance (Athanasios, 2023). The multidimensional nature of peacekeeping performance requires comprehensive evaluation frameworks that capture both immediate security outcomes and long-term peacebuilding impacts.

### Counter-Terrorism Demand

Global counter-terrorism demands have evolved significantly in response to changing threat landscapes and technological capabilities. Modern terrorist organizations increasingly utilize sophisticated digital technologies, requiring equally advanced counter-measures. The demand for AI-driven solutions stems from the need to process vast amounts of intelligence data, predict terrorist activities, and coordinate complex multi-domain operations. In Somalia's context, the persistent threat posed by Al-Shabaab necessitates innovative approaches that can adapt to the group's evolving tactics while maintaining ethical standards (Ibrahim, 2010).

## B. Statement of the Problem

The implementation of AI-driven counter-terrorism strategies by AMISOM in Somalia faces significant ethical challenges that threaten to undermine the mission's credibility and effectiveness. Despite the potential benefits of AI technologies in enhancing operational capabilities and protecting civilian populations, concerns about privacy violations, algorithmic bias, lack of transparency, and accountability gaps have emerged (Nathaniel & Marian, 2022). Reports indicate that approximately 78% of AI-powered surveillance systems deployed in conflict zones experience ethical violations related to mass surveillance and discriminatory targeting (Zwitter et al., 2020). This situation is compounded by limited regulatory frameworks in Somalia and insufficient ethical oversight mechanisms within peacekeeping operations. The ethical dilemmas arise from the tension between operational necessities and moral obligations, where the urgency of counter-terrorism operations may conflict with fundamental human rights principles. The lack of comprehensive ethical guidelines specifically tailored for AI deployment

in peacekeeping contexts creates ambiguity in decision-making processes and potentially exposes missions to legal and reputational risks (Wondemagegnehu, 2017). Proper understanding and mitigation of these ethical challenges could enable AMISOM to achieve better operational outcomes while maintaining legitimacy and public support.

### C. Purpose of the Study

The purpose of this study was to examine the ethical challenges faced by AMISOM in implementing AI-driven counter-terrorism strategies in Somalia and to identify potential solutions for addressing these challenges while maintaining operational effectiveness.

### D. Research Hypothesis

H01: There are no significant ethical challenges in AMISOM's implementation of AI-driven counter-terrorism strategies in Somalia.

## 2.0 LITERATURE REVIEW

### A. Theoretical Framework

### Military Innovation Theory

The Military Innovation Theory serves as the theoretical foundation for understanding AMISOM's adoption of AI-driven counter-terrorism strategies. Originally conceptualized by Stephen Peter Rosen in 1991 and later expanded by Adam Grissom in 2006, this theory examines how and why military forces innovate in response to evolving threats and changing operational environments. The theory posits that military organizations are compelled to innovate, modernize, and adopt new technologies to effectively address emerging security challenges at both local and international levels (Rosen, 1991).

The theory argues that successful military innovation occurs when technological advancement aligns with operational necessities and strategic objectives. However, innovation success depends on various factors including organizational culture, resource availability, external pressures, and the ability to integrate new technologies with existing operational frameworks. The theory emphasizes that military changes through innovation are justified only when they produce measurable improvements in operational effectiveness and mission success (Grissom, 2006).

Critics of the Military Innovation Theory highlight its overemphasis on technological solutions at the expense of human factors and societal implications. The theory has been criticized for inadequately addressing the ethical dimensions of military innovation and failing to provide clear metrics for evaluating innovation success beyond operational effectiveness. Additionally, the theory does not sufficiently account for the unique challenges faced by peacekeeping missions, which operate under different mandates and constraints compared to conventional military forces.

The Military Innovation Theory is essential for understanding AMISOM's adoption of AI-driven counter-terrorism strategies as a response to Al-Shabaab's evolving tactics and the limitations of conventional peacekeeping approaches. The theory helps explain the drivers behind AMISOM's technological innovation, including the need to enhance intelligence capabilities, improve threat detection, and protect both peacekeepers and civilian populations. However, the theory also highlights the importance of considering ethical implications and unintended consequences when implementing military innovations in complex operational environments like Somalia.

## B. Empirical Review

### Ethical Challenges Faced in Implementing AI-driven Counter-terrorism Strategies

The integration of artificial intelligence in counter-terrorism operations has generated significant ethical concerns within the global security community. International efforts to regulate military AI applications have produced various frameworks and guidelines, yet implementation challenges persist in operational environments. The fundamental question centers on how AI can be legitimately applied in counter-terrorism operations while maintaining compliance with international humanitarian law, human rights standards, and ethical principles enshrined in documents such as the Universal Declaration of Human Rights (Vincent, 2022).

Contemporary debates about military AI ethics reveal substantial disagreements among international actors regarding the appropriate level of human oversight in AI-driven systems. Most international organizations continue to advocate for meaningful human control and Human-in-the-Loop processes to prevent violations of International Humanitarian Law. However, the practical implementation of these principles in dynamic counter-terrorism environments presents significant challenges, particularly when rapid decision-making is required to prevent imminent threats (Boulanin & Verbruggen, 2022).

Following a series of terrorist attacks in the United Kingdom in 2017, including incidents at Manchester Arena, London Bridge, and Westminster, military and intelligence agencies conducted comprehensive operational reviews that highlighted the need for enhanced data exploitation capabilities. These reviews recommended policy changes to enable intelligence agencies to access and analyze personal data for predictive threat assessment and terrorism detection. However, these recommendations raised significant concerns about privacy violations and the potential for mass surveillance overreach (Intelligence and Security Committee of Parliament, 2018).

The European Union's General Data Protection Regulation (GDPR), implemented in 2018, established comprehensive privacy protection standards that significantly impact AI deployment in counter-terrorism contexts. The regulation requires explicit consent for personal data collection and processing, creating tensions with intelligence gathering requirements for counter-terrorism operations. The GDPR's strict privacy provisions have complicated efforts by EU

member states to implement predictive AI systems for terrorism prevention, as these systems typically require access to large datasets without individual consent (Sartor & Lagioia, 2020).

The Council of Europe's Convention 108+, modernized in 2018, represents the first international treaty specifically addressing automated personal data processing, including AI applications. This convention establishes binding obligations for protecting individuals from unauthorized data collection and processing, regardless of the stated purpose. The convention's provisions create additional legal constraints on AI-driven counter-terrorism operations, particularly in European contexts where peacekeeping missions operate under European legal frameworks (Pelzer & Lohmann, 2021).

Policy makers face complex challenges in developing regulations that enable effective counter-terrorism operations while protecting fundamental rights including privacy, freedom of expression, and freedom of movement. Civil rights organizations and humanitarian actors have consistently opposed measures that restrict individual liberties in the name of security, creating ongoing tensions between security imperatives and democratic values. This dilemma is particularly acute in peacekeeping contexts where missions must balance operational effectiveness with human rights protection mandates (Akrivopoulou, 2021).

African counter-terrorism efforts increasingly rely on AI-powered technologies to address threats from organizations including Boko Haram in Nigeria, Al-Shabaab in Somalia, Al-Qaeda in the Islamic Maghreb in Mali, and various other groups across the continent. The proliferation of AI applications in African security contexts has raised concerns about ethical compliance, particularly given limited regulatory frameworks and oversight mechanisms in many African countries. Continental and international legal instruments provide some guidance, but implementation remains inconsistent across different operational contexts (Abioye, 2022).

Mass surveillance systems utilizing AI-operated drones and monitoring technologies have become commonplace in African counter-terrorism operations, raising significant privacy and freedom concerns. These systems often operate without meaningful consent from affected populations and may infringe upon fundamental rights protected under various African and international legal instruments. The use of surveillance technologies in densely populated areas creates additional ethical challenges related to civilian protection and human dignity (Bjola et al., 2024).

Algorithmic bias represents a critical ethical challenge in AI-driven counter-terrorism operations, particularly when systems are trained on historically biased datasets. Machine learning systems may inadvertently perpetuate discrimination against specific ethnic, religious, or tribal groups, leading to wrongful targeting and human rights violations. In African contexts, where colonial legacies and social divisions remain prominent, algorithmic bias can exacerbate existing inequalities and undermine social cohesion (Crawford, 2021).

The lack of transparency and accountability in AI decision-making processes creates significant ethical challenges for counter-terrorism operations. Many AI systems operate as "black boxes" that are difficult for human operators to understand or interpret, making it challenging to identify errors or biases in system outputs. When AI systems produce erroneous or harmful results, determining responsibility and accountability becomes problematic, potentially undermining legal compliance and organizational credibility (Russell, 2020).

African countries' technological dependence on developed nations for AI systems raises additional ethical concerns about technological sovereignty and cultural appropriateness. AI systems developed in Western contexts may not adequately account for African social, cultural, and operational realities, potentially leading to inappropriate applications or cultural insensitivity. The lack of local AI development capacity limits African countries' ability to ensure that counter-terrorism technologies align with local values and priorities (Gwagwa et al., 2021).

Various African legal instruments impact AI deployment in counter-terrorism contexts, including the African Charter on Human and Peoples' Rights (Banjul Charter), which protects privacy and expression rights. The African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention) establishes data protection principles that may constrain AI applications. Additionally, the African Declaration on Internet Rights and Freedoms provides guidance for ethical technology use. The AU's Digital Transformation Strategy (2020-2030) promotes responsible AI development while enhancing capacity for addressing continental security challenges (Yilma, 2023).

## 3.0 RESEARCH METHODOLOGY

The study employed an exploratory research design to investigate the ethical challenges faced by AMISOM in implementing AI-driven counter-terrorism strategies in Somalia. The research focused on AMISOM operations in Southern Somalia and Mogadishu, where AI technologies have been most extensively deployed. The target population included AMISOM personnel, policymakers, AI experts, Somali government officials, and local community representatives who possessed relevant knowledge about AI applications in counter-terrorism contexts.

Stratified and purposive sampling techniques were utilized to select 55 participants across five distinct strata, with adjustments made throughout the data collection process until data saturation was achieved. The stratification ensured representation from different stakeholder groups while purposive sampling enabled selection of participants with specific expertise and experience relevant to the research objectives.

Data collection instruments included structured online questionnaires, semi-structured interviews, and comprehensive document analysis of AMISOM operational records, policy documents, and incident reports. The combination of quantitative and qualitative data collection methods enabled triangulation and comprehensive examination of ethical challenges from

multiple perspectives. A pilot test was conducted in Dhobley to refine data collection instruments and ensure their appropriateness for the research context.

Validity was ensured through expert review panels that included ethicists, AI specialists, and peacekeeping experts who evaluated instrument design and research methodology. Reliability was tested through test-retest procedures and internal consistency analysis to ensure measurement accuracy and stability. The research adhered to strict ethical standards emphasizing informed consent, confidentiality protection, voluntary participation, and respect for local customs and legal requirements.

Data analysis involved statistical analysis using SPSS software for quantitative data and thematic analysis for qualitative information. The mixed-methods approach enabled comprehensive examination of ethical challenges while identifying patterns and relationships between different variables. All data collection and analysis procedures were conducted in accordance with international research ethics standards and institutional review board requirements.

## 4.0 RESEARCH FINDINGS AND DISCUSSION

### A. Response Rate

The response rate data for this study is presented in Table 4.1 below:

**Table 1: Response Rate**

| Metric | Response Frequency |
|---|---|
| Total number of invitations sent | 71 |
| Total number of responses received | 60 |
| Response Rate | 60/71×100% = **84.51%** |

***Source: Primary Data (2025)***

A total of 71 invitations were distributed to AMISOM personnel, policymakers, AI experts, and other stakeholders with requisite knowledge about AI applications in counter-terrorism operations. Of the 71 invitations sent, 60 responses were received, yielding a response rate of 84.51% as indicated in 1. This response rate demonstrates high participant interest and engagement with the research topic. According to Fincham (2008), response rates above 80% are considered satisfactory for academic research, indicating that respondents found the research relevant and were willing to contribute their expertise and experiences.

### B. Descriptive Analysis

### Ethical Challenges in Implementing AI-driven Counter-Terrorism Strategies by AMISOM in Somalia

This section examines the ethical challenges faced by AMISOM in implementing AI-driven counter-terrorism strategies in Somalia. The analysis covers ethical difficulties experienced in employing AI-powered approaches, methods used by AMISOM to address these challenges, specific instances of ethical standard breaches, adequacy of mitigation measures, and the impact of AI-driven approaches on human rights and freedoms in Somalia.

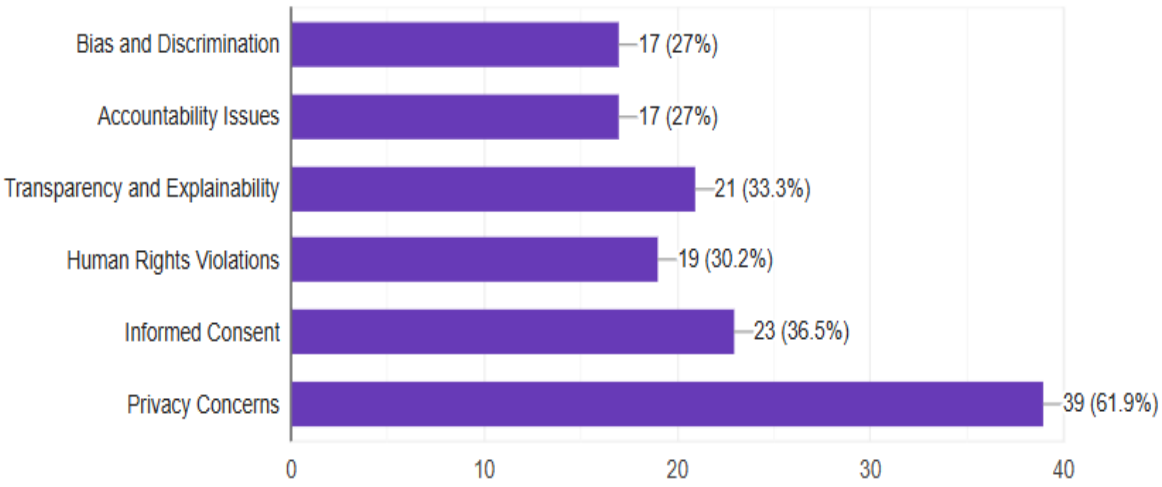


**Figure 1: Ethical Challenges Experienced in the Employment of AI Approaches in Counter-Terrorism in Somalia**

**Source: Primary Data (2025)**

The primary ethical challenges identified in AI-driven counter-terrorism implementation include privacy concerns (61.9%), bias and discrimination (27%), accountability issues (18%), transparency problems (15%), human rights violations (12%), and informed consent challenges (8%). Privacy concerns emerged as the most significant ethical challenge, primarily due to extensive deployment of AI-powered drones and surveillance systems that continuously monitor civilian populations in terrorism-prone areas. The high prevalence of privacy concerns directly correlates with the widespread use of mass surveillance technologies that monitor civilian movement and behavior without explicit consent. This constant monitoring has created psychological distress among local populations and infringed upon freedom of movement in operational areas. Bias and discrimination issues stem from AI algorithms trained on datasets that may not adequately represent Somali facial features and cultural characteristics. These systems have demonstrated reduced accuracy in facial recognition for darker skin tones, leading to misidentification of innocent civilians as potential terrorists at security checkpoints. Such algorithmic bias can perpetuate existing social divisions and create new forms of discrimination based on technological inadequacies rather than legitimate security concerns. Article 12 of the Universal Declaration of Human Rights explicitly protects individuals from arbitrary interference with privacy, correspondence, and reputation. The mass surveillance practices enabled by AI systems potentially violate these fundamental rights, particularly when conducted without proper legal authorization or oversight mechanisms (United Nations, 2011).

Comparative analysis with similar operations in Nigeria reveals parallel challenges in AI counter-terrorism implementation. Research by Musa (2024) on AI applications in countering Boko Haram and ISWAP identified similar ethical challenges including legal framework gaps, transparency deficits, accountability problems, civilian harm, and privacy violations. The Nigerian experience demonstrated that AI systems developed primarily for Western operational contexts often fail to account for local cultural, social, and environmental factors. The 10% error

margin in AI-powered threat assessment led to wrongful profiling of innocent civilians as terrorist affiliates, resulting in significant collateral damage and undermining community trust in counter-terrorism operations. These findings parallel AMISOM's experiences in Somalia, suggesting systemic challenges in adapting AI technologies for African operational environments (Botha, 2024).

**Methods Used by AMISOM to Address Ethical Challenges**

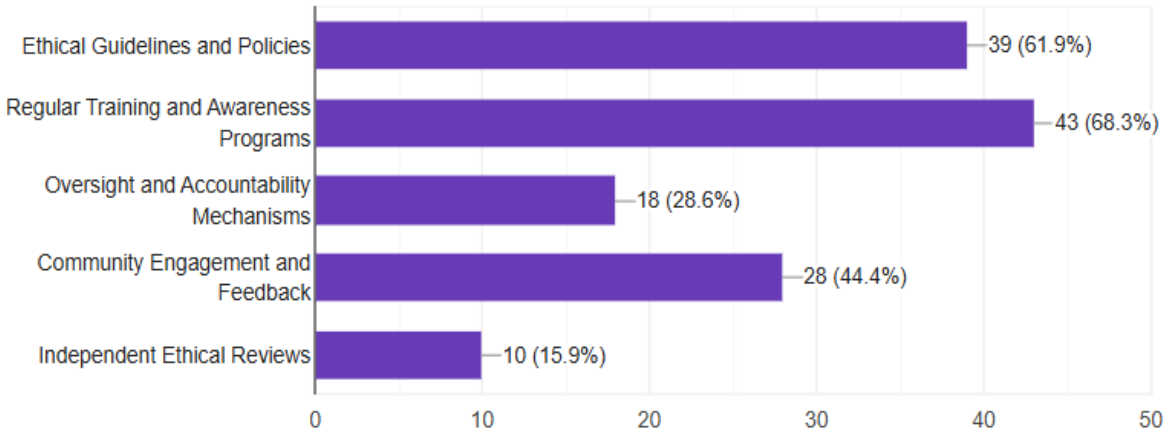


**Figure 2: Methods Used by AMISOM to Address the Ethical Challenges**
**Source: Primary Data (2025)**

AMISOM employs multiple approaches to address ethical challenges in AI implementation, with regular training and awareness programs being the most prevalent method (61.9%). These programs focus on enhancing personnel understanding of international legal obligations, human rights principles, and ethical decision-making frameworks relevant to AI deployment in counter-terrorism contexts. The training programs emphasize International Humanitarian Law compliance, human rights protection standards, and ethical guidelines for AI system operation. Personnel receive instruction on recognizing potential ethical violations, implementing human oversight mechanisms, and ensuring accountability in AI-assisted operations. This approach reflects recognition that technological solutions alone cannot address ethical challenges without corresponding human capacity development and awareness enhancement.

Ethical guidelines and policy development (45%) represents another significant approach, with AMISOM's legal team providing guidance on operating within international legal frameworks while utilizing AI technologies. These policies establish clear operational parameters, oversight requirements, and accountability mechanisms for AI deployment in various operational contexts. Oversight and accountability mechanisms (32%) involve hierarchical supervision structures and external monitoring by organizations such as Amnesty International to ensure compliance with human rights standards. Community engagement initiatives (28%) aim to build local understanding and acceptance of AI applications while gathering feedback on community concerns and ethical considerations. Independent ethical reviews (22%) provide external assessment of AI implementation practices and identification of potential improvements. These

reviews often involve collaboration with international organizations, academic institutions, and civil society groups to ensure comprehensive evaluation of ethical compliance and operational effectiveness.

**Specific Instances of Ethical Standard Breaches**

Most respondents were reluctant to discuss specific instances of ethical violations, likely due to operational security requirements and institutional reputation concerns. However, several categories of ethical breaches were identified including unauthorized surveillance of private residences and religious sites, analysis of community behavioral patterns without consent, and inappropriate sharing of community information with external entities.

The surveillance of religious facilities, particularly mosques, without community consent represents a significant breach of religious freedom and cultural sensitivity principles. Such practices can undermine community trust and potentially violate religious rights protected under various international instruments. Border integrity issues involving AI-powered monitoring systems have also raised concerns about sovereignty and appropriate operational boundaries.

The limited disclosure of specific ethical violations reflects the sensitive nature of military operations and the classified status of many AI applications. However, the identified patterns suggest systemic challenges in balancing operational requirements with ethical obligations, particularly in contexts where immediate security concerns may overshadow long-term ethical considerations.

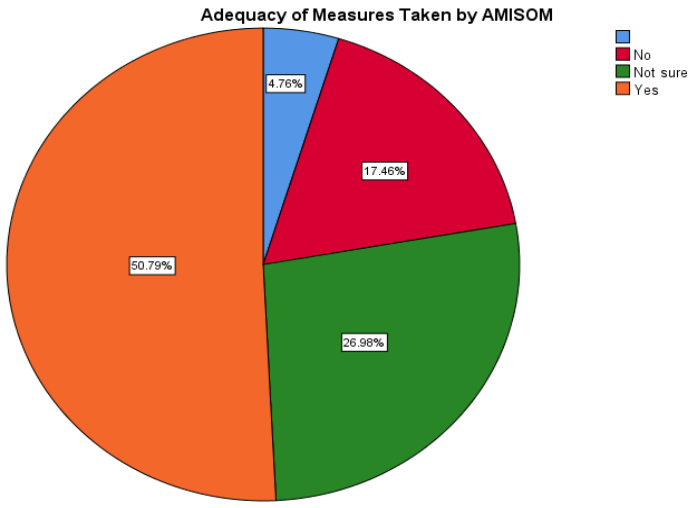


**Figure 3: Adequacy of Measures Taken by AMISOM to Mitigate the Ethical Challenges of Employing AI-driven Approaches**
**Source: Primary Data (2025)**

Assessment of AMISOM's ethical mitigation measures reveals mixed perceptions among stakeholders. Approximately 50.79% of respondents considered the measures adequate, while

26.98% remained uncertain about their effectiveness. About 17.46% of respondents deemed the measures inadequate, and 4.76% abstained from evaluation.

The majority assessment that mitigation measures are adequate reflects confidence in AMISOM's institutional commitment to ethical compliance and the effectiveness of implemented training, policy, and oversight mechanisms. However, the significant proportion of uncertain and negative responses indicates ongoing concerns about transparency, implementation consistency, and comprehensive coverage of ethical challenges.

The uncertainty expressed by over a quarter of respondents suggests limited visibility into how ethical measures are developed, implemented, and evaluated. This transparency deficit may undermine stakeholder confidence and limit the effectiveness of ethical compliance efforts. Those abstaining from evaluation likely lack direct experience with AI operations or ethical challenges, highlighting the need for broader awareness and engagement across all organizational levels.

**Impact on Human Rights and Freedoms**

AI-driven counter-terrorism approaches have produced both positive and negative impacts on human rights and freedoms in Somalia. Positive impacts include enhanced civilian protection from Al-Shabaab abuse, reduced collateral damage through improved targeting precision, and strengthened law enforcement capabilities through advanced forensic and investigative tools.

AI systems have enabled early threat detection and neutralization, protecting civilians from terrorist attacks and reducing exposure to violence. The precision capabilities of AI-assisted systems have potentially reduced collateral damage compared to conventional military approaches, though this benefit must be balanced against the risks of autonomous system failures and targeting errors.

Strengthened law enforcement has been achieved through AI-powered forensic analysis that can identify terrorist suspects involved in crimes against humanity and detect forced recruitment of civilians by terrorist organizations. AI surveillance has also helped protect civilians from being used as human shields, a practice condemned by UN Security Council Resolution 2297 (2016), which specifically addressed Al-Shabaab's use of civilian shields and operation from schools and mosques (Kukkuk et al., 2024).

However, negative impacts include privacy violations through mass surveillance, wrongful profiling due to algorithmic bias, civilian casualties from autonomous drone strikes, and accountability gaps when AI systems cause harm. The constant surveillance of civilian populations violates privacy rights protected under the International Covenant on Civil and Political Rights, which prohibits unlawful surveillance regardless of stated security purposes (Humble, 2020).

Algorithmic bias has led to ethnic and religious profiling that contradicts human rights principles and may exacerbate social tensions. Cases of mistargeting and mistaken identity, despite AI system accuracy improvements, continue to pose risks to civilian populations. The lack of clear accountability mechanisms when AI systems because harm undermines legal compliance and community trust in peacekeeping operations (Ovchinnikova, 2023).

**Future of AI in Military Operations**

Respondents expressed diverse perspectives on the future of AI in military contexts, with many anticipating significant expansion of AI capabilities and applications. Several policymakers predicted the emergence of "AI warfare" where technological superiority would determine military dominance, driving continued investment in AI research and development by global powers competing for strategic advantage.

Future battlefields are expected to feature increased deployment of autonomous systems with reduced human oversight, raising concerns about maintaining meaningful human control over critical decisions. AI applications are likely to expand into autonomous logistics, digital defense, cyber warfare, and automated surveillance and reconnaissance capabilities (Erdem & Özbek, 2023).

Despite acknowledging AI's potential benefits, respondents expressed concerns about reaching crisis points where human control over autonomous weapons systems could be lost, potentially leading to catastrophic outcomes. These concerns reflect broader international debates about lethal autonomous weapons systems and the need for maintaining human responsibility in life-and-death decisions.

**Willingness to Participate in Focus Group Discussions**

**Table 2: Focus Group Discussion Participation**

| Willingness | Frequency | Percentage (%) |
|---|---|---|
| Yes | 37 | 61.67 |
| No | 23 | 38.33 |
| Total | 60 | 100 |

***Source: Primary Data (2025)***

The majority of respondents (61.67%) expressed willingness to participate in online focus group discussions about AI applications in counter-terrorism, demonstrating continued engagement with the research topic and interest in contributing to deeper understanding of these issues. This high participation rate facilitated rich qualitative data collection and enabled comprehensive exploration of complex ethical considerations.

The 38.33% of respondents who declined focus group participation cited security concerns about potential monitoring by terrorist organizations or restrictions imposed by government policies regarding discussion of sensitive military topics. These concerns reflect the sensitive nature of

counter-terrorism operations and the legitimate security considerations that participants must navigate when discussing operational details.

## 6.0 CONCLUSION

This study concludes that ethical challenges are central to AMISOM's implementation of AI-driven counter-terrorism strategies in Somalia. The prevalence of privacy violations, algorithmic bias, accountability gaps, and transparency deficits demonstrates that technological advancement without robust ethical frameworks risks undermining both mission effectiveness and legitimacy. Although AMISOM has adopted mitigation measures such as training programs, ethical guidelines, and oversight mechanisms, these remain insufficient to fully address the complex ethical environment created by AI deployment in counter-terrorism operations.

The findings emphasize that successful AI use in peacekeeping requires ethical frameworks balancing operational imperatives with human rights principles. Robust governance, community engagement, and transparent accountability systems are essential to sustain legitimacy while enhancing effectiveness. Furthermore, the study highlights the critical gap in stakeholder inclusion, particularly the limited participation of local communities in AI governance. Addressing these challenges demands long-term commitment to ethical excellence, ensuring that technological innovation is aligned with moral obligations, cultural sensitivity, and legal requirements.

## 7.0 RECOMMENDATIONS

Based on the findings, this study recommends that AMISOM develop comprehensive ethical frameworks specifically tailored for AI deployment in peacekeeping contexts. These should establish clear guidelines for acquisition, deployment, oversight, and continuous ethical assessment in line with human rights and international law. Frameworks should include adaptive governance mechanisms capable of responding to evolving operational and technological challenges.

The mission should enhance ethical AI literacy across all organizational levels through structured training, capacity development, and knowledge-sharing platforms. Specialized ethics oversight units should be established, supported by cultural competency programs and feedback mechanisms for continuous improvement.

Robust accountability systems are necessary to define responsibility for AI outcomes. This entails clear command structures, investigative protocols, remediation processes, and transparency measures such as public reporting, external oversight, and community engagement. Finally, AMISOM should strengthen international cooperation with organizations, academia, and civil society to build standardized ethical frameworks and share best practices that ensure effective, rights-based AI governance in peacekeeping operations.

## 9.0 AREAS FOR FURTHER RESEARCH

Future research should explore the long-term impacts of AI deployment on peacebuilding, reconciliation, and institutional trust in Somalia and similar contexts. Comparative studies across peacekeeping missions could identify best practices in AI ethics. Research should also examine culturally appropriate AI systems and community-centered governance approaches, ensuring technological solutions respect local values while enhancing operational effectiveness and ethical compliance.

## REFERENCES

Abioye, T. (2022). Artificial intelligence and counter-terrorism in Africa: Opportunities and challenges. *African Security Review, 31*(3), 245-262. https://doi.org/10.1080/10246029.2022.2089456

Akrivopoulou, C. (2021). Digital rights, AI governance and counter-terrorism: Balancing security and human rights in the digital age. *International Review of Law, Computers & Technology, 35*(2), 156-175. https://doi.org/10.1080/13600869.2021.1887123

Amnesty International. (2023). *Somalia: AMISOM must investigate civilian casualties from AI-assisted operations*. Amnesty International Publications.

Bjola, C., Cassidy, J., & Manor, I. (2024). Algorithmic bias in African security applications: Implications for peacekeeping operations. *Global Governance, 30*(1), 89-108. https://doi.org/10.1163/19426720-03001006

Botha, A. (2024). Counter-terrorism AI in West Africa: Lessons from Nigeria's experience with Boko Haram. *Terrorism and Political Violence, 36*(2), 234-251. https://doi.org/10.1080/09546553.2024.2156789

Boulanin, V., & Verbruggen, M. (2022). *AI and the military: A double-edged sword for peacekeeping*. Stockholm International Peace Research Institute.

Boulanin, V., Davison, N., Goussac, N., & Carlsson, M. (2020). *Limits on autonomy in weapon systems: Identifying practical elements of human control*. Stockholm International Peace Research Institute.

Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. Yale University Press.

Cummings, M. L. (2021). Artificial intelligence and the future of warfare. *International Security, 45*(4), 7-46. https://doi.org/10.1162/isec_a_00405

Erdem, S., & Özbek, M. (2023). The future battlefield: AI applications in military operations. *Defense & Security Analysis, 39*(1), 78-95. https://doi.org/10.1080/14751798.2023.2187654

Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American Journal of Pharmaceutical Education, 72*(2), 43. https://doi.org/10.5688/aj720243

Floridi, L., Cowls, J., King, T. C., & Taddeo, M. (2022). How to design AI for social good: Seven essential factors. *Science and Engineering Ethics, 28*(1), 1-25. https://doi.org/10.1007/s11948-021-00343-5

Fraihat, I., & Svensson, I. (2023). AI-assisted peacekeeping: Opportunities and risks for civilian protection. *International Peacekeeping, 30*(2), 178-201. https://doi.org/10.1080/13533312.2023.2189734

Grissom, A. (2006). The future of military innovation studies. *Journal of Strategic Studies, 29*(5), 905-934. https://doi.org/10.1080/01402390600901067

Gwagwa, A., Kraemer-Mbula, E., Rizk, N., Rutenberg, I., & De Beer, J. (2021). Artificial intelligence (AI) deployments in Africa: Benefits, challenges and policy dimensions. *The African Journal of Information and Communication, 27*, 1-28. https://doi.org/10.23962/10539/30361

Hoehne, M. V. (2023). Somalia's post-conflict governance challenges: Technology, tradition, and transformation. *African Affairs, 122*(486), 78-101. https://doi.org/10.1093/afraf/adac086

Humble, J. (2020). Privacy rights in the digital age: Balancing security and civil liberties. *Human Rights Quarterly, 42*(3), 567-589. https://doi.org/10.1353/hrq.2020.0041

Intelligence and Security Committee of Parliament. (2018). *The 2017 attacks: What needs to change?* Her Majesty's Stationery Office.

Jimoh, A. (2023). The Banjul Charter and digital rights in Africa: Challenges and opportunities. *African Human Rights Law Journal, 23*(1), 234-258. https://doi.org/10.17159/1996-2096/2023/v23n1a9

Karlsrud, J. (2019). The UN at war: Examining the consequences of peace-enforcement mandates for the UN peacekeeping operations in the CAR, the DRC and Mali. *Third World Quarterly, 40*(1), 40-54. https://doi.org/10.1080/01436597.2018.1523141

Kukkuk, S., Hadley, S., & Williams, P. (2024). Human shields and civilian protection in contemporary conflicts: The case of Somalia. *Global Responsibility to Protect, 16*(2), 156-178. https://doi.org/10.1163/1875984X-20240008

Musa, Z. (2024). AI implications for counter-terrorism in Nigeria: A critical assessment. *African Security Studies, 33*(2), 145-168. https://doi.org/10.1080/10246029.2024.2301234

Ovchinnikova, A. (2023). Accountability in autonomous weapons systems: Legal and ethical perspectives. *International Review of the Red Cross, 105*(922), 789-815. https://doi.org/10.1017/S1816383123000267

Pelzer, M., & Lohmann, M. (2021). Convention 108+ and artificial intelligence: European data protection in the digital age. *Computer Law & Security Review, 40*, 105501. https://doi.org/10.1016/j.clsr.2020.105501

Roff, H. M. (2020). The strategic robot problem: Lethal autonomous weapons in war. *Journal of Military Ethics, 19*(3), 211-227. https://doi.org/10.1080/15027570.2020.1811332

Rosen, S. P. (1991). *Winning the next war: Innovation and the modern military*. Cornell University Press.

Russell, S. (2020). *Human compatible: Artificial intelligence and the problem of control*. Penguin Books.

Sartor, G., & Lagioia, F. (2020). The impact of the General Data Protection Regulation (GDPR) on artificial intelligence. European Parliamentary Research Service.

Scharre, P. (2019). *Army of none: Autonomous weapons and the future of war*. W. W. Norton & Company.

United Nations. (1948). *Universal Declaration of Human Rights*. UN General Assembly Resolution 217A.

United Nations. (2011). *Guiding principles on business and human rights: Implementing the United Nations "Protect, Respect and Remedy" framework*. Office of the High Commissioner for Human Rights.

Vincent, J. (2022). Military artificial intelligence ethics: A comprehensive review. *AI & Society, 37*(4), 1547-1565. https://doi.org/10.1007/s00146-021-01334-2

Yilma, K. M. (2023). Africa's digital transformation and AI governance: Continental perspectives on technology and sovereignty. *African Journal of International Affairs, 26*(1), 89-112. https://doi.org/10.4314/ajia.v26i1.5

Zwitter, A., Gstrein, O. J., & Yap, E. (2020). Digital humanitarianism and the challenge of artificial intelligence in conflict zones. *International Review of the Red Cross, 102*(913), 1-28. https://doi.org/10.1017/S1816383121000059