

AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS

Study on human and peoples' rights and artificial intelligence, robotics, and other new and emerging technologies in Africa



ACHPR
African Commission on
Human & Peoples' Rights

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PART I - INTRODUCTION TO THE STUDY

A PROBLEM STATEMENT ON THE ISSUES, CHALLENGES AND OPPORTUNITIES RAISED BY AI, ROBOTICS, NEW AND EMERGING TECHNOLOGIES

1. Introduction

Fast changing technological developments involving communications technology, robotics and other tech innovations involving the use of artificial intelligence (AI), robotics and emerging technologies continue to transform the social, economic, political, cultural, and environmental lives of peoples across the globe at breath-taking speed. As these advances, forming part of the Fourth Industrial Revolution, increasingly spread across the world, they present for Africa, as they do for others, both opportunities and challenges.¹ Across the globe – on the international, regional, and national levels – nations have begun considering the implications of AI in various spheres of life, including impact on human rights.²

Exercising its mandate in terms of Article 45 (1) (a) and (b) of the African Charter on Human and Peoples' Rights (African Charter)³, the African Commission on Human and Peoples' Rights (ACHPR) adopted Resolution 473 in February 2021, on the need to undertake a study on human and peoples' rights and AI, robotics and other new and emerging technologies in Africa (Annexure 1).⁴ The Resolution recognises that AI and other new and emerging technologies present both opportunities and perils for the promotion and protection of human and peoples' rights in Africa.⁵

The primary objective of Part 1 of this Study is to present a comprehensive problem statement that outlines the main challenges and issues that AI, robotics, and emerging technologies pose to human rights as provided for in the African Charter. This problem statement builds on the concerns identified by the ACHPR in Resolution 473. However, before delving into these challenges, it is essential to define some key terms used in Resolution 473.

¹ A Ade-Ibijola and C Okonkwo, *Artificial intelligence in Africa: Emerging challenges* in DO Eke (eds) *Responsible AI in Africa. Social and cultural studies of robots and AI* (2023, Palgrave Macmillan).

² See UNESCO Draft text of the Recommendation on the Ethics of Artificial Intelligence (2021), SHS/IGM-AIETHICS/2021/JUN/3 Rev.2; A/HRC/51/L.25, Human rights implications of new and emerging technologies in the military domain (2022); Council of Europe, Consolidated working draft of the framework convention on artificial intelligence, human rights, democracy, and the rule of law; Resolution on the need to undertake a Study on human and peoples' rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa - ACHPR/Res. 473 (EXT.OS/ XXXI) 2021; D Leslie *et al*, "Artificial intelligence, human rights, democracy, and the rule of law: A Primer" (2021), Prepared to support the Feasibility Study published by the Council of Europe's Ad Hoc Committee on Artificial Intelligence; EU AI Act.

³ Article 45 (1) (a) and (b) of the African Charter.

⁴ Resolution 473 (above).

⁵ As above.

1.1 Problem statement

As previously mentioned, Resolution 473 (*Annexure 1*) articulates several issues and concerns related to AI, robotics, and emerging technologies. This section focuses on the primary challenges and issues posed by AI, robotics, and emerging technologies.

1.1.1 The complex impact of AI, robotics, and new technologies on human rights

AI has emerged as a transformative technology with profound implications for human rights worldwide.⁶ In Africa, the impact of AI is particularly nuanced, presenting a dual-edged sword that offers both significant opportunities and considerable risks.⁷ This problem statement outlines the main effects of AI, robotics and emerging technologies on civil, political, economic, and social rights in Africa, highlighting the need for careful adaptation of predominantly Global North-developed AI technologies⁸ within the African context. It also explores AI, robotics, and emerging technologies' potential to disrupt key principles and understandings enshrined in the African Charter on Human and Peoples' Rights, and the regulatory challenges that arise from integrating AI in African societies.

AI, robotics, and emerging technologies' potential to revolutionize various sectors in Africa cannot be understated. In the realm of civil and political rights, AI can enhance governance through improved data analysis, enabling more informed policy decisions and fostering transparency.⁹ AI-driven platforms can facilitate more inclusive and fair electoral processes by ensuring accurate voter registration and monitoring election activities, thereby strengthening democratic institutions.¹⁰ Moreover, AI can aid in identifying human rights abuses through advanced data analytics, enabling quicker and more effective responses to crises.

Economically, AI holds the promise of driving development by optimizing supply chains, enhancing agricultural productivity through predictive analytics, and expanding financial

⁶ AUDA White Paper (above) 7; A Gwagwa *et al*, "Responsible artificial intelligence in Sub-Saharan Africa: Landscape and general state of play", 29 March 2021.

⁷ Resolution 473 (above); AUDA-NEPAD, White Paper (above) 39.

⁸ Resolution 473 (above).

⁹ F Adeleke and F Akinwale, "Responsible AI governance in Africa: Prospects for outcomes-based regulation", March 2024.

¹⁰ G Razzano, "The politics of AI and data: Media and election in South Africa", January 2021.

inclusion through innovative fintech solutions.¹¹ These advancements can contribute to poverty reduction and economic empowerment across the continent.¹²

Socially, AI can revolutionise healthcare by improving diagnostics and treatment, particularly in remote areas, and enhance educational outcomes through personalized learning experiences.¹³ AI, robotics and emerging technologies can also be used in law enforcement such as crime prevention.¹⁴ These opportunities, if they are harnessed by adequately tailoring these technologies for meeting the development needs of Africa, hold enormous promise for overcoming some of the structural impediments for socio-economic advancement and leapfrogging in some sectors such as finance, medicine etc.¹⁵ But the fact that the level of participation of Africa in the development of these technological advances remains marginal raises various questions about the implications of these tech advances fast permeating all aspects of our lives on our societies, individuals and communities and their ways of lives.¹⁶

Additionally, the fact that these technological advances are not without peril also necessitates critical interrogation of what the ethical and various other adverse consequences mean *vis-a-vis* human and peoples' rights guaranteed under the African Charter on Human and Peoples' Rights (African Charter).¹⁷

¹¹ A Gwagwa, E Kazim, P Kachidza, A Hilliard et al, "Road map for research on responsible artificial intelligence for development (AI4D) in African countries: The case study of agriculture", December 2021.

¹² Resolution 473 (above); AUDA-NEPAD, White Paper (above); F Adeleke, "South Africa's digital economy: The changing nature of competition and data regulation", November 2020.

¹³ V Singh, "AI and data in South Africa's health sector", July 2020; LK Dassi *et al*, "Computationally accelerating protein ligand docking for neglected tropical diseases: A case study on drug repurposing for Leishmaniasis", March 2021; Fadugba, "Locally-run interpretable breast cancer diagnosis from histology images", March 2021.

¹⁴ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 26-36; K Stone, "Responsible use of artificial intelligence for crime prevention in South Africa", March 2020.

¹⁵ M Thiga *et al*, "Collecting blood pressure and activity data using an integrated mobile and smartwatch application", October 2020; O Nasir *et al*, "Artificial intelligence and sustainable development goals nexus via four vantage points" *Technology in Society* 72 (2023) 102171; R Vinuesa *et al*, "The role of artificial intelligence in achieving the Sustainable Development Goals" (2020) 11 *Nat Commun* 233.

¹⁶ Resolution 473 (above) encourages African States to participate in formulation of policy on AI.

¹⁷ M Gaffley *et al*, "Artificial Intelligence: A Research Summary of the ethical and human rights implications of AI in Africa" (2022); S Segun, "Taking AI ethics from principles to practice: A guide to implementing responsible AI" March 2024; FA Ogonjo, "AI in the judicial system: Possible uses and ethical considerations", September 2021; M Gaffley *et al*, "Artificial Intelligence: African insight" (2022).

Thus, the above-mentioned opportunities are paralleled by significant risks.¹⁸ AI, robotics and emerging technologies can be misused for mass surveillance, leading to severe privacy violations and curtailment of freedoms.

The deployment of AI, robotics, and emerging technologies in law enforcement and judicial processes risks perpetuating and amplifying existing biases, resulting in discriminatory practices that disproportionately affect marginalized communities.¹⁹

Furthermore, the automation of jobs poses a threat to employment, particularly for low-skilled workers, exacerbating economic inequality and social unrest.²⁰ These risks underscore the need for robust safeguards to ensure that AI, robotics, and emerging technologies benefits are equitably distributed, and its adverse impacts minimized.

1.1.2 Africa's readiness for AI, robotics, and emerging technologies

Despite the growing interest and recognition of the “potential” of these technologies to drive socio-economic development as indicated above²¹, the continent's readiness to adopt and integrate them varies widely. This readiness can be examined under several key aspects, revealing the current state of affairs²² and highlighting areas needing attention.²³ The first of this concerns the possession of national AI strategy by African states. The second is the existence of AI maturity assessment frameworks. The third is the availability of the requisite infrastructure for the adaptation and use of these technologies. The fourth is the need for scientific studies and proven practical experience for going beyond the talks about the potential benefits to the actual role of AI in Africa. Finally, the existence of basic needs of significant portion of the population of the continent that cannot be met by relying on AI.

1.1.3 AI, robotics, and new technologies as a predominantly Global North inventions

¹⁸ AUDA-NEPAD, White Paper (above).

¹⁹ F Ogonjo, “Utilising AI to improve efficiency of the environment and land court in the Kenyan judiciary” (2022); O Babafemi and A Akinfaderin, “Predicting and analyzing law-making in Kenya” (2020).

²⁰ R Adams, *The new empire of AI: The future of global inequality* (Polity, 2024); OO Adeniyi and M Zalo, “The impact of AI on Women's job loss in Africa banking industry - Focus on Kenya”, October 2022; A Sey and O Mudongo, “Case studies on AI skills capacity-building and AI in workforce development in Africa”, July 2021.

²¹ See also the UN AI High Level Body's Interim Report.

²² CIPIT, “The state of AI in Africa Report” (2023); G Gondwe, “CHATGPT and the Global South: how are journalists in sub-Saharan Africa engaging with generative AI?” (2023).

²³ Literature Review, Annexure 2; See also AUDA-NEPAD, White paper (above) 107; A Gwagwa *et al*, “Responsible artificial intelligence in Sub-Saharan Africa: Landscape and general state of play”, March 2021; H Miller and R Stirling “Government Artificial Intelligence Readiness Index 2019”, May 2019.

In addition to the challenges relating to the continent's readiness for AI, robotics, and emerging technologies indicated above, there is also the issue that these technologies are predominantly developed in Western countries, reflecting their cultural, social, and economic contexts.²⁴ Indeed, the fact that much of these technologies are developed outside of the continent puts Africa even in a more vulnerable position when it comes to dealing with the adverse consequences of these emerging technologies.²⁵ For AI to be beneficial in Africa, it must be carefully adapted to the continent's unique conditions.²⁶ This adaptation involves addressing the diverse linguistic landscape, ensuring that AI systems support multiple African languages and dialects to be truly inclusive and accessible.²⁷ Additionally, AI solutions must be tailored to address specific local challenges, such as infrastructure limitations and varying levels of digital literacy.

The reliance on foreign-developed AI, robotics and emerging technologies also raises concerns about technological dependency and sovereignty. African nations risk becoming vulnerable to external influence if they overly depend on imported AI systems. Building local AI, robotics and emerging technologies expertise and capabilities is crucial for reducing this dependency and ensuring that AI development aligns with local needs and priorities.

1.1.4 Data risks posed by AI, robotics, and emerging technologies

Data lies at the heart of the development of AI, robotics, and other emerging technologies. Indeed, AUDA-NEPAD noted that “data is the lifeblood of AI and without quality data, AI applications cannot be built to solve Africa’s numerous challenges.”²⁸ Nevertheless, this centrality of data to the development and use of AI, robotics and emerging technologies brings significant risks.²⁹ Chief among these are issues related to data protection and the right to privacy.³⁰ The appropriation and expropriation of data, often without proper

²⁴ Resolution 473 (above). Literature Review, Annexure 2.

²⁵ As above.

²⁶ A Wairegi *et al*, “AI in Africa: Framing AI through an African lens”, May 2021.

²⁷ Siminyu *et al* (above); Afonja (above); Nekoto *et al* (above); Muhammad *et al* (above).

²⁸ AUDA-NEPAD, White paper (above) 114; R Ranchod, “AI and data in South Africa’s cities and towns: Centering the citizen”, March 2020.

²⁹ C Abungu, “The impact of data processing on the development of artificial intelligence in African countries”, September 2022.

³⁰ RA Odhiambo *et al*, “Data privacy in Africa's ed-tech platforms: Children's right to privacy” (2022); A/HRC/55/46, Report of the UN Special Rapporteur on the right to privacy, Report on “Legal safeguards for personal data protection and privacy in the digital age” (2024).

consent, lead to data injustice and data colonialism, where powerful tech companies, mostly from outside Africa, exploit the data of African peoples for their gain.

This exploitation can result in a loss of control over personal information and a lack of benefits from the data harvested. Data sovereignty is another critical issue, as the storage and processing of data by foreign entities can lead to privacy violations and undermine national sovereignty. Implementing robust data protection laws is essential to safeguard the privacy and rights of African citizens. There are also challenges regarding to the quality and representativeness of data that is used in training AI, robotics, and emerging technologies.³¹ Unrepresentative data can result in exclusion³² or exacerbate marginalisation of certain groups, communities, or peoples.³³ Africa is rich in various African languages – and accents – that are not necessarily represented or easily translated in AI applications and emerging technologies.³⁴

The lack of adequate regulation on data sharing further exacerbates these issues, allowing external stakeholders to capitalize on African data without accountability. The negative impact of these practices includes a deepening digital divide and a perpetuation of existing inequalities, highlighting the urgent need for robust data governance frameworks to protect the rights and interests of African individuals and communities. Likewise, issues relating to data protection are fully discussed in this study under relevant rights that are provided for in the African Charter.

1.1.5 Risks to underlying principles of the African Charter

This risk is particularly important as it speaks to the crux of this study. The African Charter provides for fundamental rights such as dignity, non-discrimination, peace, and

³¹ AUDA-NEPAD, White paper (above) 114.

³² A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on “Artificial Intelligence” (2024) paras 13-20; G Razzano “AI and exclusion in public digital systems” March 2024.

³³ M Gaffley, “AI and data in South Africa’s finance sector: Toward financial inclusion”, March 2021, https://policyaction.org.za/sites/default/files/PAN_TopicalGuide_AIData9_FinServices_V1_Elec.pdf (accessed 14 June 2024); R Adams *et al*, “Can AI and data support a more inclusive and equitable South Africa?”, February 2020, https://policyaction.org.za/sites/default/files/PAN_TopicalGuide_AIData1_IntroSeries_Elec.pdf (accessed 14 June 2024).

³⁴ K Siminyu *et al*, “African language dataset challenge” July 2020; T Afonja, “SautiLearn: Improving online learning experience with accent translation”, May 2021; W Nekoto *et al*, “Participatory research for low-resourced machine translation: A case study in African languages”, November 2020; SH Muhammad *et al*, “NaijaSenti: A Nigerian twitter sentiment corpus for multilingual sentiment analysis”, January 2022.

development. These are underlying norms in the African Charter, influenced by the histories of African peoples. As such, norms of human dignity, equality, anti-colonialism and neocolonialism, non-domination, non-exploitation, familial and communitarian ethos, peace, and development are foundational to the African Charter. Yet, while the development and deployment of AI, robotics and emerging technologies may present opportunities to these sacrosanct norms, it presents serious risks to these norms. For example, invasive surveillance and biased decision-making by AI systems can significantly undermine human dignity, leading to dehumanising experiences and violation of fundamental rights on non-discrimination and equality.³⁵ Poorly designed AI systems, robotics and emerging technologies can reinforce and magnify existing inequalities, leading to systemic discrimination.³⁶ Another example is the risk that is posed by AI, robotics, and emerging technologies to the fundamental norm of peace and security which is uniquely provided as peoples' right in the African Charter. The development and use of AI in military applications, such as autonomous weapons and enhanced surveillance, could exacerbate conflicts and undermine the right to peace.³⁷ These issues are later fully discussed in this study in relation to rights that provided for in the African Charter.

1.1.6 Risks presented by AI and emerging technologies in the digital sphere

AI and emerging technologies pose significant risks in the digital sphere, notably in the areas of online hate speech, cybersecurity, and information disorder.³⁸ The proliferation of disinformation, misinformation, and mal-information, including shallowfakes and deepfakes, creates a complex landscape of manipulated media that undermines trust in information sources.³⁹ These technologies can spread unsolicited information, including non-consensual sexual images, which infringe on personal privacy and dignity. Furthermore, AI, robotics and

³⁵ Resolution 473 (above); T Chengeta, "The right to non-discrimination, and freedom from racial oppression should be part of the guidelines and principles in the discussion on AWS" (2023).

³⁶ S Ahmed, "A gender perspective on the use of artificial intelligence in the African FinTech ecosystem: Case studies from South Africa, Kenya, Nigeria, and Ghana", June 2021; A Sey and S Ahmed, "An African perspective on gender and artificial intelligence needs African data and research" October 2020.

³⁷ African Commission, Submission on lethal autonomous weapon systems to the United Nations Secretary-General in terms of the United Nations General Assembly Resolution 78/241, May 2024.

³⁸ Resolution 473 (above); A/74/486, UN Special Rapporteur on Freedom of Expression, Report on "Online hate speech" (2019); S Timcke and M Gaffley, "The risks of AI-cybersecurity gaps to the developmental state project", May 2023.

³⁹ As above; A/79/170, Report of the UN Special Rapporteur on human rights and international solidarity (above) paras 26-30.

emerging technologies can be exploited to radicalize individuals and incite violence, amplifying societal divisions and threatening public safety.

Apart from the issues that societies where these technologies are being applied are wrestling with, various experiences are exposing the adverse impact of the increasing use of these technologies on the continent.⁴⁰ Examples include how profit driven use of algorithmic learning by certain social media platforms stocks incitement of violence and fuels conflicts.⁴¹ One such example is the case involving the death of an Ethiopian professor who during the country's unprecedentedly deadly conflict in Tigray was killed following incitement of violence widely propagated on social media.⁴²

The ability of AI and digital technologies to generate and disseminate harmful content quickly and on a large scale exacerbates these issues, making it challenging to maintain a secure and trustworthy digital environment. Cybersecurity threats also increase, as AI can be used to execute sophisticated attacks, compromising personal and institutional data. Addressing these risks requires robust regulatory frameworks and technological safeguards to protect individuals and communities in the digital age.

1.1.7 Peace and security risks posed by AI, robotics, and emerging technologies

The integration of AI, robotics, and emerging technologies into military and security systems poses significant risks to peace and security.⁴³ Autonomous weapon systems, hypersonic weapons, directed energy weapons, biotechnology, quantum technology, and 3-D printing technologies that facilitate the proliferation of small arms and light weapons are all examples of advancements that can threaten fundamental rights enshrined in the African Charter on Human and Peoples' Rights, particularly the right to life.⁴⁴ The autonomous use of force enabled by these technologies can lead to unintended escalations of violence and make it alarmingly easy to resort to war. Furthermore, the integration of AI into military

⁴⁰ As above.

⁴¹ AH Stuart, "Social media, manipulation, and violence" (2019) 15 *S.C. J. Int'l L. & Bus* 100; M Di Lisio *et al*, "Platformization hate. Patterns and algorithmic bias of verbal violence on social media" (2022) *Mediascapes journal* 20; J Stray *et al*, "The algorithmic management of polarization and violence on social media" (2023) Knight First Amendment Institute; M Ali *et al*, "Predicting cyberbullying on social media in the big data era using machine learning algorithms: review of literature and open challenges" (2019) *IEEE Access* 7.

⁴² See "Death by design: a major new case against Facebook" (2022).

⁴³ African Commission, Submission on lethal autonomous weapon systems to the UN (above).

⁴⁴ As above.

systems can result in decisions about life and death being made by algorithms, potentially bypassing human judgment and accountability.⁴⁵ This threatens not only individual lives but also the broader right to national and international peace as provided in the African Charter.⁴⁶ The ease with which violence can be executed through these advanced technologies underscores the urgent need for robust regulatory frameworks to ensure they are used responsibly and ethically.

1.1.8 AI, robotics, and new technologies' regulatory challenges

Regulating AI, robotics and new technologies in Africa presents several challenges. The main challenge is that there is a huge regulatory gap.⁴⁷ Currently, there are not many regional and international models to follow as regional and international communities are still grappling with the issue.⁴⁸ In Africa, the regulatory landscape is yet to be developed and there is no substantive literature on the human rights implications of such technologies.⁴⁹ There are concerns, some of which illustrated by real life experiences, regarding algorithmic transparency, privacy implications, profiling and predictive decision-making, cybersecurity vulnerabilities, unfairness, bias and discrimination, and the AI reliance on big data.⁵⁰ There is also the issue of standardisation of AI strategies on the continent due to fragmented standards.⁵¹

One major issue is the lack of expertise and resources necessary to develop and enforce effective AI, robotics, and emerging technologies regulations. Capacity building through education and training is essential to equip African nations with the skills needed to manage AI technologies. Collaboration with international organisations and regional partnerships can also help address expertise gaps and provide the necessary resources for regulation.

⁴⁵ As above; A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 21-25.

⁴⁶ As above.

⁴⁷ AUDA-NEPAD, White paper (above) 93, 121, 132; A Taeihagh, "Governance of artificial intelligence" (2021) 40.2 *Policy and Society* 137-157; N Swaminathan and D Danks, "Governing ethical gaps in distributed AI development" (2024) *Digital Society* 7; NA Smuha, "From a 'race to AI' to a 'race to AI regulation': Regulatory competition for artificial intelligence" (2021) 13.1 *Law, Innovation and Technology* 57-84.

⁴⁸ Annexure 2, Literature review; F Alexander, "UN attempts ai power grab: The West is unhappy", July 2024.

⁴⁹ See Annexure 2, literature review.

⁵⁰ A/HRC/42/59, UN Working Group of Experts on the Rights of Peoples of African Descent.

⁵¹ K Stone *et al*, "Submission to the UN on the UN Interim Report on Governing AI for Humanity", March 2024; A Gillwald *et al*, "AI in Africa policy project - AI4D", January 2020.

Balancing innovation with regulation is crucial to ensuring that AI, robotics, and emerging technologies' potential is harnessed without stifling its development. Engaging a broad range of stakeholders, including civil society, industry, and academia, in the regulatory process can help create balanced and effective regulations that protect human rights while promoting ethical AI use.

1.1.9 Risks in relation to state and individual duties

The integration of AI, robotics and emerging technologies into African societies has significant implications for the roles and responsibilities of both states and individuals as outlined in the African Charter. The advent of AI, robotics, and other emerging technologies presents significant risks and challenges to the established framework of state obligations and individual duties as outlined in the African Charter and other human rights instruments. Firstly, the original conceptualisation of state obligations to respect, protect, promote, and fulfil human rights was premised on the understanding that the state held the predominant power to impact, affect, and effect the lives of its citizens. This premise is being fundamentally challenged by the rise of AI, robotics, and emerging technologies, which are predominantly developed and controlled by private actors, particularly large tech companies. These entities and individuals – for example, Elon Musk – possess unprecedented influence over various aspects of human life, which necessitates a reassessment of how state obligations are defined and implemented. The state must now consider not only its direct actions but also its regulatory and oversight roles in relation to these powerful private actors to ensure human rights are upheld.

Secondly, the individual duties enshrined in the African Charter are deeply rooted in familial and communitarian values, reflecting the ethos that guided its drafters back then. These duties, designed with human persons in mind, face conceptual challenges in the era of AI, robotics, and emerging technologies. As AI, robotics, and emerging technologies increasingly take on roles traditionally held by humans, the question arises whether these duties can and should be extended to legal persons, including corporations and AI entities themselves. This requires a nuanced legal interpretation to determine if and how legal frameworks can impose ethical and social responsibilities on non-human actors, ensuring that the communal spirit of the Charter is preserved in a technologically advanced society.

Lastly, as has already been indicated above, AI, robotics, and emerging technologies are largely exported from jurisdictions outside African nations. This raises critical questions about the adequacy of the African Charter and the broader African human rights system in addressing the transnational nature of these technologies and extraterritorial application of human rights. The Charter must evolve to consider the extraterritorial implications of human rights abuses facilitated by foreign technologies and ensure robust enforcement mechanisms are in place. This includes holding foreign technology companies accountable for their operations within African territories and ensuring that the rights of African citizens are protected regardless of the geographic origins of the technological threats they face. Thus, the intersection of state obligations, individual duties, and the extraterritorial reach of AI technologies requires a comprehensive and forward-thinking approach to human rights in Africa.

1.2 Study objectives and the issues that the study

In the light of the foregoing and the parameters set in the Resolution mandating this study, the issues that the Study examines and the objectives of the study are to:

1. Assess the impact of the development and use of AI, robotics, and emerging technologies on the rights of individuals and peoples in Africa, in accordance with the African Charter on Human and Peoples' Rights and other human rights instruments;
2. Interrogate the interface between these technologies and human and peoples' rights to distil a human and peoples' rights frame of analysis as a basis for addressing the human and peoples' rights issues that these technologies give rise to both generally and in the African context particularly;
3. Discuss the role and relevance of the legislative materials that the African human rights system, such as the African Charter on Human and Peoples' Rights avail for responding to and establishing a regional governance regime for regulating and addressing the human and peoples' rights issues and the consequences relating to these technologies;
4. Investigate and illuminate how these technologies affect not only the content and boundaries of the various rights and freedoms enshrined in the African Charter but also the nature and scope of obligations of states parties to the African Charter both at the national level and in their international relations as well as the role of non-state actors particularly the big tech companies as well as the key considerations and principles for the governance of AI, robotics, and emerging technologies in Africa, in accordance with the African Charter, to ensure transparency, accountability, and respect for human rights;
5. Identify the various ways through which the mandates and human rights promotion and protection instruments and tools of the African Commission, such as the communications procedure and state reporting as well as special mechanisms, can be leveraged for harnessing the contribution of these technologies for human rights and for mitigating, if not, resolving their adverse impacts;
6. Develop recommendations to inform the thinking and action of the ACHPR not only in updating its protection and promotion work but also in the tools, and processes that it may wish to put in place for advancing human and peoples' rights in the context of the rapid advancement and huge impact of these technologies.

This study provides valuable insights for policymakers, human rights advocates, and stakeholders in shaping responsible and human rights-centered approaches to AI governance, development, and deployment in Africa and in bolstering effective response and role of the African human rights system to the human rights issues arising from these technologies.

1.3 Study methods and methodologies

To answer the above research questions, the Study used the following methods and methodologies:

- **Literature review:** The study conducted an extensive review of existing literature (*Annexure 1*) in form of academic papers, reports, and relevant legal documents to understand the current state of AI⁵², robotics and emerging technologies in Africa, the African Charter, and the intersection between AI and human rights in the African context. The Study analysed the collected data from the literature review, case studies, and stakeholder interviews to identify the key ethical implications of AI, robotics and emerging technologies deployment in Africa and its alignment with the African Charter and other human rights instruments. The study explored the challenges, risks, and opportunities associated with AI, robotics and emerging technologies and their impact on human rights.
- **Consultation with relevant stakeholders:** the Study conducted comprehensive consultations with relevant stakeholders such as policy makers, technologists, developers, technology users, civil society, experts etc. The consultations were guided by principles of diversity and inclusion. The consultations were in the form of workshops, interviews, and express calls for inputs. The Study conducted interviews with key stakeholders, including AI developers, policymakers, human rights organizations, civil society representatives, and marginalized communities, and gathered insights and perspectives on the human rights implications of AI in Africa and its compatibility with the African Charter.

⁵² Centre for Intellectual Property and Information Technology Law, “The state of AI in Africa Report” (2023).

- **Doctrinal legal research:** the Study used this methodology to focus on the letter of the law on AI, robotics, and emerging technologies in Africa. In this regard, the Study included a detailed analysis of legal rules found in primary sources (the African Charter, cases, statutes, or regulations) from different African countries.
- **Socio-legal research:** the Study also utilised an interdisciplinary approach to analyse how the technology at hand is regulated and its relationship with the wider society. Given the power dynamics involved in AI and emerging technologies, the Study utilised critical theories such as critical race theory, decoloniality, feminism, gender theories, intersectionality etc. Critical theories are integral in this research because they focus on society and culture with the aim of revealing, critiquing, and challenging power structures.
- **Comparative methods:** Comparative methods were used to compare African nations' approaches to AI and to compare the African region approaches to the technology to other regions such as Europe, Asia, and the Arab world. The African approaches were also be compared to those at the international level, particularly, those of the United Nations. In this regard, the Study identified and analysed specific case studies or examples where AI technologies have had an impact on human rights in Africa. This included use cases in healthcare, criminal justice, education, or governance.

1.4 Structure of the Study

In light of these findings, the study delves into four substantive generations of human rights as identified from the African Charter:

- **Part III:** Individual rights relating to civil and political rights.
- **Part IV:** Individual rights relating to socio-economic rights.
- **Part V:** Peoples' rights as provided for in the African Charter.
- **Part VI:** Group/Collective rights as provided for in the African Charter and other human rights instruments.
- **Part VII:** Governance of AI, robotics, and emerging technologies. Recommendations for addressing the identified challenges and leveraging opportunities.

Before addressing these substantive segments, the study begins with **Part II**, which considers the existing legal framework of the African Human Rights system and its relevance to AI,

robotics, and emerging technologies. This foundational analysis sets the stage for a deeper examination of the human rights implications and the readiness of African states to navigate the challenges and opportunities presented by these technological advancements.

PART II - THE LEGAL FRAMEWORK OF THE AFRICAN HUMAN RIGHTS SYSTEM

TREATIES AND INSTITUTIONAL MECHANISMS

2. Introduction

To comprehensively examine the human rights implications of AI, robotics, and emerging technologies in Africa, it is essential to evaluate the continent's human rights framework. Part II of this study provides an overview of pertinent African human rights treaties, highlighting their relevance and potential application in the governance of these advanced technologies. Additionally, it outlines the key institutional mechanisms that could play a significant role in addressing the challenges and issues identified in Part I, offering a foundational context for the discussion.

2.1 Relevant African treaties

The following are the key African human rights treaties that are relevant to the discussion on human rights implications of AI, robotics, and emerging technologies in Africa:

2.1.1 African Charter on Human and Peoples' Rights (African Charter)

Adopted in 1981 by the Organization of African Unity (now the African Union), the African Charter is foundational to the protection of human rights in Africa.⁵³ The African Charter provides for individual and peoples' rights both in the realm of civil and political rights and socio-economic rights. For over 40 years, the African Charter has provided a basis for protection of human rights in Africa, even so, in face of new inventions such as the internet and many digital technologies.⁵⁴

The African Charter is grounded in the unique historical and socio-political context of Africa.⁵⁵ The continent's painful past, marked by the scars of colonialism, apartheid, racial and ethnic discrimination, and multiple forms of domination, infuses the Charter with a profound commitment to emancipation, dignity, and the eradication of all forms of oppression.⁵⁶ The Preamble's focus on "freedom, equality, justice, and dignity" underscores

⁵³ African Charter; VOO Nmehielle, *The African human rights system: Its laws, practice, and institutions* (Martinus Nijhoff Publishers, 2001); K Kufuor, *The African human rights system: origin and evolution* (Springer, 2015).

⁵⁴ M Ssenyonjo, *The African regional human rights system: 30 years after the African Charter on Human and Peoples' Rights* (Martinus Nijhoff Publishers, 2011).

⁵⁵ C Heyns, "The African regional human rights system: The African Charter" (2003) *Penn St. L. Review* 679.

⁵⁶ Preamble, The African Charter; PT Zeleza, "The struggle for human rights in Africa"(2007) *Canadian Journal of African Studies/Revue canadienne des études africaines* 474-506; B Ibhawoh, *Imperialism and human rights: Colonial discourses of rights and liberties in African history* (State University of New York Press, 2008).

the African Charter's commitment to addressing historical injustices and setting a path forward that honours the aspirations of African peoples.⁵⁷

Throughout this study, including the literature review in Annexure 2, it becomes evident that in the era of AI, robotics, and emerging technologies, certain fundamental binding norms from the African Charter must be prioritized and upheld by all stakeholders. These norms are distinctively articulated in the African Charter, reflecting the continent's unique historical context.⁵⁸ The key norms are as follows:

a) Human dignity

Human dignity is at the core of the African Charter. In the context of this study, human dignity mandates that the development and deployment of AI, robotics and emerging technologies is done in a manner that respect, protect, promote, and fulfil the intrinsic worth of every individual, avoiding dehumanizing practices and maintaining the highest standards of privacy, personal, family and community integrity. This norm is discussed more in detail in Part III of this study.

b) Equality and non-discrimination

Likewise, equality and non-discrimination is at the centre of the African Charter. In the context of this study, this norm is to ensure that AI, robotics, and emerging technologies are designed and implemented in ways that do not perpetuate or exacerbate existing biases, thereby promoting fair treatment for all individuals regardless of race, gender, or socioeconomic status.⁵⁹ In the historical context of Africa, these provisions are of huge significance. These principles are critical in the governance of AI, robotics and emerging technologies as will be discussed later in the study. Algorithmic discrimination is a rising concern, where biases encoded in data get reinforced and perpetuated by AI, robotics, and emerging technologies. Ensuring technological advancements respect these principles

⁵⁷ As above.

⁵⁸ BO Okere, "The protection of human rights in Africa and the African Charter on Human and Peoples' Rights: A comparative analysis with the European and American systems"(1984) *Human Rights Quarterly* 141; Z Motala, "Human rights in Africa: A cultural, ideological, and legal examination" (1988) 12 *Hastings International & Comparative Law Review* 373.

⁵⁹ Article 2 and Article 3 of the African Charter; F Viljoen, *International human rights law in Africa* (OUP Oxford, 2012); A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 5-12.

requires proactive measures such as fairness audits, transparency requirements, and redress mechanisms.

c) Equity, non-exploitation, non-domination, and self-determination

These norms underscore the importance of developing AI systems that empower individuals and communities rather than exploit or dominate them, ensuring that the benefits of AI are distributed justly, and that people retain control over their own lives and futures.⁶⁰ In this regard, practices of data exploitation, data appropriation and data colonialism are inconsistent with African Charter rights that relate to the norm of equity, non-exploitation, non-domination, and self-determination.

In relation to AI, robotics and emerging technologies, exploitation could manifest in the misuse of individuals' data for profit without consent or benefit to the individuals themselves. The African Charter's prohibition of one people's domination by another is a clear statement against power imbalances.⁶¹ In the age of AI, domination can take the form of technological oppression where entities control and dictate AI processes that disproportionately impact marginalised groups.

Further, the advent of AI, robotics and emerging technologies presents new challenges that echo past oppressions that are recalled in the preamble of the African Charter. Concepts such as "data colonialism" highlight how data, the lifeblood of AI, can be harnessed in ways that perpetuate domination and exploitation.⁶² These patterns mirror historic colonial extraction processes where resources were harnessed to benefit external entities at the expense of local communities.

Relating to the express provisions of the Charter on prohibition of exploitation, the ACHPR noted that in the context of AI, there is need to emphasise "freedom from domination of one people by another, freedom from racial and other forms of discrimination in framing of global AI governance frameworks."⁶³ In this regard, the ACHPR emphasised that "the

⁶⁰ Article 5 and Article 19 of the African Charter.

⁶¹ Article 19 of the African Charter.

⁶² A/77/196, Report of the UN Special Rapporteur on the right to privacy, Report on "Privacy and data protection: Increasingly precious asset in digital era" (2022).

⁶³ Resolution 473 (above).

development of new technologies must reflect a strong commitment to human rights and human dignity' and must not perpetuate 'the ongoing influence of mindsets that channel certain narratives, including racially biased beliefs, and remain embedded in decision-making.'⁶⁴

The African Charter also provides for the right of all peoples to self-determination, directly confronting the legacies of colonialism.⁶⁵ As AI, robotics and emerging technologies become more influential in determining socio-economic outcomes, the principle of self-determination is essential as a peoples' right. AI, robotics, and emerging technologies designed and controlled externally could compromise a community's or nation's right to shape its destiny.

d) Economic development

The African Charter also has an emphasis on economic development and socio-economic rights. In terms of this fundamental norm, AI, robotics, and emerging technologies must contribute – rather than undermine – sustainable and inclusive growth, addressing development challenges and enhancing the quality of life across the continent. Economic liberation and development is important to the continent on account of the current circumstances and histories of African peoples. This is discussed in detail in Part IV of this study.

e) Peace and security

The African Charter also emphasise the norm of peace and security. Indeed, the African Charter is the only regional human rights instrument that provides for peoples' right to peace and security. In the context of this study, this norm is critical in emphasising that AI, robotics and emerging technologies must foster a safe and secure environment, preventing conflict, and protecting individuals from harm in accordance with the peace and security aspirations of the continent. These technologies must not undermine peace and security.

The above norms are recurring themes throughout this study and are also core in other African human rights treaties referred to below. The African Charter, unlike any other

⁶⁴ Resolution 473 (above); A/HRC/42/59, UN Working Group of Experts on the Rights of Peoples of African Descent.

⁶⁵ Article 20 of African Charter.

regional human rights treaty, contains unique provisions on peoples' rights, socio-economic rights, and individual duties.⁶⁶ These provisions are particularly important given AI, robotics, and emerging technologies' impact on peoples, socio-economic rights, and the role of individuals in the development and deployment of these technologies.

The provisions of the African Charter offer a unique and history-rich perspective to the worldwide dialogue on AI, robotics, and emerging technologies. These provisions underscore the importance of acknowledging historical continuities, particularly in understanding how modern practices of data extraction and technological dominance can mirror previous forms of oppression. Furthermore, the African Charter ardently advocates for proactive emancipation, emphasizing the intrinsic rights of all communities to have a defining role in the development and benefits derived from AI, robotics, and emerging technologies. This perspective champions a vision of technologies that elevate and empower rather than subjugate. Additionally, the African Charter underscores the significance of broad-based collaboration, urging states and communities to join hands in ensuring that AI, robotics, and emerging technologies act as tools for liberation, steering clear from furthering any form of oppression.

In sum, the African Charter, informed by Africa's unique history and challenges, offers vital insights into shaping a just AI-driven future. It prompts stakeholders to be vigilant against new forms of exploitation and to ensure that AI, robotics, and emerging technologies serve as tools for liberation, equality, and dignity. The African Charter stands as a testament to the need for globally inclusive discussions on AI, robotics and emerging technologies that respect diverse histories and aspirations.

2.1.2 African Charter on the Rights and Welfare of the Child

The African Charter on the Rights and Welfare of the Child provides for the protection and welfare of children, including their rights to education, health, and protection from exploitation.⁶⁷ This Charter, providing for the principle of "best interest of the child"⁶⁸ is the

⁶⁶ M Mutua, "Human rights in Africa: the limited promise of liberalism" (2008) *African Studies Review* 17-39.

⁶⁷ African Charter on the Rights and Welfare of the Child.

⁶⁸ Article 4, African Charter on the Rights and Welfare of the Child.

most critical and specific treaty on the protection of children on the continent.⁶⁹ Like the African Charter, the African Charter on the Rights and Welfare of the Child also emphasise key norms such as norm of non-discrimination.⁷⁰

As is shown in Part V of this study, having a specific and elaborate treaty on the rights and welfare of children is critical given the impact of AI, robotics, and emerging technologies on the rights of children. Indeed, the African Charter on the Rights and Welfare of the Child notes that in regard to certain rights of children, there must be “application of appropriate technology.”⁷¹

As is fully discussed in Part V of the study, AI, robotics, and emerging technologies can, for example, contribute positively to the rights of children by personalising educational content, enhancing healthcare delivery, and strengthening child protection mechanisms. For instance, these technologies can facilitate early diagnosis and treatment of diseases, significantly improving health outcomes for children. Nonetheless, the deployment of AI, robotics and emerging technologies in this context requires stringent regulation to safeguard children's privacy and prevent exploitation. The collection and processing of children's data must be conducted with the highest ethical standards to ensure their rights are not compromised.

2.1.3 Protocol to the African Charter on the Rights of Women

The African human rights system also benefits from another specialised treaty, the Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women (Maputo Protocol).⁷² Just like the African Charter, the Maputo Protocol also provides for key norms

⁶⁹ AA Getachew, "Advancing Children's Rights in Africa: The role of the African Children's Charter and Its monitoring body" (2014) *Mekelle ULJ* 66; Dejo, "Protecting children's rights in Africa: A critique of the African Charter on the Rights and Welfare of the Child" (2002) 10 *International Journal on Children's Rights* 127; J Afrooz Kaviani and J Sloth-Nielsen, "Child protection, safeguarding and the role of the African Charter on the Rights and Welfare of the Child: Looking back and looking ahead" (2020) *African Human Rights Law Journal* 643-666; F Viljoen, "Supra-national human rights instruments for the protection of children in Africa: The Convention on the Rights of the Child and the African Charter on the Rights and Welfare of the Child" (1998) 31.2 *Comparative and International Law Journal of Southern Africa* 199-212.

⁷⁰ Article 3, African Charter on the Rights and Welfare of the Child.

⁷¹ Article 14, African Charter on the Rights and Welfare of the Child.

⁷² Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women; F Viljoen, "An introduction to the protocol to the African charter on human and peoples' rights on the rights of women in Africa" (2009) 16 *Wash. & Lee Journal of Civil Rights & Soc.* 11; C Ocran, "The Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa" (2007) *African Journal of International and Comparative Law* 147-152.

that are critical in relation to this study, in particular, providing for women's right to dignity⁷³, non-discrimination⁷⁴, development⁷⁵, peace⁷⁶ and security.⁷⁷ The Maputo Protocol also acknowledges the role of science and technology is realising certain fundamental rights for women and emphasises states obligations to provide education and training for women "in the fields of science and technology."⁷⁸

Likewise, specific issues and use cases relating to rights of women are discussed under Part VI of this study. AI, robotics, and emerging technologies can be powerful tools in achieving certain rights for women by providing gender analysis, improving access to healthcare, and supporting economic empowerment. For example, AI, robotics, and emerging technologies can help identify and address gender disparities in various sectors, enabling more effective policy interventions. However, as will be fully discussed later, these technologies can also perpetuate gender biases if not carefully managed. Biased algorithms in areas such as hiring, and credit scoring can exacerbate existing inequalities and discrimination against women. The Maputo Protocol, therefore, is a critical framework in reminding stakeholders that it is crucial to develop and deploy AI, robotics, and emerging technologies with a gender-sensitive approach to avoid reinforcing harmful stereotypes and biases that have harmed women for many years.

2.1.4 Protocol to the African Charter on the Rights of Persons with Disabilities

As will be discussed in Part V of the study, AI, robotics, and emerging technologies have far reaching consequences for persons with disabilities. Within the African human rights system, the Protocol to the African Charter on the Rights of Persons with disabilities provides a framework for the protection of the rights of persons with disabilities.⁷⁹ While providing for

⁷³ Article 3, Maputo Protocol.

⁷⁴ Article 2, Maputo Protocol.

⁷⁵ Article 19, Maputo Protocol.

⁷⁶ Article 10, Maputo Protocol; R Sigsworth and K Liezelle, "Women, peace and security-implementing the Maputo Protocol in Africa" (2016) *Institute for Security Studies Papers* 1-24.

⁷⁷ Article 4, Maputo Protocol.

⁷⁸ Article 12(2)(b), Maputo Protocol; see also A Budoo, "Gender budgeting as a means to implement the Maputo Protocol's obligations to provide budgetary resources to realise women's human rights in Africa" (2016) *African Journal of Legal Studies* 199-219.

⁷⁹ Protocol to the African Charter on the Rights of Persons With Disabilities; D Msipa and Juma, "The African Disability Protocol: Toward a social and human rights approach to disability in the African Human Rights System" 1-18, in *Handbook of disability: Critical thought and social change in a globalizing world* (Singapore: Springer Nature Singapore, 2023).

the protection of a range of rights of persons with disabilities, the Protocol equally provides for underlying norms on dignity⁸⁰, equality⁸¹, and non-discrimination⁸² as part of the general principles. More importantly – and essential to the discussion on AI, robotics, and emerging technologies – the Protocol has critical provisions on accessibility⁸³ and data collection.⁸⁴

As will be discussed under Part V, AI, robotics, and emerging technologies can significantly enhance the quality of life for persons with disabilities by providing assistive technologies and improving access to services in line with the provisions of the Protocol. For example, AI-driven tools can facilitate communication and mobility, promoting greater independence. However, ensuring that these technologies are affordable and accessible remains a significant challenge. Without proper regulation, there is a risk that AI, robotics, and emerging technologies will not be equitably distributed, thus exacerbating existing disparities.

2.1.5 Protocol to the African Charter on the Rights of Older Persons in Africa

Equally, the African human rights system also has a specific treaty on the protection of older persons in Africa – the Protocol to the African Charter on the Rights of Older Persons in Africa.⁸⁵ Among other special measures⁸⁶ that must be adopted by states in relations to older persons, the Protocol also underline the basic and key norms relating to equality⁸⁷ and non-discrimination.⁸⁸

More importantly, and in relevant to the study on AI, robotics and emerging technologies, the Protocol has provisions relating to data collection⁸⁹ of older persons and general state

⁸⁰ Articles 3 and 10, Protocol to the African Charter on the Rights of Persons with Disabilities.

⁸¹ Articles 3 and 6, Protocol to the African Charter on the Rights of Persons with Disabilities.

⁸² Articles 3 and 5, Protocol to the African Charter on the Rights of Persons with Disabilities.

⁸³ Articles 3 and 15, Protocol to the African Charter on the Rights of Persons with Disabilities.

⁸⁴ Article 32, Protocol to the African Charter on the Rights of Persons with Disabilities.

⁸⁵ Protocol to the African Charter on the Rights of Older Persons in Africa; See D Chirwa and CI Rushwaya, "Guarding the guardians: A critical appraisal of the protocol to the African charter on the rights of older persons in Africa" (2019) 19.1 *Human Rights Law* 53-82.

⁸⁶ Preamble, Protocol to the African Charter on the Rights of Older Persons in Africa.

⁸⁷ Article 4, Protocol to the African Charter on the Rights of Older Persons in Africa.

⁸⁸ Articles 3 and 6, Protocol to the African Charter on the Rights of Older Persons in Africa.

⁸⁹ Article 21, Protocol to the African Charter on the Rights of Older Persons in Africa.

obligations in relation to older persons' right to access various forms of infrastructure⁹⁰ including specific fields such as health⁹¹ and education.⁹²

There is no doubt that older persons in Africa are greatly impacted by AI, robotics, and emerging technologies. As will be fully discussed in Part V of the study, these technologies can improve the quality of life for older persons by enhancing healthcare and social services. For instance, AI-driven health monitoring systems can provide timely medical interventions, thereby improving health outcomes.

However, the digital divide poses a significant challenge, as older persons may have limited access to and familiarity with new technologies. Ensuring that AI technologies are inclusive and accessible to older individuals is essential for promoting their rights and welfare.

2.1.6 Refugee Convention and the Kampala Convention on Internally Displaced Persons

The African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention)⁹³ is another treaty that is critical in the African human rights system and relevant to the discussions on AI, robotics, and emerging technologies.⁹⁴ The Kampala Convention is relevant for the protection for the rights of those who are displaced both in peace time and in armed conflict.⁹⁵ Indeed, commentators have noted how the Kampala Convention fills up an important gap in the protection of human rights.⁹⁶ Like many other human rights treaties listed above, the Kampala Convention also contains key norms of human dignity, non-discrimination and equality as part of state

⁹⁰ Article 18, Protocol to the African Charter on the Rights of Older Persons in Africa.

⁹¹ Article 15, Protocol to the African Charter on the Rights of Older Persons in Africa.

⁹² Protocol to the African Charter on the Rights of Older Persons in Africa.

⁹³ Kampala Convention.

⁹⁴ FZ Guistiniani, "New hopes and challenges for the protection of IDPs in Africa: The Kampala Convention for the Protection and Assistance of Internally Displaced Persons in Africa" (2010) 39 *Denver Journal of International Law and Policy* 347.

⁹⁵ A Dieng, "Protecting internally displaced persons: The value of the Kampala Convention as a regional example" (2017) *International Review of the Red Cross* 263-282; S Ojeda, "The Kampala Convention on Internally Displaced Persons: Some international humanitarian law aspects" (2010) *Refugee Survey Quarterly* 58-66.

⁹⁶ MT Maru, "The Kampala Convention and its contribution in filling the protection gap in international law" (2011) *Journal of Internal Displacement* 91-130.

obligations.⁹⁷ Further, the Convention has provision on the collection and maintenance of personal data, an aspect that is relevant to the issues under discussion.⁹⁸

AI, robotics, and emerging technologies can aid in implementing the obligations in the Kampala Convention by improving the management and protection of refugees and internally displaced persons (IDPs). For example, AI-driven tools can facilitate the efficient allocation of resources and provide real-time data for decision-making. However, just like in the case of other treaties, the deployment of AI, robotics and emerging technologies must be accompanied by robust governance frameworks to prevent misuse and protect these vulnerable populations. Ensuring that these technologies are used to support, rather than undermine, the rights of refugees and IDPs is essential.

2.1.7 African Charter on Democracy, Elections and Governance

While not strictly a human rights instrument, the African Charter on Democracy, Elections and Governance is important to the African human rights system.⁹⁹ It has long been established that democracy is a necessary precondition for the enjoyment of many rights. Indeed, some commentators have conceptualised the African Charter on Democracy, Elections and Governance as a human rights instrument.¹⁰⁰ Furthermore, this Charter has specific provisions that draw the nexus between democracy, rule of law, elections, and human rights.¹⁰¹ Further, the Charter also contains provisions on some of the core norms of the African human rights system, namely, non-discrimination¹⁰², peace¹⁰³ and development.¹⁰⁴ Thus, notwithstanding its implementation challenges¹⁰⁵, this treaty is relevant when considering the governance framework on AI, robotics, and emerging technologies.

⁹⁷ Article III and IV, Kampala Convention.

⁹⁸ Article XII, Kampala Convention.

⁹⁹ African Charter on Democracy, Elections and Governance.

¹⁰⁰ G Niyungeko, "The African Charter on Democracy, Elections and Governance as a human rights instrument" (2019) *Journal of African Law* 63–80.

¹⁰¹ Articles 4, 6, and 7, African Charter on Democracy, Elections and Governance.

¹⁰² Article 8, African Charter on Democracy, Elections and Governance.

¹⁰³ Article 11, African Charter on Democracy, Elections and Governance.

¹⁰⁴ Article 9, African Charter on Democracy, Elections and Governance.

¹⁰⁵ U Engel, "The 2007 African Charter on Democracy, Elections and Governance: Trying to make sense of the late ratification of the African Charter and non-implementation of its compliance mechanism" (2019) 54 *Africa Spectrum* 127-146; M Wiebusch *et al*, "The African Charter on Democracy, Elections and Governance: Trends, challenges and perspectives" (2019) 54 *Africa Spectrum* 95–105; M Wiebusch *et al*, "The African Charter on Democracy, Elections and Governance: Past, present and future" (2019) *Journal of African Law* 9-38.

As is discussed under Part III of this study, AI, robotics, and emerging technologies present both challenges and opportunities for the right to vote, which is at the foundation of a democratic society. AI, robotics, and emerging technologies can enhance democracy and elections by improving transparency, efficiency, and citizen engagement in democratic processes. For example, these technologies can be used to monitor elections, detect fraud, and facilitate voter education. However, AI's role in governance also raises significant concerns. AI-driven surveillance and data collection can infringe on privacy rights and be used for political repression.¹⁰⁶ Ensuring that these technologies are developed and used transparently and ethically is crucial for maintaining the integrity of democratic processes.

2.1.8 African Youth Charter

Finally, the African Youth Charter is another important treaty in the African human rights system.¹⁰⁷ While not necessarily a human rights treaty, the African Youth Charter contains critical human rights for the African youths, including fundamental norms that are core to the African human rights system – non-discrimination¹⁰⁸, development¹⁰⁹, peace, and security.¹¹⁰

There is no doubt that AI, robotics, and emerging technologies are more relevant to the African youth who are the future of the continent. Indeed, the African Youth Charter recognises this by expressly stating as follows: “Youth are determined to transform the continent in the fields of science and technology. Therefore, they are committed to promoting and using science and technology in Africa and conducting research towards science and technology.”¹¹¹

In recognition of the role of African youth when it comes to development and use of technologies, the African Youth Charter provides that states have an obligation to “strengthen participation in and the quality of training in science and technology.”¹¹²

¹⁰⁶ A/HRC/41/35, UN Special Rapporteur on Freedom of Expression, Report on “Surveillance and human rights” (2019).

¹⁰⁷ African Youth Charter.

¹⁰⁸ Article 2, African Youth Charter.

¹⁰⁹ Article 10 and 19, African Youth Charter.

¹¹⁰ Article 17, African Youth Charter.

¹¹¹ Article 13 (5), African Youth Charter.

¹¹² Article 13(4)(d), African Youth Charter.

Further, states are obligated to “adopt pedagogy that incorporates the benefits of and trains young people in the use of modern information and communication technology such that youth are better prepared for the world of work.”¹¹³ As is clear, when considering the human rights implications of AI, robotics, and emerging technologies in Africa, it is critical for stakeholders to consider the legal framework that is set out in the African Youth Charter as part of the African human rights framework and governance. Since the African youth are hugely impacted by the development and use of these technologies, it is critical that they are also included in decision-making.¹¹⁴

2.2 African human rights institutions and mechanisms

Having outlined the relevant treaties that constitute the legal framework in the African human rights system, it is important to outline the institutional framework that supports this system. Indeed, there are various institutions – at the regional, sub-regional and national level – that play an important role in the African human rights system.¹¹⁵ Before discussing some of those institutions, it is important to generally outline the role that these institutions can play in making sure that AI, robotics, and emerging technologies are developed and used to advance human rights in Africa.

Several regional, sub-regional, and national institutions are pivotal in ensuring that AI, robotics, and emerging technologies align with human rights treaties within the African human rights system. The African Observatory on Responsible Artificial Intelligence recently submitted a policy document to the United Nations, outlining seven key functions that institutions can play towards effective governance of these technologies.¹¹⁶

First, institutions must thoroughly assess the development and impact of AI – and by extension, robotics, and emerging technologies – in Africa. This requires sustained investment in monitoring national AI ecosystems, with tools like the Global Index on

¹¹³ Article 13(4)(j), African Youth Charter.

¹¹⁴ N Tidimane and C Ntau, “The African Youth Charter and youth participation in decision making: Opportunities and challenges” (2016) 10.4 *IUP Journal of International Relations*; YA Manu and HA Mohammed, “The African Youth Charter and Youth Development: A reflection on challenges of implementation in Nigeria” (2024) *Nnamdi Azikiwe Journal of Political Science* 46-63.

¹¹⁵ OC Okafor, *The African human rights system, activist forces, and international institutions* (Cambridge University Press, 2007).

¹¹⁶ F Adeleke and R Adams, “Submission to the UN on the UN Interim Report on Governing AI for Humanity”, March 2024.

Responsible AI offering valuable insights by annually tracking progress towards responsible AI use at the national level.¹¹⁷

Second, institutions should enhance the interoperability of AI governance efforts. Governance frameworks must be adaptable to technological advancements and flexible enough to address unique regional challenges. Institutions must prepare to deal with high compliance and governance costs, along with issues of inadequate data protection in many African nations, restrict data sharing and develop tailored solutions.¹¹⁸

Third, institutions need to develop and harmonize standards, safety, and risk management frameworks relevant to Africa. This involves engaging multiple stakeholders, conducting comprehensive human rights impact assessments, creating region-specific guidelines, and implementing capacity-building initiatives.¹¹⁹

Fourth, institutions should facilitate the development, deployment, and use of AI for economic and societal benefits through international multi-stakeholder cooperation. Strengthening legal, financial, and technical frameworks, alongside capacity building across all sectors, is essential for advancing responsible AI use and fostering African contributions to AI innovation.¹²⁰

Fifth, institutions must promote international collaboration on talent development, access to computing infrastructure, building diverse high-quality datasets, responsible sharing of open-source models, and AI-enabled public goods to achieve the SDGs. Sustainable partnerships between government, private sector, and academia are crucial.¹²¹

Sixth, institutions should monitor risks, report incidents, and coordinate emergency responses. Effective oversight systems, incident reporting, coordinated responses, thorough investigations, and collaboration with regulatory authorities are necessary to ensure compliance and address misuse or abuse.¹²²

¹¹⁷ As above.

¹¹⁸ As above.

¹¹⁹ As above.

¹²⁰ As above.

¹²¹ As above.

¹²² As above.

Seventh, institutions must ensure compliance and accountability based on binding norms from the treaties that were outlined above. Continuous engagement with state and non-state actors is needed to ensure these norms are relevant and applicable in national and regional contexts.¹²³

2.2.1 African Commission on Human and Peoples' Rights (ACHPR)

The ACHPR is one of the critical institutions in the African human rights system. It is tasked with promoting and protecting human rights across the continent. In terms of the African Charter, part of the functions of the ACHPR shall include promotion of human and peoples' rights through collection of documents, undertaking "studies and research on African problems in the field of human and peoples' rights"¹²⁴ and "should the case arise, give its views or make recommendations to Governments."¹²⁵ The ACHPR can also "formulate and lay down, principles and rules aimed at solving legal problems relating to human and peoples' rights and fundamental freedoms upon which African Governments may base their legislations."¹²⁶ In terms of the "Applicable Principles, "the Commission shall draw inspiration from international law on human and peoples' rights, particularly from the provisions of various African instruments on human and peoples' rights, the Charter of the United Nations, the Charter of the Organization of African Unity, the Universal Declaration of Human Rights, other instruments adopted by the United Nations and by African countries in the field of human and peoples' rights as well as from the provisions of various instruments adopted within the Specialized Agencies of the United Nations of which the parties to the present Charter are members."¹²⁷ Further, "the Commission shall also take into consideration, as subsidiary measures to determine the principles of law, other general or special international conventions, laying down rules expressly recognized by member states of the Organization of African Unity, African practices consistent with international norms on human and people's rights, customs generally accepted as law, general principles of law recognized by African states as well as legal precedents and doctrine."¹²⁸

¹²³ As above.

¹²⁴ Article 45, African Charter.

¹²⁵ Article 45, African Charter.

¹²⁶ Article 45, African Charter.

¹²⁷ Article 60, African Charter.

¹²⁸ Article 61, African Charter.

In line with the above mandate, in 2021, the ACHPR adopted Resolution 473 calling for a study on human right implications of AI, robotics and emerging technologies in Africa.¹²⁹ Resolution 473 notes myriad ways AI technologies intersect with foundational rights—ranging from dignity, freedom from discrimination and exploitation to liberty, equality, and even the fundamental right to freedom of expression.¹³⁰ The Resolution notes of the African Commission’s fervent belief that State Parties must be the vanguard, ensuring that all AI innovations align with sacrosanct human rights doctrines. In the context of Africa, there is a clarion call for AI, especially those introduced from foreign shores, to be recalibrated, ensuring they resonate with African ethos and cater to the continent's unique needs. Additionally, the sanctity of transparent decision-making within AI realms, a cogent legal and ethical governance structure aligned with the ACHPR's spirit, and the African Union's proactive role in sculpting a pan-African AI regulatory framework are emphasized.¹³¹ In essence, Resolution 473 is not just a documentation of concerns on AI; it is a fervent call to action, a beacon emphasizing the imperativeness of fortifying human rights in an era increasingly shadowed by AI and its technological kin.

More importantly, Resolution 473 specifically addresses AI's interaction with the unique aspects of the African Charter. It delves into AI, robotics and emerging technologies' influence on peoples’ rights, its relation to Charter’s specific anti-exploitation provisions, the obligations of individuals in the context of AI, robotics and emerging technologies, and its effect on African norms and values, especially the community-centric approach.¹³²

The ACHPR also have critical special procedures in form of working groups, special rapporteurs, and committees whose working is not only relevant but can provide guidance to current efforts on governing AI, robotics, and emerging technologies in a manner that is consistent with the African Charter and other relevant human rights instruments.

a) Working Group on Economic, Social and Cultural Rights

As already indicated – and fully discussed in Part IV of this study – AI, robotics and emerging technologies have the potential to significantly impact the realisation of economic, social,

¹²⁹ Resolution 473 (above).

¹³⁰ As above.

¹³¹ As above.

¹³² As above.

and cultural rights in Africa. This brings to light the importance of the work of the Working Group on Economic, Social and Cultural Rights, who should equally discuss these matters and share their expertise.

b) Working Group on Extractive Industries, Environment and Human Rights Violations

The above sections have already noted issues related to exploitation of Africa's natural resources when it comes to the development of AI, robotics, and emerging technologies. Here, the work of the Working Group on Extractive Industries, Environment and Human Rights Violations can be very vital, not only in sharing expertise but combining its findings and adapting it to the current discussions. Equally, this working group can also explore the potential of AI, robotics, and emerging technologies in enhancing environmental monitoring, providing real-time data on environmental degradation and human rights abuses in extractive industries. This can facilitate more effective interventions and policy responses to protect the rights of communities.¹³³

c) Working Group on the Rights of Older Persons and People with Disabilities in Africa

A section above has already indicated the importance of the treaty frameworks on the rights of persons with disabilities and older persons. The work of this working group can be vital in formulating policy on AI, robotics, and emerging technologies.

d) Working Group on Death Penalty, Extra-Judicial, Summary or Arbitrary Killings and Enforced Disappearances in Africa

Part III of this study discusses the right to life implications of AI, robotics, and emerging technologies. The work of the Working Group on Death Penalty, Extra-Judicial, Summary or Arbitrary Killings and Enforced Disappearances is particularly critical to these considerations. Further, this Working Group can also consider how it can leverage AI, robotics, and emerging technologies to monitor and document issues relating to violations of the right to life and disappearances more effectively.

¹³³ A/HRC/24/41, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive Industries and Indigenous Peoples" (2013); A/HRC/18/35, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive industries operating within or near indigenous territories" (2011).

e) Working Group on Indigenous Populations/Communities and Minorities in Africa

AI, robotics, and emerging technologies AI have implications for various indigenous peoples and minority communities in Africa.¹³⁴ The specialised work of the Working Group on Indigenous Populations/Communities and Minorities in Africa can be critical in making sure that an inclusive governance framework is developed. There is need to hear perspectives from this Working Group on whether, AI, robotics and emerging technologies can provide tools for preserving cultural heritage, monitoring land rights, and enhancing advocacy efforts. AI-driven tools can help document and promote indigenous languages and cultures, ensuring their preservation for future generations.

f) Special Rapporteur on Human Rights Defenders and Focal Point on Reprisals in Africa

AI, robotics, and emerging technologies can also have implications for human rights defenders. In this regard, the work of the Special Rapporteur on Human Rights Defenders can also be important in informing positions on the governance and monitoring framework. There are also questions as to whether these technologies can by enhance the monitoring and protection of human rights defenders (HRDs). AI-driven tools can analyse patterns of threats and attacks against HRDs, enabling more effective responses and protection measures.

g) Special Rapporteur on Freedom of Expression and Access to Information

Part III of this study addresses the right to freedom of expression implications of AI, robotics, and emerging technologies. In this regard, the work of the Special Rapporteur on Freedom of Expression and Access to Information can be important in informing governance the needed governance framework. More fully, this specialised mechanism can address – through research – claims that these technologies can enhance media monitoring, detect censorship, and promote access to information. Further claims that can be addressed through this specialised mechanisms are claims that in the interest of the right to freedom

¹³⁴ A/HRC/51/28, Report of the Special Rapporteur on the rights of indigenous peoples, Report on “Indigenous women and the development, application, preservation and transmission of scientific and technical knowledge” (2022).

of expression, AI can analyse large volumes of data to identify trends in media freedom and access to information, providing valuable insights for advocacy and policy-making.

h) Special Rapporteur on Refugees, Asylum Seekers, Internally Displaced Persons, and Migrants in Africa

As already indicated above, the specialised treaty on the rights of migrants and IDPs is relevant to the governance of AI, robotics, and emerging technologies. This special mechanism is critical in the interpretation and enforcement of that treaty. As such, the work of this Special Rapporteur is not only important but relevant. Further, this specialised mechanism can address the question whether AI can support the Special Rapporteur on Refugees, Asylum Seekers, Internally Displaced Persons, and Migrants by improving the management and protection of displaced populations. Similarly, whether AI-driven tools can facilitate the efficient allocation of resources, enhance border management, and provide real-time data for decision-making.

i) Special Rapporteur on the Rights of Women in Africa

Part VI of this study addresses the women rights implications of AI, robotics, and emerging technologies. This institutional mechanism can play a critical role in this regard. The Special Rapporteur can also consider whether AI, robotics and emerging technologies can enhance the work of the Special Rapporteur on the Rights of Women by providing tools for gender analysis, improving access to services, and supporting advocacy efforts.

j) Special Rapporteur on Prisons, Conditions of Detention and Policing in Africa

Part III of this study addresses how several civil and political rights that relate to prison conditions, detention and policing such as the right to liberty, fair trial, human dignity and right to life are impacted by AI, robotics, and emerging technologies. As such, the work of this specialised mechanism is very important. Further, the Special Rapporteur may also assess whether these technologies can support the Special Rapporteur on Prisons, Conditions of Detention and Policing by enhancing the monitoring and management of detention facilities and policing practices.

k) Committee for the Prevention of Torture in Africa

Likewise, Part III of this study address how AI, robotics and emerging technologies impact the fundamental right of freedom from torture. As such, the work of this Committee is not only relevant, but critical. Further, the Committee may also consider whether AI, robotics, and emerging technologies can enhance the work of the Committee for the Prevention of Torture by providing tools for monitoring and documenting instances of torture and ill-treatment.

l) Committee on the Protection of the Rights of People Living With HIV (PLHIV) and Those at Risk, Vulnerable to and Affected by HIV

Finally, Part IV of this study considers the right to health implications of AI, robotics, and emerging technologies. The work of this Committee – in relation to one of the most devastating diseases on the continent – is relevant to the current discussions. Further, the Committee may assess whether AI technologies can support the work of the Committee on the Protection of the Rights of People Living with HIV by enhancing healthcare delivery, improving data collection, and supporting advocacy efforts. AI-driven tools can facilitate early diagnosis and treatment, improving health outcomes for PLHIV.

2.2.2 The African Court for Human and Peoples' Rights (The African Court)

Protocol to the African Charter on Human and Peoples' Rights on the Establishment of an African Court on Human and Peoples' Rights. The African Court plays a crucial role in adjudicating human rights cases. AI can support the Court by improving case management, facilitating legal research, and enhancing the efficiency of judicial processes. However, integrating AI in the judicial system must be approached with caution. Bias in AI algorithms used for legal decision-making can result in unjust outcomes. Ensuring AI applications in the judiciary are transparent, fair, and accountable is essential.

2.2.3 Other African Union (AU) institutions

The AU and its institutions, such as the African Parliament and the Peace and Security Council, can play a crucial role in the governance of AI, robotics, and emerging technologies, ensuring these advancements comply with human rights and fundamental freedoms. As a pan-African organization, the AU has the capacity to harmonize policies and frameworks

across the continent, fostering a unified approach to technology governance. The African Parliament can contribute by enacting legislation and advocating for regulations that safeguard human rights, while the Peace and Security Council can address security concerns related to the misuse of technology. By leveraging their collective expertise and authority, these institutions can establish and enforce norms and standards that promote responsible development and deployment of emerging technologies, ensuring they benefit all African citizens while protecting their rights and freedoms.

2.2.4 African sub-regional institutions

Africa's sub-regional institutions, including the Economic Community of West African States (ECOWAS), the Southern African Development Community (SADC), the Arab Maghreb Union, the Community of Sahel-Saharan States, COMESA, the East African Community, the Economic Community of Central African States, and the Intergovernmental Authority on Development, are pivotal in ensuring that AI, robotics, and emerging technologies are deployed in a manner that upholds fundamental rights and freedoms. These organizations can foster regional cooperation and harmonize regulatory frameworks, creating a cohesive and robust governance structure across the continent. By sharing best practices and successful governance models, these sub-regional bodies can help each other navigate the complexities of technological advancements. Furthermore, close collaboration with the African Union can ensure that regional initiatives align with continental standards and objectives, thereby promoting a unified approach to technology governance in Africa. Such synergy not only strengthens individual member states' capacities but also fosters a collective commitment to protecting human rights and ensuring equitable technological progress.

2.2.5 National institutions

National institutions hold a critical responsibility in ensuring that AI, robotics, and emerging technologies align with fundamental human rights. Key players, such as national courts and human rights institutions, are essential for the enforcement of standards, as they operate directly within their respective countries and can address issues in real-time. These institutions, often supported by local human rights non-governmental organisations, are on the ground and intimately familiar with the specific challenges and needs of their

communities. As such, they are well-positioned to interpret and apply human rights standards in the context of new technologies. Therefore, when mapping the governance framework for these technologies, stakeholders must prioritize the role of national institutions. Ultimately, the primary obligation to protect and enforce human rights rests with the state, making the engagement and empowerment of national bodies indispensable in the pursuit of ethical and rights-respecting technological development.

PART III

CIVIL AND POLITICAL RIGHTS IN THE CHARTER

3. Introduction

3.1 AI and the right to dignity

The African Charter provides for the protection of the right to dignity and recognises it as a fundamental objective for fulfilling the legitimate aspirations of African peoples.¹³⁵ The African Charter is the only regional human rights instrument that provides for the right to dignity as a stand-alone right.¹³⁶ The right to dignity is also provided for in national constitutions and international treaties that are binding on African states.¹³⁷

Human dignity is particularly important to Africa because of its historical battles against exploitation and dehumanisation of its peoples. In recognition of the importance of the right to dignity, the African Commission stated: “Dignity is, therefore, the soul of the African human rights system and which it shares with both the other systems and all civilised human societies. Dignity is consubstantial, intrinsic, and inherent to the human person. In other words, when the individual loses his dignity, it is his human nature itself which is called into question, to the extent that it is likely to interrogate the validity of continuing to belong to human society. When dignity is lost, everything is lost. In short, when dignity is violated, it is not worth the while to guarantee most of the other rights.”¹³⁸

Human dignity is critical in Africa because it is the basis for African independence and liberation¹³⁹; the ground upon which all forms of exploitation and human degradation are prohibited¹⁴⁰; is an African social value that represents positive aspects of Africans such as respect, honour, ubuntu etc.¹⁴¹; is used as an ultimate tool for interpreting other human

¹³⁵ African Charter, Article 5 ; Preamble, African Charter.

¹³⁶ Article 5, African Charter.

¹³⁷ See African constitutions; ICCPR; Genocide Convention; CEDAW; CAT.

¹³⁸ *Open Society Justice Initiative v Côte d'Ivoire*, Communication 318/06, African Commission on Human and Peoples' Rights, 17th extraordinary session (2015) para 139; See also, *Institute for Human Rights and Development in Africa (on behalf of Esmaila Connateh & 13 others) v Angola*, Communication 292/04, para 49; *Purohit & Moore v Gambia*, ACHPR communication no 241/2001; *The Nubian Community in Kenya v The Republic of Kenya*, ACHPR, Communication 317/06; *Open Society Justice Initiative v Côte d'Ivoire*, ACHPR, Communication 318/06.

¹³⁹ Preamble, African Charter.

¹⁴⁰ Article 5, African Charter; See *Institute for Human Rights and Development in Africa (on behalf of Esmaila Connateh & 13 others) v Angola*, Communication 292/04, para 49.

¹⁴¹ R English, “Ubuntu: The quest for an indigenous jurisprudence” (1996) 12 *South African Journal of Human Rights* 641; IJ Kroeze ‘Doing things with value: The case of Ubuntu’ (2002) 13 *Stellenbosch Law Review* 252; Y

rights¹⁴²; and is considered the "mother of all rights"¹⁴³, influencing issues on conditions of detention, inhuman arrest¹⁴⁴, people with disabilities¹⁴⁵, indigenous and minority groups¹⁴⁶, democracy and elections¹⁴⁷, adequate medical care and food and basic sanitation etc.¹⁴⁸

AI technologies have several implications for the right to dignity. The right to human dignity is intrinsically linked to socio-economic rights, such as the rights to education, health, and work, as these rights form the foundation for individuals and communities to live with autonomy, respect, and fulfillment.¹⁴⁹ AI and emerging technologies offer transformative opportunities to advance the right to dignity in Africa by accelerating the achievement of the Sustainable Development Goals (SDGs), thereby enabling African peoples to lead dignified lives. For example, AI-driven solutions can enhance agricultural productivity, optimising resource allocation, and creating innovative financial inclusion systems for marginalised communities. Similarly, these technologies can improve healthcare access, expand educational opportunities, and foster job creation, all of which are essential to ensuring a life of dignity.

AI and emerging technologies present significant risks to the right to dignity. From African perspective, this is on account of the bias and limitations in the development, design and training of AI models and the algorithms. It was also noted during the African Commission's multi-stakeholder consultations for this study that threats to dignity are linked to the

Mkogoro "Ubuntu and the law in South Africa" (1998) 4 *Buffalo Human Rights Law Review* 15; Geyale (above) 123; D Cornell & N Muvangua, "Ubuntu and the law: African ideals and post-Apartheid Jurisprudence" (2012) 5; N Emeghara "The dignity of the human person in African belief" (1992-1993) 14 *Theology Annual* 126-137.

¹⁴² A Barak *Human dignity* (2015) 67, 69-84; E Daly *Dignity rights: courts, constitutions, and the worth of the human person* (2012) 18; R Alexy & J Rivers *A theory of constitutional rights* (2009) 64.

¹⁴³ Barak (above); C McCrudden 'Human dignity and judicial interpretation of human rights' (2008) 19 *European Journal of International Law* 656.

¹⁴⁴ *Esmaila Connateh* (above), paras 50, 85.

¹⁴⁵ *Purohit & Moore v Gambia*, ACHPR communication no 241/2001, paras 57-59.

¹⁴⁶ *Nubian case* (above), paras 132 and 135.

¹⁴⁷ *Open Society Justice Initiative v Côte d'Ivoire*, ACHPR, Communication 318/06.

¹⁴⁸ *Esmaila Connateh* (above); see also *Open Society Justice Initiative v Côte d'Ivoire*, para 140

¹⁴⁹ M Mutua, "Human rights in Africa: the limited promise of liberalism" (2008) *African Studies Review* 17-39; A Barak, *Human dignity* (Cambridge University Press, 2015) xxiv; TA Geyale, The role of human dignity in the jurisprudence of the African Commission on human and peoples' rights (2021) 5 *African Human Rights Yearbook* 133.

threats that AI poses across individual civil, political, and socio-economic rights, as well as peoples' and group rights.¹⁵⁰

3.2 AI and the right to non-discrimination, equality, and freedom from domination

The African Charter has several provisions providing for the right to equality, non-discrimination, and freedom from domination.¹⁵¹ The right to non-discrimination and equality is further affirmed in various protocols to the African Charter, specifically addressing the rights of women, persons with disabilities, and the elderly, as referenced earlier. This right is rooted in Africa's unique historical and socio-political context, shaped by a painful legacy of colonialism, apartheid, racial and ethnic discrimination, and other forms of oppression. The African Commission has emphasised the significance of the right to non-discrimination and linked it to the right to dignity.¹⁵²

3.2.1 AI opportunities and the right to non-discrimination

Stakeholders have noted that AI and emerging technologies can enhance inclusive development priorities.¹⁵³ AI can be used to address inequality, for example, through promotion of financial inclusion.¹⁵⁴ There are AI companies in Africa which are working to reduce poverty and inequality.¹⁵⁵ As discussed further in the section on the rights of vulnerable groups, AI can help advance the rights of women, the child, the elderly and persons with disabilities depending particularly when its use is tailored to the needs of such groups of people. AI can thus be used to tackle underlying structural issues that underlie discrimination.¹⁵⁶

¹⁵⁰ African Commission, "Multi-stakeholder consultation meeting on the African Commission Study on AI" (30 September to 1 October 2024); see also S Kanuck, "Humor, ethics, and dignity: Being Human in the age of artificial intelligence" (2019) 33 *Ethics & International Affairs* 4; KO Alakwe, "Human dignity in the era of artificial intelligence and robotics: Issues and prospects" (2023) *Journal of Humanities and Social Sciences Studies* 88.

¹⁵¹ See Articles 2,3,19 and 20 of the African Charter.

¹⁵² *Nubian Community in Kenya v The Republic of Kenya*, ACHPR, Communication 317/06, paras 126 and 131.

¹⁵³ AUDA-NEPAD White Paper: Regulation and Responsible Adoption of AI in Africa Towards Achievement of AU Agenda 2063, p. 31.

¹⁵⁴ AUDA-NEPAD Whitepaper (above) 140, 141; African Commission, Multistakeholder consultation meeting, Kigali (above).

¹⁵⁵ AUDA-NEPAD Whitepaper (above) 180.

¹⁵⁶ AUDA-NEPAD Whitepaper (above) 34.

Stakeholders have noted that due to various factors – including the use of unrepresentative data at the developmental stage of AI – there is risk of AI exacerbating discrimination on the grounds of race, gender, ethnicity, social status etc.¹⁵⁷ There is also a critical risk that many Africans may not access these technologies on account of factors such as digital divide, rural-urban divide, lack of infrastructure, affordability, AI literacy etc.¹⁵⁸ There is, therefore, a real danger of AI widening inequality.¹⁵⁹ Stakeholders have equally highlighted the risk of discrimination in policy-making, where AI governance is often dominated by certain voices, excluding diverse perspectives.¹⁶⁰

While acknowledging the inherent risk of bias and discrimination throughout the life cycle of AI technologies—spanning design, development, deployment, post-deployment, and policy formulation—many states and stakeholders are incorporating an emerging principle now commonly referred to as "*mitigation of bias*" or "*mitigation of harm*" in their AI strategies and policy proposals. It is important to recognise that these new terminologies are inconsistent with the language of human rights law. At both regional¹⁶¹ and international¹⁶² levels, human rights law regarding the right to non-discrimination emphasises the state obligation to eliminate, eradicate, abolish, and prohibit discrimination, rather than merely mitigating it. The distinction between "*mitigation of bias*" in AI and the binding state obligation to "*prohibit and eliminate discrimination*" underscores a fundamental contrast in

¹⁵⁷ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 5-12; UN AI Advisory Body, Interim Report (above) 2, 4, 11; MISA, AI Report on Southern Africa (2024) 9, 15, 20; A/78/L.49, General Assembly Resolution on Artificial Intelligence, "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development" (2024), p.6; A/79/170, Report of the UN Special Rapporteur on human rights and international solidarity, Report on "Artificial intelligence and international solidarity – towards human-centred artificial intelligence international solidarity by design" (2024) paras 5-18.

¹⁵⁸ A/78/L.49, General Assembly Resolution on Artificial Intelligence, "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development" (2024), p.6.

¹⁵⁹ AUDA-NEPAD Whitepaper (above) 25, 32, 132, 141; MISA, AI Report on Southern Africa (2024) 19, 26; Adams, *The new empire of AI* (above).

¹⁶⁰ African Commission, Multistakeholder consultation meeting, Kigali (above); T Chengeta, "The right to non-discrimination, and freedom from racial oppression should be part of the guidelines and principles in the discussion on autonomous weapon systems" (above); UN AI Advisory Body, Interim Report (above) para 46.

¹⁶¹ Articles 4(f), 4(c), 5(2)(a), and 5(2)(b) of Protocol to the African Charter on Human and Peoples' Rights on the Rights of Persons with Disability in Africa (RPDA); Articles 2 and 2(1)(b) of Protocol to the African Charter on the Elimination of Discrimination Against Women (Maputo Protocol);

¹⁶² Articles 4(1)(b), 4(1)(e), and 5(2) of Convention on the Rights of Persons with Disabilities (CRPD); Articles 2(f), 2(e) and 2(b) of Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW); Articles 2(1)(d), and 5 of Convention on the Elimination of All Forms of Racial Discrimination (CERD); Article 26 of ICCPR and Article 2(2) of ICSECR.

scope, legal authority, and societal impact. "Mitigation of bias" falls short of the robust and legally binding standards set by the international human rights framework.¹⁶³ Further, some stakeholders refer to "algorithmic fairness" as a potential remedy.¹⁶⁴ It is crucial to recognise that while "algorithmic fairness" relies on statistical measures, the right to non-discrimination is context-sensitive¹⁶⁵ which cannot be satisfied through automated fairness.¹⁶⁶

3.3 AI and the right to life

The state's duty to respect, protect, promote, and fulfill the right to life includes preventing arbitrary deprivations of life by both state and non-state actors.¹⁶⁷ This is especially crucial given the significant involvement of non-state actors in the development and deployment of lethal AI technologies. The African Commission has noted that "a deprivation of life is arbitrary if it is impermissible under international law, or under more protective domestic law provisions. Arbitrariness should be interpreted with reference to considerations such as appropriateness, justice, predictability, reasonableness, necessity, and proportionality."¹⁶⁸ State obligations relating to protection of humans from arbitrary deprivation of the right to life apply extraterritorially.¹⁶⁹ The concept of extraterritorial application of human rights is critical because lethal AI applications are being deployed across borders.¹⁷⁰ The intersection of AI with the right to life carries profound implications, spanning across civilian contexts,

¹⁶³ T Chengeta, "The right to non-discrimination, and freedom from racial oppression should be part of the guidelines and principles in the discussion on autonomous weapon systems" (2023) pages 13–17.

¹⁶⁴ AUDA-NEPAD Whitepaper (above) 7, 61, 81.

¹⁶⁵ S Wachter *et al*, "Why fairness cannot be automated: Bridging the gap between EU non-discrimination law and AI" (2021) *Computer Law & Security Review* 41.

¹⁶⁶ S Wachter *et al*, "Bias preservation in machine learning: the legality of fairness metrics under EU non-discrimination law" (2020) *West Virginia Law Review* 735.

¹⁶⁷ General Comment 3 (above), paras 9 and 38.

¹⁶⁸ Para 12, General Comment 3 (above).

¹⁶⁹ Para 14, General Comment 3 (above).

¹⁷⁰ D Garcia, *The AI military race: Common good governance in the age of artificial intelligence* (Oxford University Press, 2024); Al Jazeera, "The Gospel: Israel turns to a new AI system in the Gaza war", December, 2023; The Guardian, "The machine did it coldly': Israel used AI to identify 37,000 Hamas targets" (2024); Al Jazeera, "AI-assisted genocide': Israel reportedly used database for Gaza kill lists", April, 2024.

law enforcement and military domain.¹⁷¹ States must ensure that development and deployment of lethal AI technologies is consistent with the right to life.¹⁷²

Stakeholders have noted that the use of lethal AI technologies like autonomous weapon systems (AWS) – both in law enforcement or armed conflict – may result in arbitrary deprivation of the right to life.¹⁷³ There are several issues regarding the appropriateness of entrusting machines with the power over life and death¹⁷⁴, the unpredictability of AWS¹⁷⁵, their capacity to comply with human rights and international humanitarian law (IHL) principles of distinction, necessity, and proportionality of lethal force¹⁷⁶, and the crucial matters of accountability and justice.¹⁷⁷

Within the realm of law enforcement, the foundational principles of necessity and proportionality dictate that the application of lethal force must be a measure of last resort, utilized solely when essential to safeguard another life.¹⁷⁸ This fundamental tenet, often

¹⁷¹ National Research Project, “Development and use of artificial intelligence in light of the negative and positive obligations of the state to guarantee the right to life”.

¹⁷² Para 7, General Comment 3 (above), A/HRC/23/47, Report of the Special Rapporteur on extrajudicial, summary, or arbitrary executions, Christof Heyns, 9 April 2013; CCW/GGE.1/2024/WP.5, Addressing Bias in Autonomous Weapons Submitted by Canada, Costa Rica, Germany, Ireland, Mexico, and Panama, Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System Geneva, 4-8 March and 26-30 August 2024; Chengeta, AWS and racial oppression (above).

¹⁷³ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on “Artificial Intelligence” (2024) paras 26-36; Chengeta, AWS and racial oppression (above) 60, 64; JR Emery “Probabilities towards death: bugsplat, algorithmic assassinations, and ethical due care”(2020) *Critical Military Studies* 9-10.

¹⁷⁴ T Chengeta, “Dignity, Ubuntu, Humanity and Autonomous Weapon Systems (AWS) Debate: An African Perspective” (2016) 13 *Brazilian Journal of International Law* 460; C Heyns, “Autonomous weapons in armed conflict and the right to a dignified life: an African perspective” (2017) 33(1) *South African Journal on Human Rights* 46–71; P Asaro, “On banning autonomous weapon systems: human rights, automation, and the dehumanization of lethal decision-making” (2012) *International Review of the Red Cross* 687.

¹⁷⁵ M Taddeo and A Blanchard, “Accepting moral responsibility for the actions of autonomous weapons systems—a moral gambit” (2022) 35(3) *Philosophy & Technology* 78.

¹⁷⁶ T Chengeta, “Measuring autonomous weapon systems against international humanitarian law rules” (2016) Vol 5 *Journal of Law and Cyber Warfare*.

¹⁷⁷ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on “Artificial Intelligence” (2024) paras 21-25; T Chengeta, “Accountability gap, autonomous weapon systems and modes of responsibility in international law” (2016) Vol 45 *Denver Journal of International Law Number 1*; A Warren and A Hillas, “Lethal autonomous weapons systems: Adapting to the future unmanned warfare and unaccountable robots” (2017) *Yale Journal of International Affairs* 71; R Crotoft, “War torts: Accountability for autonomous weapons” (2015) *U. Pa. L. Rev* 164; A Seixas-Nunes, *The legality and accountability of autonomous weapon systems: A humanitarian law perspective* (Cambridge University Press, 2022).

¹⁷⁸ Para 27, General Comment 3 (above); *McCann and Others v the United Kingdom*, [1995] ECtHR Application No.18984/91.

termed the "*protect life principle*,"¹⁷⁹ underscores the gravity and restraint with which lethal force should be employed.¹⁸⁰ Indeed, the African Commission has noted that "intentional deprivation of life is prohibited unless strictly unavoidable to protect another life or other lives."¹⁸¹ Evaluating the necessity and proportionality of such force is inherently context-specific, demanding nuanced human judgment, situational awareness, and intuition.¹⁸² This of necessity excludes without exception reliance on autonomy or algorithmic decision-making in matters of lethal force. As such, the African Commission has emphasised the importance of maintaining human control over use of force.¹⁸³ This notion of meaningful human control over use of force has been equally emphasised by several stakeholders.¹⁸⁴ The need for robust regulation also arises from the proliferation of lethal AI technologies risks enabling non-state actors, particularly terrorists, posing a significant threat to the right to life for many Africans.¹⁸⁵ One should also be mindful of the design bias of these technologies, such as the inability to accurately identify people of color in facial-recognition-based targeting, particularly making people of color susceptible to being targeted. Indeed, some lethal AI technologies "are racialised and gendered, and classed models of the self, delivered with imperialist rhetoric of colonisation and conquest".¹⁸⁶ In Africa, of major pressing concern is AI's role in the production and use of small and light weapons, where these weapons significantly contribute to violations of the right to life.¹⁸⁷ Finally, the fact that lethal AI systems like AWS may be incapable of complying with rules of IHL such as

¹⁷⁹ See S Casey-Maslen and C Heyns, *The right to life under international law: An interpretative manual* (Cambridge University Press, 2021); para 27, General Comment 3 (above).

¹⁸⁰ Para 27, General Comment 3 (above).

¹⁸¹ Para 13, General Comment 3 (above).

¹⁸² Asaro, on banning AWS (above); E Whittaker, "Machine judgement and the law of armed conflict: Can autonomous weapons systems comply with the principle of distinction?" (2021) *NEL Rev.* 52; A Sharkey, "Autonomous weapons systems, killer robots and human dignity" (2019) *Ethics and Information Technology* 75-87; H Roff and R Moyes, "Meaningful human control, artificial intelligence and autonomous weapons", Briefing Paper prepared for the Informal Meeting of Experts on Lethal Autonomous Weapons Systems, UN Convention on Certain Conventional Weapons, 2016.

¹⁸³ Para 31, General Comment 3 (above).

¹⁸⁴ A/HRC/23/47 (above); T Chengeta, "Defining meaningful human control in autonomous weapon systems" (2016) Vol 32 *NYU Journal of International Law and Politics* 126 – 203; D Amoroso and G Tamburrini. "Autonomous weapons systems and meaningful human control: ethical and legal issues" (2020) *Current Robotics Reports* 187-194; E Schwarz, "Autonomous weapons systems, artificial intelligence, and the problem of meaningful human control" (2021) *Philosophical Journal of Conflict and Violence*.

¹⁸⁵ UNGGE 2019 Report, CCW/GGE.1/2019/3, p. 13.

¹⁸⁶ Y Katz, *Artificial Whiteness: Politics and ideology in artificial intelligence* (Columbia University Press, 2020) 7.

¹⁸⁷ A/79/240, 2024 Report of the Secretary-General, Work of the Advisory Board on Disarmament Matters, paras 20, 41.

distinction and proportionality which requires human judgement¹⁸⁸ additionally brings with it the risk of accountability gap due to difficulties of attributing responsibility in cases of violations, which is inconsistent with human rights, particularly the right to life.

AI and emerging technologies can also play a crucial role in safeguarding the right to life within law enforcement contexts, such as aiding in hostage rescue operations¹⁸⁹, bomb defusal¹⁹⁰, and timely delivery of medical assistance to crime victims¹⁹¹, as well as in early detection and prevention of criminal activities like terrorism.¹⁹² Since the right to life is interpreted broadly to include state responsibilities in relation to socio-economic rights that are relevant to enhancing life,¹⁹³ AI technologies present opportunities for realisation of various economic, social, and cultural rights that enhance the right to life.¹⁹⁴ For example, AI-driven advancements in healthcare can lead to more accurate diagnoses, personalised treatment plans, and improved patient outcomes, thereby enhancing the quality and longevity of life. Similarly, AI technologies can bolster disaster response efforts by enabling quicker and more effective rescue operations, ultimately saving lives in critical situations. Moreover, AI-driven innovations in transportation safety, such as autonomous vehicles equipped with advanced collision avoidance systems, have the potential to significantly reduce traffic accidents and fatalities, further contributing to the preservation of life.¹⁹⁵

3.4 AI and the right to liberty

¹⁸⁸ T Chengeta, "Measuring Autonomous Weapon Systems against International Humanitarian Law Rules" (2016) Vol 5 *Journal of Law and Cyber warfare Issue 1* (c); Asaro, on banning AWS (above); E Whittaker, "Machine judgement and the law of armed conflict: Can autonomous weapons systems comply with the principle of distinction?" (2021) *NEL Rev.* 52; A Sharkey, "Autonomous weapons systems, killer robots and human dignity" (2019) *Ethics and Information Technology* 75-87.

¹⁸⁹ T Prathima *et al*, "Detection of armed assailants in hostage situations-a machine learning based approach." (2021) *Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks*.

¹⁹⁰ S Dayanand *et al*, "Robotic bomb detection and disposal: Application using Arduino" (2022) 7th *International Conference on Communication and Electronics Systems*; M Shyam *et al*, "Intellectual design of bomb identification and defusing robot based on logical gesturing mechanism" (2023) *International Conference on Advances in Computing, Communication and Applied Informatics*.

¹⁹¹ R Christopher, "Using artificial intelligence to address criminal justice needs" (2019) *National Institute of Justice Journal* 280.

¹⁹² A/HRC/52/39, Report of Special Rapporteur on counter-terrorism and human rights, Report on "Human rights implications of the development, use and transfer of new technologies in the context of counter-terrorism and countering and preventing violent extremism" (2023) paras 7-55.

¹⁹³ Paras 3 and 6, General Comment 3 (above).

¹⁹⁴ Para 43, General Comment 3 (above).

¹⁹⁵ Para 42, General Comment 3 (above).

African Charter provides for the protection of the right to liberty.¹⁹⁶ The African Commission has emphasised that at no point should anyone be arbitrarily deprived of liberty.¹⁹⁷

AI technologies provide both opportunities and risks for the right to liberty.¹⁹⁸ AI technologies can improve the effectiveness of surveillance technologies thereby making sure that correct persons are arrested.¹⁹⁹ These technologies can help identify potential threats and respond swiftly to security incidents, thereby contributing to the protection of individuals' rights to security while minimising the risk of arbitrary detention.²⁰⁰ Further, AI-driven predictive policing can bolster efforts to safeguard the right to liberty and prevent arbitrary arrest and detention in African jurisdictions.²⁰¹ By focusing on crime prevention rather than reactive measures, predictive policing can help reduce the likelihood of wrongful arrests and detentions.²⁰²

Nevertheless, AI technologies pose significant risks to the right to liberty, particularly in terms of privacy infringement and the potential for arbitrary surveillance.²⁰³ These technologies could lead to widespread monitoring of individuals' activities without their consent, infringing upon their right to privacy and freedom from unwarranted intrusion.²⁰⁴ The potential for algorithmic bias and discrimination in predictive policing practices is also a

¹⁹⁶ Article 6, African Charter.

¹⁹⁷ *George Iyanyori Kajikabi v The Arab Republic of Egypt*, Communication 344/07, para 215.

¹⁹⁸ BC Stahl *et al*, "Right to life, liberty and security of persons" in *Ethics of artificial intelligence: Case studies and options for addressing ethical challenges* (Cham: Springer International Publishing, 2022) 63; P Molnar, "Technology on the margins: AI and global migration management from a human rights perspective" (2019) 8.2 *Cambridge International Law Journal* 305-330; M Zajko, "AI as automated inequality: statistics, surveillance and discrimination" (2023) 343-353 in *Handbook of critical studies of artificial intelligence* (Edward Elgar Publishing, 2023).

¹⁹⁹ C Muller, "The impact of artificial intelligence on human rights, democracy and the rule of law" (2020) *Council of Europe* 1; CN Radavoi, "The impact of artificial intelligence on freedom, rationality, rule of law and democracy: Should we not be debating it?" (2019) *Texas Journal on Civil Liberties & Civil Rights* 107.

²⁰⁰ A Raso, *et al*, "Artificial intelligence & human rights: Opportunities & risks" (2018) *Harvard Berkman Klein Center Research Publication* 2018-6

²⁰¹ K Blount, "Using artificial intelligence to prevent crime: implications for due process and criminal justice" (2024) 39.1 *AI & Society* 359-368.

²⁰² AI can also be used positively to search for the disappeared and hold those responsible accountable in furtherance of the right to liberty A/HRC/54/22/ADD.5, UN Special Rapporteur on Enforced Disappearances (above) paras 26 -55.

²⁰³ Stahl (above) 64; see also M Vasic and A Billard, "Safety issues in human-robot interactions. In: Proceedings of the 2013 IEEE international conference on robotics and automation, Karlsruhe, 6–10 May, pp 197–204; D Leslie, "Understanding artificial intelligence ethics and safety: a guide for the responsible design and implementation of AI systems in the public sector" (2019) *The Alan Turing Institute*.

²⁰⁴ As above.

threat to the right to liberty.²⁰⁵ AI algorithms used to forecast criminal behaviour may inadvertently perpetuate existing biases in law enforcement, leading to discriminatory targeting of certain communities or individuals.²⁰⁶ Furthermore, the use of AI in immigration and border control systems presents additional challenges to the right to liberty.²⁰⁷ AI-based algorithms used to assess immigration applications or identify individuals at border crossings may lack transparency and accountability, leading to arbitrary decision-making and potential violations of individuals' rights to freedom of movement and protection from arbitrary detention.²⁰⁸ Finally, stakeholders have also noted that AI can be used to facilitate or conceal the commission of enforced disappearance, or as a means of reprisal or intimidation.²⁰⁹

3.5 AI and right to fair trial

The African Charter explicitly guarantees individuals the right to fair trial, encompassing various elements crucial to a fair trial such as the right to be heard by a competent and impartial court, the presumption of innocence, the right to a defense, including legal representation of one's choice, and the right to be tried promptly by an impartial court.²¹⁰ The right to a fair trial is both a cornerstone of justice and essential for protecting all other basic rights.²¹¹

²⁰⁵ P Ugwuodike, "AI audits for assessing design logics and building ethical systems: The case of predictive policing algorithms" (2022) 2.1 *AI and Ethics* 199-20; T Hung and Y Chun-Ping, "Predictive policing and algorithmic fairness" (2013) *Synthese* 206; ZB Frederik, "Discrimination, artificial intelligence, and algorithmic decision-making" (2018) *Council of Europe, Directorate General of Democracy* 42.

²⁰⁶ As above.

²⁰⁷ C Darch *et al*, "AI, biometrics and securitisation in migration management: Policy options for South Africa", March 2020; N Vavoula, "Artificial intelligence (AI) at Schengen borders: Automated processing, algorithmic profiling and facial recognition in the era of techno-solutionism" (2021) 23.4 *European Journal of Migration and Law* 457-484; T Ige *et al*, "Enhancing border security and countering terrorism through computer vision: A Field of Artificial Intelligence" (2022) in *Proceedings of the Computational Methods in Systems and Software* (Cham: Springer International Publishing, 2022) 656-666.

²⁰⁸ R Rodrigues, "Legal and human rights issues of AI: Gaps, challenges and vulnerabilities" (2020) 4 *Journal of Responsible Technology* 8; P Molnar, "Technology on the margins: AI and global migration management from a human rights perspective" (2019) 8.2 *Cambridge International Law Journal* 305-330.

²⁰⁹ A/HRC/54/22/ADD.5, Report of the UN Special Rapporteur on Enforced Disappearances, Report on "New technologies, and enforced disappearances" (2023), paras 8-25.

²¹⁰ Article 7(1), African Charter.

²¹¹ African Commission, Multistakeholder consultation meeting, Kigali (above); see also *Beneficiaries of Nobert Zongo v Burkina Faso*, Communication No. 013/2011, para 160.

One of the notable potential advantages²¹² that stakeholders noted is the ability of AI technologies to streamline and automate various aspects of legal processes, thereby enhancing efficiency and reducing case backlogs.²¹³ Additionally, AI algorithms can assist in legal research by quickly identifying relevant case law and precedent, facilitating more informed decision-making by judges and legal practitioners. Furthermore, AI systems can help identify patterns of bias or inconsistencies in legal proceedings, contributing to efforts to promote impartiality and equity within the justice system.

On the other hand, the adoption of AI also raises significant concerns and risks for the right to a fair trial.²¹⁴ One major disadvantage is the potential for algorithmic bias, where AI systems may perpetuate or even exacerbate existing disparities and prejudices within the legal system.²¹⁵ Biased algorithms could lead to discriminatory outcomes, such as disproportionate sentencing or wrongful convictions, particularly for marginalized or vulnerable populations who are often prejudicially associated with engagement in criminal activities.²¹⁶ While the use of this technology in the legal system remains very limited, the lack of transparency arising from the opacity of AI decision-making processes can undermine trust in the legal system and raise questions about the fairness and legitimacy of AI-assisted judgments. Moreover, the reliance on AI technologies may reduce the role of human judgment and discretion in legal proceedings, diminishing the capacity for empathy, contextual understanding, and nuanced decision-making that are crucial for ensuring a fair trial.

²¹² J Ulenaers, "The impact of artificial intelligence on the right to a fair trial: Towards a robot judge?" (2020) *Asian Journal of Law and Economics* 11.2; K Terzidou, "The use of artificial intelligence in the judiciary and its compliance with the right to a fair trial" (2022); PM Nowotko, "AI in judicial application of law and the right to a court" (2021) *Procedia Computer Science* 192.

²¹³ As above.

²¹⁴ W Gravett, "Jailed by a "Black Box": The impact of opaque algorithms on the right to a fair trial in the United States of America" (2021) 84 *THRHR* 299; K Blount, "Seeking compatibility in preventing crime with artificial intelligence and ensuring a fair trial"(2021) *Masaryk University Journal of Law and Technology* 25-52; K Quezada-Tavárez *et al*, "Legal challenges in bringing AI evidence to the criminal courtroom" (2021) 12(4) *New Journal of European Criminal Law* 531-551.

²¹⁵ MA Malek, "Criminal courts' artificial intelligence: the way it reinforces bias and discrimination" (2022) 2(1) *AI and Ethics* 233-245.

²¹⁶ As above.

The use of algorithmic systems in criminal justice presents serious risks to the that right to be presumed innocent²¹⁷ as conceptualised in the African Charter.²¹⁸ Use of algorithmic systems in courts may result in self-incrimination.²¹⁹ Further, the use of algorithmic systems in courts of law may also negatively impact accused persons' right to cross-examine witnesses who testify against them in courts of law.²²⁰ When evidence is based on AI it becomes difficult, if not impossible, to cross examine the evidence. AI based judgements can also undermine the right to appeal, a principle enshrined in the African Charter.²²¹ Appeals often hinge on challenging the reasoning behind lower court decisions; however, when those decisions rely on opaque AI systems, it becomes difficult to identify and contest the basis for the ruling. AI systems lack situational awareness, qualitative assessments, and human judgment that is critical in assessing mitigating and aggravating circumstances,²²² thereby posing risks to principled sentencing.

3.6 AI and freedom of religion

AI can advance freedom of religion such as through AI-powered language translation tools which can overcome linguistic barriers by facilitating the translation of religious texts,

²¹⁷ R Stoykova, "Digital evidence: Unaddressed threats to fairness and the presumption of innocence" (2021) *Computer Law & Security Review* 42.

²¹⁸ Article 7(1)(b), African Charter; *Sa Majeste la Reine v Jacques Mungwarere* [2011] CSON 1254; General Comment Number 32 on Article 14, Right to Equality before Courts and Tribunals and to a Fair Trial; *Allenet de Ribemont* (1995) 20 EHHR 557.

²¹⁹ *Lam v Chi-Ming v The Queen* [1991] 2 AC 212 at 222; ICCPR, Article 14(3); *Funke v France*, App. No. 10828/84 (1993) 44; University of Bristol, Human Rights Implementation Centre. Building human rights into practice, a Training Manual for Judges and Prosecutors on the Application of Human Rights Law in the Administration of Criminal Justice in Palestine, p.102; See also *Catt v United Kingdom*, ECtHR; *Saunders v The United Kingdom*, Application No.19187, December 17,1996 at paragraph 71; *Kelly v Jamaica*, Communication no.253/1987,4/8/1991 UN document CCPR/C/4/D/1987.

²²⁰ Art. 14(3)(e) of ICCPR; Art 6 (3) of ECHR; Art. 16(5) of Arab Charter on Human Rights; See "Right to Cross-Examination of Witnesses In the case-law of European Human Rights Court."

²²¹ Article 7(1)(a), African Charter.

²²² S Starr, "Evidence-based sentencing and the scientific rationalization of discrimination" (2014) 66 *Stanford Law Review* 848-850; F Schauer, Profiles, probabilities, and stereotypes (Harvard University Press, 2006) 19-22; R Brauneis and E Goodman, "Algorithmic transparency for the smart city" (2018)20 *Yale Journal of Law & Technology* 112; *Green v United States*, 365 U.S. 301 (1961); *Thanos v State*, 622 A.2d 727 (Md. 1993), 732; *Harris v State*, 509 A.2d 120 (Md. 1986) 1127; JT Sullivan, "The capital defendant's right to make a personal plea for mercy: Common law allocution and constitutional mitigation" (1985) 15 *New Mexico Law Review* 57; C Chan, "The right to allocution: A defendant's word on its face or under oath?" 75 *Brooklyn Law Review* 2; K Thomas, "Beyond mitigation: towards a theory of allocution" (2007) 75 *Fordham Law Review* 5; D Santoro and M Kumar, *Speaking truth to power – A Theory of whistleblowing* (Springer, 2018) 157; M Fidler, "Conscientious objectors and whistle-blowers: Sentencing should recognize first amendment interests" (2018) Berkman Klein Center for Internet & Society at Harvard University.

scriptures, and teachings into various local languages spoken across the continent.²²³ AI can also enhance religious education and spiritual growth through AI-driven educational platforms²²⁴ that can facilitate personalised approach to religious education.²²⁵ AI technologies can also contribute to promoting interfaith dialogue and understanding, through facilitating virtual interconnectedness.²²⁶ This virtual interconnectedness has the potential to foster mutual respect, tolerance, and appreciation for religious diversity, ultimately contributing to the cultivation of harmonious coexistence and peaceful relations among religious communities across Africa. AI-driven advancements in immersive technologies such as virtual reality (VR) and augmented reality (AR) offer innovative avenues for enhancing religious experiences.²²⁷

On the other hand, AI and other new technologies pose a serious risk of diluting or distorting authentic religious traditions and rituals.²²⁸ The reliance on digital platforms and virtual experiences may lead to a detachment from the rich cultural and historical contexts that have long shaped religious practices in African communities and may undermine diversity of religious practices by presenting homogenising prototype. AI in religion can also lead to algorithmic bias and discrimination.²²⁹ For example, AI-powered recommendation

²²³ J Muñoz-Basols *et al*, "Potentialities of applied translation for language learning in the era of artificial intelligence" (2023) *Hispania* 171-194.

²²⁴ K Tran, "Preliminary research on the social attitudes toward AI's involvement in Christian education in Vietnam: Promoting AI technology for religious education"(2021) *Religions* 208; C Tan, "Digital Confucius? Exploring the implications of artificial intelligence in spiritual education"(2020) *Connection Science* 280-291.

²²⁵ Above; see also I Jun-Sub and H Young-Ju, "A study on theological students' perception of Artificial Intelligence and the Christian educational implications" (2020) 61 *Journal of Christian Education in Korea* 233.

²²⁶ A Asdi *et al*, "Religious diversity and AI: The role of the Catholic Church in interfaith dialogue" 92024) *Stipas Tahasak Danum Pambelum Keuskupan Palangkaraya* 48-60; RC Jacoba, "Exploring the Role of artificial intelligence in interreligious discourse" (2023) *Religion and Social Communication Journal* 375; Y Andriansyah, "The current rise of artificial intelligence and religious studies: Some reflections based on ChatGPT" (2023) *Millah Journal of Religious Studies* ix-xviii.

²²⁷ O Allal-Chérif, "Intelligent cathedrals: Using augmented reality, virtual reality, and artificial intelligence to provide an intense cultural, historical, and religious visitor experience" (2022) *Technological Forecasting and Social Change* 178; A Anhelova and M Halyna, "Augmented reality in contemporary religious practice" (2021); L Llerena-Izquierdo and L Cedeño-Gonzabay, "Photogrammetry and augmented reality to promote the religious cultural heritage of San Pedro Cathedral in Guayaquil, Ecuador" *International Conference on Applied Technologies* (Cham: Springer International Publishing, 2019).

²²⁸ S Umbrello, "The Intersection of Bernard Lonergan's critical realism, the common good, and artificial intelligence in modern religious practices" (2023) *Religions* 1536.

²²⁹ K Hernandez and B Faith, "How digital discrimination affects sustainable development for religious and ethnic minorities" (2023) in *Poverty and prejudice: Religious inequality and the struggle for sustainable* 125; J Gerards, and FZ Borgesius, "Protected grounds and the system of non-discrimination law in the context of algorithmic decision-making and artificial intelligence" (2022) 20 *Colorado Technology Law Journal* 1.

systems for religious content or resources may prioritise certain religious perspectives or interpretations over others.²³⁰ Additionally, AI-driven virtual assistants or chatbots designed to provide religious guidance may inadvertently propagate biased or exclusionary narratives as commodification of religious services can threaten spirituality and integrity.²³¹ There is also a risk of AI-driven deepfake technologies which can be used to fabricate religious texts, images, or videos, leading to confusion and division among believers²³² as well as reduction of trust in religious authorities and teachings.²³³

3.7 AI and right to freedom of expression

This right to freedom of expression guaranteed under Article 9 of the African Charter is “crucial and indispensable for the free development of the human person and to create a democratic society.”²³⁴ Stakeholders have noted that AI presents both opportunities and risks concerning the right to freedom of expression in Africa.²³⁵

AI-driven platforms, such as social media and online forums, apart from empowering individuals to express themselves freely,²³⁶ enable users to share ideas, engage in discussions, and access a wealth of knowledge, thereby fostering a more vibrant and inclusive exchange of ideas.²³⁷ With hundreds of languages spoken across the continent, AI-powered language translation technologies can play a pivotal role in bridging linguistic barriers across Africa's diverse cultural landscape, allowing individuals to express themselves and access information in their native tongue.²³⁸

²³⁰ As above.

²³¹ T Zubair *et al*, "Combating fake news, misinformation, and machine learning generated fakes: Insights from the Islamic ethical tradition" (2019) *ICR Journal* 189-212; C Ashraf, "Exploring the impacts of artificial intelligence on freedom of religion or belief online" (2022) *The International Journal of Human Rights* 757-791.

²³² As above.

²³³ As above.

²³⁴ *Ingabire Victoire Umuhoza v Rwanda*, Application No, 003/2014 (2019); *Lingens v. Austria*, Application Number No. 9815/82; CCPR/C/GC/34, General Comment 34 on Freedom of opinion an expression, para 2.

²³⁵ African Commission, Multistakeholder consultation meeting, Kigali (above).

²³⁶ GD Gregorio and D Pietro, Artificial intelligence, and freedom of expression" (2023) in *Artificial intelligence and human rights* (Oxford University Press 2023) 76-90.

²³⁷ A/73/348, UN Special Rapporteur on Freedom of Expression, Report on “Artificial Intelligence technologies and implications for the information environment” (2018).

²³⁸ MAS Khasawneh, "The potential of AI in facilitating cross-cultural communication through translation" (2023) 37 *Journal of Namibian Studies: History Politics Culture* 107-130; J Muñoz-Basols *et al*, "Potentialities of applied translation for language learning in the era of artificial intelligence" (2023) 106.2 *Hispania* 171-194; S Gupta *et al*, "Analysis of AI-enhanced educational tools developed in India for linguistic minorities and disabled people" (2023) *Life Span & Disability* 26.2.

Moreover, AI-enabled accessibility features such as speech recognition and text-to-speech technologies can enhance the right to freedom of expression of persons with disabilities.²³⁹ Further, AI algorithms can help identify and filter out harmful content, such as hate speech, extremist content, and misinformation, thereby promoting a safer online environment conducive to free expression.²⁴⁰

Stakeholders also noted that AI technologies pose significant risks to freedom of expression in Africa.²⁴¹ The use of AI-powered content moderation algorithms by social media platforms, for instance, has raised concerns about censorship and the stifling of dissenting voices.²⁴² Protecting freedom of expression includes speech that may offend, shock, or provoke, making it crucial for stakeholders to exercise caution when deploying AI content moderation tools,²⁴³ thereby avoiding removal of lawful expression. Moreover, AI-driven surveillance technologies employed by governments for monitoring online activities can infringe upon individuals' privacy rights and deter them from freely expressing themselves online for fear of surveillance and reprisal.²⁴⁴

Additionally, stakeholders noted that the spread of AI-generated deepfake videos and other manipulated content further erodes trust in online information and undermines the credibility of genuine expressions of speech.²⁴⁵ Moreover, AI-powered recommendation

²³⁹MF Almufareh *et al*, "A conceptual model for inclusive technology: Advancing disability inclusion through artificial intelligence" (2024) *Journal of Disability Research* 3.1; N Nasser *et al*, "Enhancing mobility for the visually impaired with AI and IoT-enabled mobile applications" (2024) *ScienceOpen Preprints*.

²⁴⁰ K Kertysova, "Artificial intelligence and disinformation: How AI changes the way disinformation is produced, disseminated, and can be countered" (2018) *Security and Human Rights* 55-81; N Bontridder and Y Pouillet, "The role of artificial intelligence in disinformation" (2021) *Data & Policy* 32; E Llansó *et al*, "Artificial intelligence, content moderation, and freedom of expression" (2020); R Gorwa, "Algorithmic content moderation: Technical and political challenges in the automation of platform governance" (2020) *Big Data & Society*; M Fernandez, "Artificial intelligence and online extremism: Challenges and opportunities" (2021) *Predictive policing and artificial intelligence* 132-162.

²⁴¹ African Commission, Multistakeholder consultation meeting, Kigali (above).

²⁴² A/HRC/38/35, UN Special Rapporteur on Freedom of Expression, Report on "Online content regulation" (2018); MA Naseer (above); JM Garon (above); E Llansó *et al* (above).

²⁴³ *Handyside v. United Kingdom*, Case Number 5493/72; *Perna v Italy*, Application no. 48898/99; *Affaire Women on Waves et Autres v Portugal*, Requête no 31276/05.

²⁴⁴ D Karpa *et al*, "Artificial intelligence, surveillance, and big data"(2022) in *Diginomics research perspectives: The role of digitalization in business and society* (Springer International Publishing, 2022) 145-172.

²⁴⁵ African Commission, Multistakeholder consultation meeting, Kigali (above); See also AM Sears, "Algorithmic speech and freedom of expression"(2020) 53 *Vanderbilt Journal of Transnational Law* 1327; RA Filippo *et al* (above); H Xianhong *et al*, *Steering AI and advanced ICTs for knowledge societies: A rights, openness, access, and multi-stakeholder perspective* (UNESCO Publishing, 2019); RF Moreno, "Generative AI and deepfakes: A human rights approach to tackling harmful content" (2024) *International Review of Law, Computers & Technology* 1-30; E Meskys *et al*, "Regulating deep fakes: Legal and ethical considerations" (2020) *Journal of*

algorithms – based on engagement metrics and user preferences – exacerbate echo chambers and filter bubbles, limiting exposure to diverse viewpoints and reinforcing existing biases.²⁴⁶ As a result, individuals may be exposed to a narrow range of information that aligns with their existing beliefs, leading to polarisation, radicalisation, and a diminished capacity for critical thinking. Finally, the reliance on AI-driven automated decision-making systems in the digital sphere introduces risks of algorithmic discrimination and bias, particularly for marginalised communities.²⁴⁷

3.8 AI and right to freedom of association and assembly

In terms of the right to freedom of association and assembly, AI offers significant advantages for enhancing the right to freedom of assembly in Africa.²⁴⁸ AI-powered communication platforms and social media networks can potentially facilitate the organisation and coordination of peaceful assemblies.²⁴⁹ These platforms enable activists and organisers to disseminate information, mobilise supporters, and coordinate logistics more efficiently.²⁵⁰ AI-powered translation and interpretation technologies can overcome language barriers and promote cross-cultural dialogue within diverse assembly settings. AI technologies can enhance the safety and security of individuals participating in assemblies.²⁵¹ For instance, AI-powered surveillance systems equipped with facial recognition capabilities can help monitor gatherings and identify potential security threats, ensuring the protection of participants and preventing violent disruptions.²⁵² Additionally, AI-driven crowd management systems can optimise the allocation of resources and

Intellectual Property Law & Practice 24-31; M Tabuz, "Regulating deep fakes in the Artificial Intelligence Act"(2023) *Applied Cybersecurity & Internet Governance* 1-42; S Karnouskos, "Artificial intelligence in digital media: The era of deepfakes" (2020) *IEEE Transactions on Technology and Society* 138-147.

²⁴⁶ A Makki and J Omer, "Future challenges in receiving media messages in light of developments in artificial intelligence" (2023) *Migration Letters* 167-183.

²⁴⁷ African Commission, Multistakeholder consultation meeting, Kigali (above).

²⁴⁸ A Raso *et al* (above); Leslie *et al*, "Artificial intelligence, human rights, democracy, and the rule of law: a primer" (above); MS Cataleta and A Cataleta, "Artificial intelligence and human rights, an unequal struggle" (2020) *CIFILE Journal of International Law* 41-63.

²⁴⁹ Ashraf (above).

²⁵⁰ As above.

²⁵¹ J Dworzecki and N Izabela, "Artificial intelligence (AI) and ICT-enhanced solutions in the activities of police formations in Poland" (2021) in *Artificial Intelligence and its contexts: Security, business, and governance* (Cham: Springer International Publishing, 2021) 161-181.

²⁵² As above; see also M Akhtar, "Police use of facial recognition technology and the right to privacy and data protection in Europe" (2019) *Nordic Journal of Law and Social Research* 324-344; CCPR/C/GC/37, General Comment 37 on the right to peaceful assembly, para 10.

emergency response measures during large-scale assemblies, mitigating the risk of accidents or stampedes.²⁵³ There is also a potential to use AI holograms in protests which can be a safer way of protesting.²⁵⁴

However, AI technologies present several risks to the right to freedom of assembly,²⁵⁵ with their risks potentially outweighing their advantages most notably the use of facial recognition technologies. AI technologies such as those with facial recognition may have a negative impact on the right to privacy.²⁵⁶ AI algorithms employed in surveillance may exhibit bias or discrimination, leading to the unjust targeting and profiling of certain groups based on factors such as race, ethnicity, or political affiliation.²⁵⁷ Stakeholders also noted that there is a risk of AI technologies erroneously identify peaceful gatherings as potential threats, leading to preemptive arrests or dispersal efforts by authorities.²⁵⁸ There is also a risk of malicious actors deploying AI algorithms to spread false or misleading information aimed at undermining legitimate protest movements or inciting violence and division within communities.²⁵⁹

3.9 AI and right to freedom of movement

The African Charter provides for the protection of the right to freedom of movement which includes the right to leave and return to one's own country.²⁶⁰ In terms of this right, mass expulsion is generally prohibited²⁶¹ and once a person has been admitted into a territory, they can only be expelled in terms of a decision taken in accordance with the law.²⁶² The right to freedom of movement is critical because it intersects with various other rights, such as immigration and asylum rights, non-discrimination, privacy, dignity, right to vote, and

²⁵³ CCPR/C/GC/37, General Comment 37 on the right to peaceful assembly, para 10.

²⁵⁴ J Sheean, "A (new) specter haunts Europe: The political legibility of Spain's hologram protests" (2018) *Journal of Spanish Cultural Studies* 465-480; G Negri, "How European civil society is pushing back against democratic erosion" (2020) *Carnegie Europe* 3.

²⁵⁵ Ashraf (above).

²⁵⁶ CCPR/C/GC/37, General Comment 37 on the right to peaceful assembly, para 62; See also A/HRC/44/24, paras. 10, 33–34.

²⁵⁷ CCPR/C/GC/37, General Comment 37 on the right to peaceful assembly, para 81; See also CCPR/C/GBR/CO/7, para. 11; and A/HRC/44/24, para. 32.

²⁵⁸ African Commission, Multistakeholder consultation meeting, Kigali (above).

²⁵⁹ O'Brien (above).

²⁶⁰ Article 12 (1), African Charter.

²⁶¹ Article 12(5), African Charter.

²⁶² Article 12(4), African Charter; *Law Offices of Ghazi Suleiman v Sudan*, Communication 228/99 para 57.

freedom and security of the person.²⁶³ It is also linked to socio-economic rights such as the right to work, education, housing, health etc.²⁶⁴ In times of emergencies such as displacement, this right is essential for accessing safety and humanitarian aid.²⁶⁵ The right to freedom of movement also promotes regional integration which enhances economic growth and development in Africa.²⁶⁶ Like other non-absolute rights, the right to freedom of movement can be limited in as long as it is consistent with principles on the limitation of human rights that have been discussed above.²⁶⁷ Stakeholders have noted that the emergence of AI heralds a transformative era, influencing the dynamics of freedom of movement in Africa amidst its diverse socio-economic, cultural, and political landscapes.²⁶⁸

AI-powered transportation systems hold the potential to revolutionise mobility by providing efficient and affordable modes of travel.²⁶⁹ For instance, ride-sharing platforms such as Uber and Bolt which are used in many African cities are increasingly equipped with AI algorithms can optimise routes, reduce congestion, and enhance accessibility in urban and rural areas, thereby facilitating easier movement for individuals across the continent.²⁷⁰

²⁶³ General Comment No 27 on Article 12; Article 12(3), African Charter; African Union, 'The Implementation Of Free Movement Of Persons In Africa 2020 – 2021' (2021); Treaty Establishing the Economic Community of Central African States, and 1983 ECCAS Protocol on Freedom of Movement and Rights of Establishment of Nationals of Members States; Protocol on the Establishment of The East African Community Common Market 2010; ECOWAS/979 Protocol A/P.1/5/79 relating to Free Movement of Persons, Residence and Establishment; Treaty Establishing the Community of Sahel-Saharan State; COMESA Protocol on the Free Movement of Persons, Labour, Services, Rights of Establishment and Residence; SADC Protocol on Facilitation of the Movement of Persons; *Falana Anor v Benin*; Gerald Postema, 'Racism and the Law by Plessy' (Springer 1997) 48; *Abdoulaye Baldé & 5 Ors v. Senegal*, ECW/CCJ/JUD/04/13; *Femi Falana & Anor v Benin & 2 Others*, ECW/CCJ/JUD/02/12, para 33.

²⁶⁴ Y Yang and S Gupta 'Regional trade arrangements in Africa: past performance and the way forward' (2005) 05 IMF Working Papers 1.

²⁶⁵ Guiding Principles on Internal Displacement (1998).

²⁶⁶ O Sibanda 'AfCFTA and trajectory of industrialisation and development sustainability in Africa' (2020) 85; O Ikotun, AO Akhigbe and SK Okunade 'Sustainability of borders in a post-COVID-19 world' (2021) 48 *Politikon* 297-311; AU Commission's 2021 African Integration Report; African Union, 'African Integration Report 2021' (2021); Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment.

²⁶⁷ Article 12(2), African Charter.

²⁶⁸ African Commission, Multistakeholder consultation meeting, Kigali (above).

²⁶⁹ A Nikitas *et al*, "Artificial intelligence, transport and the smart city: Definitions and dimensions of a new mobility era" (2020) *Sustainability* 2789; K Mbowa *et al*, "An overview of key emerging technologies transforming public transportation in the Fourth Industrial Revolution era" IOP Conference Series: Materials Science and Engineering. Vol. 1107. No. 1. IOP Publishing, 2021.

²⁷⁰ S Heinonen and S Erkki, "Empowering the elderly: Implementation of navigation assistance application for public transportation" (2016); X Wan *et al*, "Mobile crowdsourcing for intelligent transportation systems: Real-time navigation in urban areas" *IEEE Access* 7 (2019): 136995-137009; E Jamei *et al*, "Investigating the role of virtual reality in planning for sustainable smart cities" (2017) *Sustainability* 2006.

AI technologies can improve transportation safety and security, thereby promoting the right to freedom of movement.²⁷¹ Advanced AI-based surveillance systems, such as smart traffic management systems and facial recognition technology, can enhance road safety, prevent accidents, and deter criminal activities, thus creating safer environments for people to travel freely without fear or apprehension. Another example is Fastagger, a Kenyan tech startup which is developing a software infrastructure that allows machine learning and AI models to run directly on edge devices, including lower-end smartphones. This could potentially be applied to navigation or mobility assistance apps for marginalised communities such as persons with disabilities and the elderly.²⁷² Wayfindr is an example of an AI-powered audio navigation systems for blind and visually impaired individuals.²⁷³ Autonomous drones equipped with AI are already utilised for delivering medical supplies, humanitarian aid, and essential goods to inaccessible rural and remote areas.²⁷⁴

AI can offer significant benefits for immigrants' right to movement in Africa by providing translation and interpretation tools that bridge language barriers, facilitating communication with local populations, government officials, and service providers, and enabling smoother integration into host communities.²⁷⁵ Finally, AI-powered platforms can help immigrants navigate legal procedures, access justice, and connect with support

²⁷¹R Abduljabbar *et al*, "Applications of artificial intelligence in transport: An overview" (2019) *Sustainability* 189; O Illiashenko *et al*, "Security-Informed safety analysis of autonomous transport systems considering ai-powered cyberattacks and protection" (2023) *Entropy* 1123; D Gangwani *et al*, "Applications of machine learning and artificial intelligence in intelligent transportation system: A review" *Applications of Artificial Intelligence and Machine Learning: Select Proceedings of ICAAAIML* (2021) 203-216.

²⁷² E Humeau and T Deshpande "AI for Africa: Use cases delivering impact" (2024) 5; A Bokolo, "Inclusive and safe mobility needs of senior citizens: implications for age-friendly cities and communities" (2023) *Urban Science* 103; K Faber and D Lierop, "How will older adults use automated vehicles? Assessing the role of AVs in overcoming perceived mobility barriers" (2020) *Transportation Research Policy and Practice* 353-363.

²⁷³ N Lomas, "Wayfindr is building an open standard for indoor navigation by beacon" (2015).

²⁷⁴ Think Global Health, "Drones deliver humanitarian aid in Africa" (2024); M Srivastava *et al*, "Application of artificial intelligence of medical things in remote healthcare delivery" in *Handbook of security and privacy of ai-enabled healthcare systems and internet of medical things* (CRC Press, 2024) 169-190.

²⁷⁵ P Molnar, "Technology on the margins: AI and global migration management from a human rights perspective" (2019) *Cambridge International Law Journal* 305-330; T Bircan and EK Emre, "Big data for whose sake? Governing migration through artificial intelligence" (2021) *Humanities and Social Sciences Communications* 1-5; N Ahmad, "Refugees and algorithmic humanitarianism: Applying artificial intelligence to RSD procedures and immigration decisions and making global human rights obligations relevant to AI governance" (2020) *International Journal on Minority and Group Rights* 1-69; A Beduschi, "International migration management in the age of artificial intelligence" (2021) *Migration Studies* 576-596.

networks and cultural resources, fostering social cohesion and empowerment in their new environments.²⁷⁶

In contrast to the various potential and actual advantages identified above, stakeholders have noted concerns regarding the potential of AI exacerbating existing inequalities and disparities in access to mobility services.²⁷⁷ AI-driven transportation solutions may disproportionately benefit urban centers and affluent communities, leaving marginalised and underserved populations with limited or no access to transportation options.²⁷⁸ Along the same lines, AI algorithms in transportation risk perpetuating discrimination due to reliance on unrepresentative data and flawed facial recognition technologies, particularly at borders.²⁷⁹ AI-powered transportation systems pose privacy risks, as their reliance on personal data collection, such as location and biometrics, could lead to unauthorised access, surveillance, and profiling, compromising privacy rights and freedom of movement.²⁸⁰ Stakeholders have also noted the risk of over-reliance on AI-driven navigation and autonomous vehicles in regions with limited infrastructure or weak regulations which may result in malfunctions, accidents, and cyberattacks, threatening public safety and free movement.²⁸¹ For example, it is reported that OpenAI suffered a cyber-attack in 2023.²⁸² Further, widespread automation in transportation could displace millions of workers, causing economic insecurity and limiting access to transportation and societal

²⁷⁶ N Ouedraogo and H Öcal, "Crisis communication in sub-Saharan Africa: media coverage of terrorist attacks in the age of social media" (2023) 3 *International Journal of African Studies* 33-68.

²⁷⁷ African Commission, Multistakeholder consultation meeting, Kigali (above); Molnar (above); L R Shade "Digital divide: civic engagement, information poverty, and the internet worldwide" (2003) *Canadian Journal of Communication* 28.

²⁷⁸ E Orkoh and W Viviers, "Gender composition of ownership and management of firms and the gender digital divide in Africa" (2021) *South African Journal of Business Management* 52; S Castellano, "Africa's digital gender divide" (2015) 69(9) *Talent Development* 16.

²⁷⁹ A Sumsion *et al*, "Surveying racial bias in facial recognition: Balancing datasets and algorithmic enhancements" (2024) 13 *Electronics* 2317; P Molnar, "Technology on the margins: AI and global migration management from a human rights perspective" (2019) *Cambridge International Law Journal* 305-330.

²⁸⁰ S Singha, "Protecting data and privacy: cloud-based solutions for intelligent transportation applications" (2023) 24 *Scalable Computing Practice and Experience* 257-276; F Santoni, *Human Freedom in the Age of AI* (Taylor & Francis, 2024); R Van den Hoven, "Privacy and data protection in the age of pervasive technologies in AI and robotics" (2017) *European Data Protection Law Review* 338; R Leenes and S Conca, "Artificial intelligence and privacy—AI enters the house through the cloud" (2018) in *Research handbook on the law of artificial intelligence* (Edward Elgar Publishing, 2018) 280-306.

²⁸¹ S Singh *et al*, "Artificial intelligence and security of industrial control systems" (2020) in *Handbook of big data privacy* 121-164; S Harnad, "Artificial intelligence, cyberattacks, and advanced technology" (2021) *Space Systems and Sustainability: From Asteroids and Solar Storms to Pandemics and Climate Change* 209.

²⁸² K Gedeon, "OpenAI was hacked last year, according to new report. It didn't tell the public for this reason" (2024); C Metz, "A hacker stole OpenAI secrets, raising fears that China could, too" (2024).

participation.²⁸³ Equally, AI-powered transportation raises concerns about increased energy use and emissions, exacerbating climate change and affecting mobility and quality of life.²⁸⁴ Finally, the opaque nature of AI algorithms and decision-making processes may undermine immigrants' ability to challenge adverse decisions or seek redress for wrongful treatment, eroding their access to due process and procedural fairness.²⁸⁵

3.10 AI and the right to vote

The African Charter provides for the protection of the right to vote which includes participating in government and political process of one's country.²⁸⁶ The African Commission has emphasised the importance of the right to vote which must be exercised without discrimination.²⁸⁷ AI presents both opportunities and risks concerning the right to vote and democracy in Africa.

3.10.1 AI opportunities for the right to vote

Stakeholders noted that AI technologies can offer significant advantages for the right to vote and democracy in Africa.²⁸⁸ For example, they can streamline electoral processes, enhance voter registration, and improve the efficiency of vote counting, thereby potentially increasing access to the electoral process and bolstering democratic participation.²⁸⁹ AI-

²⁸³ BB Pradhan and P Priyabrata, "Digital technology impacts on the labour market and the transport industry" (2020) *PalArch's Journal of Archaeology of Egypt/Egyptology* 5116-5124; A Nikitas *et al*, "Autonomous vehicles and employment: An urban futures revolution or catastrophe?" (2021) *Cities* 114.

²⁸⁴ R Nishant *et al*, "Artificial intelligence for sustainability: challenges, opportunities, and a research agenda" (2020) 53 *International Journal of Information Management*; M Massar *et al*, "Impacts of autonomous vehicles on greenhouse gas emissions—positive or negative?" (2021) *International Journal of Environmental Research and Public Health* 5567; O Silva *et al*, "Environmental impacts of autonomous vehicles: A review of the scientific literature" (2022) *Science of The Total Environment* 830.

²⁸⁵ G Pavlidis, "Unlocking the black box: analysing the EU Artificial Intelligence Act's framework for explainability in AI" (2024) *Law, Innovation and Technology*.

²⁸⁶ Article 13(1), African Charter; Article 13(2), African Charter; Article 13(3), African Charter.

²⁸⁷ *Mouvement Ivoirien des Droits Humains (MIDH) v Cote d'Ivoire*, Communication 246/02, para 77.

²⁸⁸ African Commission, Multistakeholder consultation meeting, Kigali (above); See also CH Kan, "Artificial intelligence in the age of democracy and human rights: Normative challenges and regulatory perspectives" (2024) *International Journal of Eurasian Education and Culture* 145-166; F Filgueiras, "The politics of AI: Democracy and authoritarianism in developing countries" (2022) *Journal of information technology & politics* 449-464; AI Abdulkadir, "Securing credible elections in Africa through ICT: An appraisal of Nigeria" (2021) *Acta Universitatis Danubius. Relationes Internationales* 5-19; H Hlomani and S Timcke, "AI and the future of democracy in Africa: Navigating the promise and the peril" (2024); H Hlomani and S Timcke, "How might ai reshape democracy on the African continent?" (2024); B Makgale, "Beyond the ballot - AI, voter rights and the future of elections in Africa" (2024).

²⁸⁹ SML Bender, "Algorithmic elections" (2022) *Michigan Law Review* 489; J Oluwatobi and F Omolola, "Advancing democratic governance with AIoT-enabled e-voting: A case study of Covenant University's

driven voter profiling and micro-targeting use demographic and behavioural data to tailor campaign messages and enhance voter outreach.²⁹⁰ Further, AI technologies, such as those enabling remote voting, can enhance accessibility for marginalised groups, including persons with disabilities and individuals in remote areas.²⁹¹ Finally, AI-powered tools like predictive analytics can help electoral authorities detect irregularities and voter suppression, safeguarding election integrity and preventing fraud.²⁹² By enhancing transparency and accountability, AI contributes to the maintenance of free and fair elections, essential pillars of democracy.

3.10.2 AI risks for the right to vote

Aside the opportunities identified above, AI brings forth significant risks and challenges to the right to vote and democracy in Africa.²⁹³ Stakeholders have raised concerns about the potential for AI algorithms to perpetuate or exacerbate existing discrimination, biases and inequalities in the electoral system.²⁹⁴ Biased data inputs or algorithmic decision-making processes could result in discriminatory outcomes, disproportionately affecting certain demographic groups, such as marginalised communities or ethnic minorities.²⁹⁵ Along the

Departmental Associations in Alignment with SDG 16" *Artificial Intelligence of Things for Achieving Sustainable Development Goals* 335; Bender (above); P Savaget *et al*, "Empowering political participation through artificial intelligence" (2019) *Science and Public Policy* 369-380.

²⁹⁰ M Safiullah and P Neha, "Big data, artificial intelligence and machine learning: A paradigm shift in election campaigns" (2022) in *The new advanced society: Artificial intelligence and industrial internet of things paradigm* 247-261; PR Bahri *et al*, "Artificial intelligence (ai)-based campaign in the implementation of general elections" (2024) *Research Review International Journal of Multidisciplinary* 117-127; B Vian, "Profiling & targeting emotions in digital political campaigns"(2020); S Udupa and L Koch, "Tackling online misogyny in political campaigns: Promise and limitations of artificial intelligence" (2023) *Feminist Media Studies* 1-7.

²⁹¹ A Hagerty and I Rubinov, "Global AI ethics: a review of the social impacts and ethical implications of artificial intelligence" (2019).

²⁹² S Tunmibi and O Wole, "Security and preservation of election data in Nigeria in the fourth industrial revolution" (2023) 47 *IASSIST Quarterly* 3-4; Y Yatsyna and I Kudinov, "Innovative analytical and statistical technology in election forensics" (2023) *Regional Formation & Development Studies* 40.2; Y Khurram *et al*, "Novelty detection for election fraud: A case study with agent-based simulation data" (2023) 44.3 *AI Magazine* 255-262; D Padmanabhan "AI could help cut voter fraud – but it's far more likely to disenfranchise you" (2024).

²⁹³ S Itodo, "Artificial Intelligence and the integrity of African elections"(2024); K Manheim and K Lyric, "Artificial intelligence: Risks to privacy and democracy" (2019) *Yale Journal of Law & Technology* 106; B Hawes *et al*, "Can artificial intelligence be used to undermine elections?" (2023); M Coeckelbergh, *Why AI undermines democracy and what to do about it* (John Wiley & Sons, 2024); N Nagy, "Humanity's new frontier": Human rights implications of artificial intelligence and new technologies" (2024) *Hungarian Journal of Legal Studies* 236; Y Chen, "How will ai steal our elections?" (2024) Center for Open Science; B Stepien-Zalucka, "AI-voting? A few words about the role of algorithms in elections" (2021) *Artificial intelligence and human rights* 117-128.

²⁹⁴ African Commission, Multistakeholder consultation meeting, Kigali (above); See also Policy Action Network, "The politics of AI and data: Media and elections in South Africa" (2021) 12.

²⁹⁵ Policy Action Network (above) 13.

same lines, the digital divide and unequal access to technology hinder equitable participation in AI-driven electoral processes, disproportionately excluding marginalized communities and undermining universal suffrage and democratic inclusivity. This could undermine the principle of equal suffrage and lead to disenfranchisement.

AI-driven voter profiling and micro-targeting raise concerns about voter manipulation, as political actors may exploit personal data and predictive analytics to influence opinions and electoral outcomes.²⁹⁶ Further, AI-driven disinformation, fake news, and deepfakes pose significant risks to elections in Africa, undermining democracy by spreading false information, eroding public trust, and manipulating voter perceptions to influence electoral outcomes.²⁹⁷

Reliance on AI for voter registration and identity verification introduces cybersecurity risks, including hacking, data manipulation, and election result tampering, undermining electoral integrity and public trust in democracy.²⁹⁸ Finally, the opacity and lack of accountability in the development and deployment of AI technologies in elections undermine democratic governance by limiting stakeholders' ability to scrutinise, verify, and hold responsible parties accountable, eroding public confidence in electoral integrity.²⁹⁹

²⁹⁶ Policy Action Network (above) 8 and 17

²⁹⁷ A/78/288, UN Special Rapporteur on Freedom of Expression, Report on "Gendered disinformation and its implications for the right to freedom of expression" (2023); L Ofusori, "Mitigating AI-driven disinformation during an electoral year" (2024); Policy Action Network (above) 4.

²⁹⁸ Policy Action Network (above) 13.

²⁹⁹ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 21-25; R Alvarado, "Opacity, big data, artificial intelligence and machine learning in democratic processes" in *Big data and democracy* (Edinburgh University Press, 2020) 167.

PART IV

SOCIO-ECONOMIC RIGHTS IN THE AFRICAN CHARTER

4. Introduction

While many studies claim that AI and emerging technologies will have a positive impact on socio-economic rights,³⁰⁰ the main challenge is that many African countries do not have the requisite infrastructure and readiness to harness the potential that AI promises.³⁰¹ The following sections examine how specific socio-economic rights are impacted by AI technologies.

4.1 AI and the right to property

There are various right to property implications of AI. The African Charter provides for the protection of the right to property.³⁰² The African Commission has noted that the right to property extends to both individuals and communities.³⁰³ It has noted that for many Africans, the right to property is linked to their culture, religion, and identity.³⁰⁴ The African Commission has also noted that for many African communities, the right to property is linked to the right to life and livelihood.³⁰⁵ The African Commission has elaborated that the right to property encompasses three fundamental elements: the right to utilize the property (*usus*), to derive benefits from its fruits (*fuctus*), and the capacity to transfer or dispose of the property (*abusus*).³⁰⁶ In this formulation, individuals and communities have a right to undisturbed enjoyment of their property and the state is obliged to ensure enjoyment of this right in all its aspects, including protection from interference from non-state actors.³⁰⁷

³⁰⁰ AI Advisory Body Interim Report, paras 4, 7, 18 and 23.

³⁰¹ As above, para 46.

³⁰² Article 14, African Charter.

³⁰³ *African Commission on Human and Peoples' Rights v Kenya*, application 006/2012, Judgement, 26 May 2017, para 123; *Artur Margaryan and Artur Sargsyan v. the Republic of Kenya* (African Commission).

³⁰⁴ *Centre for Minority Rights Development & Minority Rights Group International (MRG) on behalf of the Endorois Community v The Republic of Kenya*.

³⁰⁵ *Center on Housing Rights and Evictions (COHRE) v. Sudan*, Communication No. 296/2005, African Commission on Human and Peoples' Rights, July 29, 2009, para. 205; United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted September 13, 2007, G.A. Res. 61/295, U.N. Doc. A/RES/47/1.

³⁰⁶ *African Commission on Human and Peoples' Rights v Kenya*, application 006/2012, Judgement, 26 May 2017, para 124.

³⁰⁷ *Centre for Minority Rights Development & Minority Rights Group International (MRG) on behalf of the Endorois Community v The Republic of Kenya*, AfCHR, 2 February 2010.

Where property is nationalised or expropriated for public interest³⁰⁸ such as economic reform aimed at achieving social justice, there must be adequate compensation.³⁰⁹

The above legal framework is critical in examining the right to property implications of AI technologies. The right to property holds immense significance in Africa, particularly in the era of AI, where data has become a valuable form of property.³¹⁰ Stakeholders have noted that the development and deployment of AI is characterised by data expropriation and data colonialism, where data is harvested from individuals and communities, often without their consent or fair compensation.³¹¹ Principles of data justice and equity are therefore, critical, in realisation of property rights in the age of AI and emerging technologies.³¹²

4.1.1 AI opportunities for the right to property

AI and emerging technologies open new avenues for wealth creation and property ownership – including intellectual property, particularly, for the African youth.³¹³ Several African developers and tech companies are engaged in AI research and innovation.³¹⁴ Nevertheless, in the field of intellectual property rights, AI raises novel questions as to whether AI systems can be inventors and "owners" of intellectual property.³¹⁵ AI also holds the potential to facilitate the redistribution of wealth in Africa by optimising resource allocation and promoting inclusive development – particularly, to marginalised

³⁰⁸ *Noca v. Democratic Republic of the Congo*.

³⁰⁹ Principles And Guidelines On The Implementation Of Economic, Social And Cultural Rights In The African Charter On Human And Peoples' Rights; 19-20.

³¹⁰ N Couldry and UA Mejias, *The cost of connection: How data is colonising human life and appropriating it for capitalism* (Stanford University Press, 2019).

³¹¹ This point was emphasised by Professor UA Mejias in during the multi-stakeholder consultation meeting organised by the African Commission in Kigali, Rwanda, 1 October 2024; See also D Leslie *et al*, "Advancing data justice research and practice: an integrated literature review" (2022) *The Alan Turing Institute in collaboration with The Global Partnership on AI* 16.

³¹² Leslie *et al* (above) 30.

³¹³ AUDA-NEPAD Whitepaper on AI (above) 20, 53, 61; AE Ogiemwonyi *et al*, "Artificial intelligence in Africa: Challenges and opportunities" (2021) 375-388.

³¹⁴ See "Supercharging a continent: World's cutting-edge tech and brightest minds catalysing Africa's innovation-driven future" (2024); A Korinek and JE Stiglitz, "Artificial intelligence and its implications for income distribution and unemployment" (2018) in *The economics of artificial intelligence: An agenda* (University of Chicago Press, 2018) 349-390.

³¹⁵ D Thaldar and M Naidoo, "AI inventorship: The right decision? (2021) *South Africa Journal of Science* 117; *Thaler v Comptroller-General of Patents, Designs and Trademarks* [2023] UKSC 49.K Michelle, 'Me, myself, and AI: Should Kenya's patent law be amended to recognise machine learning systems as inventors' *Strathmore Law Review*; RD Brown "Property ownership and the legal personhood of artificial intelligence" (2021) *Information & Communications Technology Law* 208-234.

communities. In land ownership for African countries currently going through land reform programs, AI-driven solutions such as precision agriculture, remote sensing, and predictive analytics offer tools to enhance soil management, crop monitoring, and yield optimisation.³¹⁶

4.1.2 AI risks to the right to property

Notwithstanding some of the opportunities presented by AI for the right to property, there are also significant risks.³¹⁷ One of the significant risks posed by AI to the right to property in Africa is the monopolisation of AI technologies and intellectual property by foreign entities.³¹⁸ Currently, much of the AI infrastructure and technology are owned and controlled by individuals and companies outside of Africa, a situation that encourages exploitation and inequality.³¹⁹ Property ownership in the field of AI and emerging technologies is also subject to other conditions such as education, social status, gender, rural-urban divide etc which also worsens inequality.³²⁰ As already mentioned, data exploitation and expropriation is a form of property rights abuse in the age of AI and emerging technologies.³²¹ Further, as AI-driven automation displaces traditional jobs and

³¹⁶ AUDA-NEPAD Whitepaper on AI (above) 61, 64-65; E Raj *et al*, "Precision farming in modern agriculture" in *Smart Agriculture Automation Using Advanced Technologies: Data Analytics and Machine Learning, Cloud Architecture, Automation and IoT*. Singapore: Springer Singapore, 2022. 61-87; Y Liu *et al*, "From Industry 4.0 to Agriculture 4.0: Current status, enabling technologies, and research challenges" *IEEE Transactions on Industrial Informatics* 17.6 (2020): 4322-4334.

³¹⁷ D Dyason and S Graham, "Navigating the future of property professionals: an AI-enabled paradigm" (2023) *Journal of Property Investment & Finance*.

³¹⁸ R Adams, "AI in Africa: Key concerns and policy considerations for the future of the continent" (2022), <https://afripoli.org/ai-in-africa-key-concerns-and-policy-considerations-for-the-future-of-the-continent>; Katz, *Artificial Whiteness* (above).

³¹⁹ A/HRC/57/70, Report of the Working Group on African Descent, Report on "Fulfilling the economic, social and cultural rights of people of African descent in the age of digitalization, artificial intelligence, and new and emerging technologies" (2024), paras 17-73; S Niyazov, "AI-powered monopolies and the new world order: How AI's reliance on data will empower tech giants and reshape the global order" (2019); Adams, *The new empire of AI* (above).

³²⁰ R Qiu and L Zhanhong, "AI Widens the Gap between the Rich and the Poor" (2023) *SHS Web of Conferences*. Vol. 152. *EDP Sciences*, 2023; Adams, *The new empire of AI* (above); A Sharma *et al*, "The double-edged sword of ai and industrial revolution 4.0: Will they widen or bridge the global economic divide?" in *Sustainable technology for society 5.0* (CRC Press, 2024) 183-196; C Alonzo, "How artificial intelligence could widen the gap between rich and poor nations" (2020).

³²¹ A Birhane, "Algorithmic colonization of Africa" (2020) 17; Couldry and Mejias, *Data colonialism* (Above); A/79/170, UN Special Rapporteur on human rights and international solidarity (above) paras 31-34.

industries, large segments of the population may experience loss of livelihoods and property.³²²

4.2 AI and the right to work

AI presents several implications for the right to work. The African Charter provides for the protection of the right to work.³²³ The African Commission and the African Court have emphasised the importance of the right to work in the context of Africa.³²⁴ State obligation to facilitate employment is more pertinent in the context of AI and emerging technologies.³²⁵ AI brings both advantages and risks to the right to work in Africa – it can both create and destroy employment opportunities.³²⁶

4.2.1 AI opportunities for the right to work

AI technologies in Africa presents several significant advantages for the right to work and employment opportunities across the continent.³²⁷ AI can catalyse job creation, particularly in emerging industries such as fintech, e-commerce, and renewable energy.³²⁸ AI can address skill gaps in the digital economy and enhance the employability.³²⁹ AI can also promote inclusive economic growth by including communities that are often marginalised –

³²² OO Adeniyi, "The impact of ai on women's job loss in Africa banking industry- focus on Kenya" (2021) Centre for Intellectual Property and Information Technology Law; F Noor et al, "Future of Jobs and the challenge of artificial intelligence" (2020) *Global Strategic & Security Studies Review* 32-39.

³²³ Article 15, African Charter.

³²⁴ *Zimbabwe Lawyers for Human Rights & Associated Newspapers of Zimbabwe v. Zimbabwe*, 284/03, para 179; *Annette Pagnouille (on behalf of Abdoulaye Mazou) v Cameroon*, 39/90_10AR, para 29; *Nubian Community in Kenya v. Kenya*, 317/06, para 168; *Kennedy Gihana and Others v. Republic of Rwanda*, 017/2015, para 131.

³²⁵ UN General Assembly Resolution on AI (above) para 6(q).

³²⁶ AUDA-NEPAD, Whitepaper on AI (above) 64; O Adeniyi, *Is AI for better or for worse? The impact of artificial intelligence on women's jobs in Africa* (2024); UNESCO AI Ethics Recommendation (above), paras 116 and 118; UN High Level Body on AI, Interim Report (above) paras 16 and 30; S Karombe, "Artificial intelligence in Africa: A socioeconomic view" (2024); MISA, AI Report on Southern Africa (above) 27.

³²⁷ UNESCO AI Ethics Recommendation (above), paras 116 and 118; UN High Level Body on AI, Interim Report (above) paras 16 and 30; MISA, AI Report on Southern Africa (above) 27; AUDA-NEPAD, Whitepaper on AI (above) 64.

³²⁸ FT Tschang and A Esteve, "Artificial intelligence as augmenting automation: Implications for employment" (2021) *Academy of Management Perspectives* 642-659; D Acemoglu et al, "Artificial intelligence and jobs: Evidence from online vacancies" (2022) *Journal of Labor Economics* 293-340.

³²⁹ DS Lakshmi et al, "Influence of artificial intelligence-based skill development training on employability" (2024) *International Journal of Educational Reform*; RN Pagani et al, "AI and employability: Challenges and solutions from this technology transfer" (2023) in *Smart cities and digital transformation: Empowering communities, limitless innovation, sustainable development, and the next generation* (Emerald Publishing Limited, 2023) 253-284.

for example, through freelance platforms that can reach remote areas.³³⁰ AI can also enhance efficiency and productivity in the workplace for those already employed.³³¹

4.2.2 AI risks to the right to work

Notwithstanding the opportunities noted above, AI presents several significant risks and challenges for the right to work.³³² AI can disrupt traditional industries and displace workers,³³³ particularly among low-skilled and unskilled workers.³³⁴ This will exacerbate existing inequalities in the labour market, widening the gap between skilled and unskilled workers,³³⁵ thereby perpetuating the cycle of poverty.³³⁶ Stakeholders in this study have highlighted that AI and emerging technologies are likely to disproportionately impact disadvantaged groups, including women, people with disabilities, minorities, and indigenous communities. These groups often represent a significant portion of the workforce in roles most vulnerable to displacement by these technologies in Africa.³³⁷ Finally, the increased use of AI in the workplace to monitor behaviour of employees may also violate the right to privacy of workers.³³⁸ Further, since AI development is still largely concentrated in the hands of multinational corporations, there is a real risk of continued exploitation of African

³³⁰ A Birhane *et al*, "Power to the people? Opportunities and challenges for participatory AI"(2022); R Njodzi *et al*, "Challenges and opportunities for digital inclusion in marginalised communities" (2022) *Digital Transformation for Promoting Inclusiveness in Marginalized Communities* 72-94; AUDA-NEPAD Whitepaper on AI (above) 153-154.

³³¹ M Yadav *et al*, "Harnessing artificial intelligence to empower HR processes and drive enhanced efficiency in the workplace to boost productivity" (2023) *International Journal on Recent and Innovation Trends in Computing and Communication* 381-390; VV Yawalkar, "A study of artificial intelligence and its role in human resource management" (2019) *International Journal of Research and Analytical Reviews* 20-24.

³³² UNESCO AI Ethics Recommendation (above), paras 116 and 118; UN High Level Body on AI, Interim Report (above) paras 16 and 30; MISA, AI Report on Southern Africa (above) 27; AUDA-NEPAD, Whitepaper on AI (above) 64; A/79/170, UN Special Rapporteur on human rights and international solidarity (above) paras 50-52.

³³³ Above; see also A/HRC/57/70, Report of the Working Group on African Descent on AI (above) 17-73.

³³⁴ Karombe (above); see also GC Malamsha and DG Nyambo, "Multi-level association rule mining for the discovery of strong underrepresented patterns : the case study of small dairy farms in Tanzania" 18 April 2023.

³³⁵ D Sholler and I MacInnes, "AI and income inequality: the danger of exacerbating existing trends toward polarization in the US workforce" (2024) in *Handbook of artificial intelligence at work* (Edward Elgar Publishing, 2024) 338-355; MISA, AI Report on Southern Africa (above) 11; UNESCO AI Ethics Recommendation (above), preamble, para 121.

³³⁶ Above.

³³⁷ African Commission, Multistakeholder consultation meeting, Kigali (above).

³³⁸ D Sholler and I MacInnes (above).

peoples in the work place.³³⁹ Stakeholders have thus noted that AI and digital technologies can also be enablers of contemporary forms of slavery.³⁴⁰

4.3 AI and the right to health

The African Charter provides for the right to both physical and mental health and state obligations thereof.³⁴¹ The African Commission has emphasised the importance of the right to health³⁴² as it is linked to other fundamental human rights such as the right to life and dignity.³⁴³ The impact of AI on health is one of the largely discussed topics globally.³⁴⁴ While AI in medical practice is still in the infancy stage in Africa,³⁴⁵ there are several AI startups like Heart X Group in Africa and Dawa Health in Zambia that are focusing on providing health solutions powered by AI and emerging technologies.³⁴⁶

4.3.1 AI opportunities for the right to health

AI has the potential to revolutionise the health sector in Africa.³⁴⁷ AI can broaden access to quality health through the flow of health information, disease diagnostics, detection, prevention, monitoring, management, and drug research and development.³⁴⁸ For example, there are already use cases of AI by radiologists, gastrointestinal physicians and surgeons using scopes with AI-guided functions, and cardiologists using AI-based software to detect cardiac arrhythmias and fibrillations.³⁴⁹ Rwanda has created AI-driven system for detecting

³³⁹ Katz (above); Couldry and Mejias (above).

³⁴⁰ A/78/161, Report of UN Special Rapporteur on Contemporary forms of slavery (2024) p.4.

³⁴¹ Article 16(1), African Charter and Article 16(2), African Charter.

³⁴² See *Social and Economic Rights Action Center (SERAC) and Another v Nigeria* (2001) AHRLR 60 (ACHPR 2001); *Zimbabwe Human Rights NGO Forum v Zimbabwe* (2006) AHRLR 128 (ACHPR 2006).

³⁴³ E Durojaye, "Advancing gender equity in access to HIV treatment through the Protocol on the Rights of Women in Africa" (2013) 13(2) *African Human Rights Law Journal* 375-392.

³⁴⁴ AUDA-NEPAD, "AI for Africa: Artificial intelligence for Africa's socio-economic development" (2021) 22-23.

³⁴⁵ AA Adejumo *et al*, "Artificial intelligence in medical practice: closing the gap for the present and creating opportunities for the future" (2023) *The Nigerian Health Journal* 580.

³⁴⁶ AUDA-NEPAD White Paper (above) 65-66.

³⁴⁷ A/HRC/53/65, UN Special Rapporteur on Right to Health, Report on "Digital innovation, technologies and the right to health" (2023) paras 7-14; A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 40-43; BA Townsend *et al*, "Mapping the regulatory landscape of AI in healthcare in Africa" (2023) *Pharmacol* 2; AUDA-NEPAD, "White Paper: Regulation and Responsible Adoption of AI for Africa Towards Achievement of AU Agenda 2063" (2024) 7; UN Advisory Body, Interim Report, paras 1 and 16; Adejumo (above) 583.

³⁴⁸ Townsend (above); UN Advisory Body (above) para 16; AUDA-NEPAD Whitepaper (above) paras 7, 18; AUDA-NEPAD, "AI for Africa: Artificial intelligence for Africa's socio-economic development" (2021) 22-23.

³⁴⁹ Adejumo (above) 582.

disease outbreaks swiftly.³⁵⁰ South Africa is using an AI-based tool to aid radiologists in interpreting medical images. Kenya is using mobile AI apps to tackle healthcare challenges in remote and underserved regions. Indeed, stakeholders have highlighted that, while Africa may lag in the overall development of AI technologies, the continent is already home to several advanced AI start-ups and innovations actively being deployed.³⁵¹

There is also increased reliance on surgical robots in Africa, some of which have considerable level of autonomy with the argument that they operate with more precision.³⁵² Autonomous surgical robots (ASR) are advanced medical devices powered by AI and designed to autonomously perform complex surgical procedures with precision.³⁵³ For example, they are used for urological surgery.³⁵⁴ ASR can increase access to surgical care in underserved areas through remote surgical procedures and teleoperation capabilities.³⁵⁵ AI and robotics can be useful in the context of pandemics such as covid-19, particularly, in delivery of medicines.³⁵⁶

4.3.2 AI risks for the right to health

Equally, AI and emerging technologies pose far-reaching concerns for the right to health, particularly, for individuals and peoples already disadvantaged on the basis of economic status, social factors, gender, ethnicity, rural-urban divide etc.³⁵⁷ One of the main challenges is that not many African countries have an infrastructure that is ready to adopt AI in the

³⁵⁰ AUDA-NEPAD Whitepaper (above) 105, 106 ; AUDA-NEPAD, AI for Africa (above) 22-23.

³⁵¹ African Commission, Multistakeholder consultation meeting, Kigali (above).

³⁵² A Mehta *et al*, “Embracing robotic surgery in low- and middle-income countries: Potential benefits, challenges, and scope in the future” (2022) *Ann Medical Surgery* 84; E Mbunge *et al*, “Unbundling the significance of cognitive robots and drones deployed to tackle COVID-19 pandemic: A rapid review to unpack emerging opportunities to improve healthcare in sub-Saharan Africa” (2021) *Cognitive Robotics* 205–213; “Robotic surgery: African-first at Groote Schuur” (2021).

³⁵³ HJ Marcus *et al*, “The IDEAL framework for surgical robotics: development, comparative evaluation and long-term monitoring” (2024) 30 *Nat Med* 30 61–75; Mbunge (above) 209; Adejumo (above) 584; MJ Connor *et al*, “Autonomous surgery in the era of robotic urology: friend or foe of the future surgeon?” (2020) 17 *Nat Rev Urology* 643–649.

³⁵⁴ Connor (above) 643.

³⁵⁵ E Fosch-Villaronga *et al*, “A human in the loop in surgery automation” (2021) 3 *Nat Mach Intell* 368–369.

³⁵⁶ Mbunge (above) 205, 206.

³⁵⁷ A Gwagwa *et al*, “Artificial intelligence (AI) deployments in Africa: Benefits, challenges and policy dimensions” (2020) *The African Journal of Information and Communication* 3; A/79/170, UN Special Rapporteur on human rights and international solidarity (above) paras 48-49.

health sector.³⁵⁸ Access to health in Africa is already characterised by inequality that is caused by many social factors and AI may worsen the inequality and discrimination in the health sector.³⁵⁹ Development and deployment of AI in the health sector can also negatively impact data justice and the right to privacy of African patients.³⁶⁰ Stakeholders also noted that the challenge of lack of transparency, interpretability, understandability and accountability relating to AI technologies in the health sector is a huge risk for African patients.³⁶¹ Some stakeholders have also pointed out that the proliferation of ASR can undermine human agency, patients autonomy, values of patients, informed consent and medical ethics.³⁶² The African Charter recognise the importance of a remedy where there is a human rights violation.³⁶³ Unlike human surgeons who can be held accountable for medical errors, attributing responsibility in cases of adverse outcomes involving ASR becomes inherently challenging.³⁶⁴ Furthermore, the introduction of ASR raises broader societal concerns about the erosion of human touch and empathy in healthcare delivery.³⁶⁵ The quality of human care cannot be replaced by machines.³⁶⁶ There are also concerns that

³⁵⁸ J Kahn, “The need for human infrastructure in African healthcare AI” (2022) *Nature Medicine* 1-2; A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on “Artificial Intelligence” (2024) paras 40-43.

³⁵⁹ AUDA-NEPAD Whitepaper (above) 22; MP Sendak et al, “Real-world integration of a sepsis deep learning technology into routine clinical care: Implementation study” (2020) 8(7) *JMIR medical informatics* e15182; Z Obermeyer et al, “Dissecting racial bias in an algorithm used to manage the health of populations” (2020) *Science* pp.447-453.

³⁶⁰ A/74/277, Report of the UN Special Rapporteur on the right to privacy, Report on “The protection and use of health-related data” (2019); M Shabani & L Marelli, “Re-identification risk versus data utility for applications of artificial intelligence: A case study on the MIMIC database” (2021) *Patterns* 100334; A Mantzavinou & A Prakash, “Artificial intelligence in global health: critical considerations of ethics, practices, and discourses” (2022) 17(9) *Global Public Health* 1434–1449.

³⁶¹ D Wang et al, “Deep learning for identifying metastatic breast cancer” (2016); K Mwantimwa, “Unlocking the potential of artificial intelligence to improve access in Africa” (2019) 1(5) *The Lancet Digital Health* e168-e169; A/HRC/57/70, Report of the Working Group on African Descent on AI and digitalisation (above) 17-73.

³⁶² African Commission, Multistakeholder consultation meeting, Kigali (above); see also Martin (above) 643; Marcus (above) 61; N Lee, “Robotic surgery: where are we now?” (2024) 384 *Lancet* 1417; YS Kwok et al, “A robot with improved absolute positioning accuracy for CT guided stereotactic brain surgery” (1988) 35 *IEEE Trans. Biomed. Eng* 153–160; BS Peters et al, “Review of emerging surgical robotic technology” (2018) 32 *Surg. Endosc.* 1636–1655; L Maynou et al, “The diffusion of robotic surgery: examining technology use in the English NHS” (2022) 126 *Health Policy* 325–336; The Lancet, “Robotic surgery evaluation: 10 years too late” (2016) 388 *Lancet* 1026; A Pichetworakoon et al, “Economic and Legal on The Deploying of Medical and Healthcare Robotics: Case Study on a Comparison of the European Union (EU), South Africa, and Thailand” (2021) 5 (2) *CRRU Law, Political Science and Social Science Journal* 21–43; Adejumo (above) 583; J Tyler et al, “Intelligent, autonomous machines in surgery” (2020) *Journal of Surgical Research* 92.

³⁶³ Article 56, African Charter.

³⁶⁴ Tyler (above) 97.

³⁶⁵ Adejumo (above) 584; Tyler (above) 92.

³⁶⁶ Adejumo (above) 584

advances in AI in the health sector can compromise the competences of health professionals where there may be an overreliance on machines.³⁶⁷

To enhance the safety and effectiveness of AI applications in healthcare across Africa, states must establish national standards and testing protocols specifically tailored to the region's disease profiles and demographic characteristics.³⁶⁸ These standards should prioritise aspects such as human dignity, human control, medical ethics, model interpretability, explainability, accountability, data protection and consent, and error prevention to ensure the reliability and suitability of AI technologies for local healthcare contexts.³⁶⁹

4.4 AI and right to education

The African Charter provides for the right to education³⁷⁰ which is linked to right to freedom of culture³⁷¹ and protection of African values.³⁷² Thus, the impact of AI on the right to education must be examined in the context of African values and cultural context.³⁷³ The African Commission has emphasised the importance of the right to education in Africa.³⁷⁴

The African Union has identified science and education as part of its priorities and emphasises the need for African states to invest not only in AI and emerging technologies but also AI and digital literacy for Africans.³⁷⁵ There is also a growing recognition of the need to integrate AI concepts and skills into existing educational curricula.³⁷⁶ Numerous African

³⁶⁷ B Meskó et al, "Digital health is a cultural transformation of traditional healthcare" (2017) *Mhealth* 3.

³⁶⁸ J Amankwah-Amoah et al, "Overcoming AI challenges in Africa: insights from six major economies" (2022) 174 *Technological Forecasting and Social Change* 121-265.

³⁶⁹ Y Mehmood et al, "Protection of Big Data Privacy" (2016) 4 *IEEE Access* 1821-1834; H Roberts, "The Chinese approach to artificial intelligence: an analysis of policy, ethics, and regulation" (2021) 36 *AI & Soc* 59-77; Kahn (above); Martin (above) 648; AUDA-NEPAD Whitepaper (above) 65.

³⁷⁰ Article 17(1), African Charter.

³⁷¹ Article 17(2), African Charter.

³⁷² Article 17(3), African Charter.

³⁷³ Article 17(1) and Article 17(2), African Charter.

³⁷⁴ *Free Legal Assistance Group v. Zaire*, Communication 25/89-47/90-56/91-100/93, African Commission on Hum. & Peoples' Rights (1995), para 48; *African Commission on Human and Peoples' Rights v. Republic of Kenya*, Application 006/2012, African Court on Human and Peoples' Rights. para 155; *Centre for Minority Rights Development and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya*, Communication 276/03, *African Commission on Human and Peoples' Rights* (2010) paras 115, 249.

³⁷⁵ African Union, 'Continental Education Strategy for Africa (CESA 16-25)' pages 11 & 23.

³⁷⁶ See Solomon Sunday Oyelere et al, 'Artificial Intelligence in African Schools: Towards a Contextualized Approach' (2022) 2022 IEEE Global Engineering Education Conference (EDUCON), Tunis, Tunisia, 28-31 March 2022, at page 1577/78.

nations such as Kenya, Nigeria, South Africa, Tunisia, Zimbabwe etc. are already integrating AI into their educational systems.³⁷⁷

In considering the implications of AI on the right to education, AI must be conceptualised in two main ways: First, AI should be conceptualised as a tool through which learners access education. When AI is conceptualised as a tool to access the right to education, then state obligations include state investment in AI education in secondary and tertiary schooling systems.³⁷⁸ Second, AI should be conceptualised as a critical subject of study that must be realised under the right to education. When AI is conceptualised as a critical subject of study under the right to education, part of obligations is to include AI education in the curricular and state institutions aimed at AI and digital literacy.³⁷⁹ In this regard, AI education is not only for schools and universities but for all citizens.³⁸⁰

Stakeholders have noted AI's potential to contribute to education and they have also indicated the risks that comes with integrating AI in education, particularly, in the African context.³⁸¹

4.4.1 Potential uses of AI in education

AI stands to revolutionise education by tailoring learning experiences, offering real-time feedback, and facilitating personalised learning paths.³⁸² Through AI-powered tools and platforms, learners can access high-quality educational resources which is critical for their

³⁷⁷ AUDA-NEPAD Whitepaper (above) 47; AUDA-NEPAD, AI for Africa (above) 23; J Hlongwane *et al*, "Towards the integration of artificial intelligence in higher education, challenges and opportunities: The African context, a case of Zimbabwe" (2024) *International Journal of Research and Innovation in Social Science* 417; P Sibai and B Neupane, "Artificial intelligence needs assessment survey in Africa" (2021) *United Nations Educational, Scientific and Cultural Organization*; AA Mashishi, "South Africa's artificial intelligence planning: Adoption of AI by government" (Department of Communications and Digital Technologies, October 2023).

³⁷⁸ AUDA-NEPAD Whitepaper (above) paras 73, 163; AUDA-NEPAD, AI for Africa (above) 23; AU Digital Transformation Strategy 2030, page 15.

³⁷⁹ AUDA-NEPAD, AI for Africa (above) 23.

³⁸⁰ See 'UNESCO Global Judges' Initiative" (2024) 11; MA Ayanwale *et al*, 'Examining Artificial Intelligence Literacy among Pre-Service Teachers for Future Classrooms' (2024) 6; Chisom *et al* (above) 643, AUDA-NEPAD, AI for Africa (above) 23; UNESCO (2020) UNESCO Global Education Monitoring Report 2020 (p.55 – 57).

³⁸¹ AUDA-NEPAD Whitepaper (above) 218; A Gwagwa *et al*, "Artificial intelligence (AI) deployments in Africa" 12,14, 16, 17; AUDA-NEPAD, AI for Africa (above) 23; M Jantjies, "AI and data in education: Policy considerations for South Africa" (2020); O Chisom *et al*, "Review of AI in education: Transforming learning environments in Africa" (2024) 5 *International Journal of Applied Research in Social Sciences* 637-654.

³⁸² AUDA-NEPAD Whitepaper (above) 29, 36, 218; A/79/520, UN Special Rapporteur on the Right to Education, Report on AI (above) p.10.

research.³⁸³ AI applications can streamline instruction, assessment, management, and enhance accessibility for learners.³⁸⁴ For example, the Intelligent Tutoring Systems delivers tailored pedagogical assistance and feedback to students.³⁸⁵

AI essay scoring engines alleviate faculty workloads and reduce costs for educational institutions.³⁸⁶ Automated tutors and e-learning platforms can also mitigate staff shortages.³⁸⁷ There are also AI applications tailored specifically for students with disabilities.³⁸⁸ AI applications can also advise students on employability issues.³⁸⁹ For educational administrators, AI analytics tools help track student retention and academic success rates to inform interventions and resource allocation.

4.4.2 Risks of AI in education

Overreliance on AI tools like ChatGPT pose serious risk to critical thinking which is at the core of education.³⁹⁰ Some AI applications adopted in education were not originally designed with the purpose of enhancing learning: “there is no better example than current generative AI that showcases that these big corporations will produce AI and will put it out there, and they will force it onto the population until it becomes the norm. There is no specific purpose, there is no specific use case for generative AI. It’s just been a technology

³⁸³ AUDA-NEPAD Whitepaper (above) 8.

³⁸⁴ O Zawacki-Richter *et al*, “Systematic review of research on artificial intelligence applications in higher education—where are the educators?” (2019) 16(1) *International Journal of Educational Technology in Higher Education* 1-27; A Kaplan & M Haenlein, “Siri, Siri, in my hand: Who’s the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence” (2019) 62(1) *Business Horizons* 15-25.

³⁸⁵ BD Nye, “Intelligent tutoring systems by and for the developing world: a review of trends and approaches for educational technology in a global context” (2015) 25(2) *International Journal of Artificial Intelligence in Education* 177-203.

³⁸⁶ MD Shermis & J Burstein (eds), *Handbook of automated essay evaluation: Current applications and new directions* (Routledge, 2013); D Amemado, “Integrating artificial intelligence in higher education: A critical review of case applications” (2020) 15(1) *Research and Practice in Technology Enhanced Learning* 1-13.

³⁸⁷ JC Aker & C Ksoll, “Can ABC combat absenteeism? Experimental evidence and costs from a mobile phone-based intervention in Côte d’Ivoire” (2021) 82 *Economics of Education Review* 102; BK Daniel, “Big Data analytics and ethics in higher education: A systematic literature review” (2010) *Journal of Information, Communication and Ethics in Society*.

³⁸⁸ A Følstad *et al*, “Artificial intelligence in education: a review of general publications from 2012 to 2020” (2021) *Ai & Society* 1-14.

³⁸⁹ K Verbert *et al*, “Learning analytics dashboard applications” (2016) 60(10) *American Behavioural Scientist* 1269-1291; S Isaacs & W Jochems, “Integrating AI into education in South Africa” (Oxford, 2021).

³⁹⁰ A/79/520, UN Special Rapporteur on the Right to Education, Report on “Artificial intelligence in education” (2024), p. 5; S Yamada, *History and development of education in Africa* (Oxford, 2019); ANSA-Africa, “Power of education in youth empowerment” (2024).

over the past couple of years that's just floating around looking for purpose, looking for some kind of uptake.”³⁹¹ Stakeholders have highlighted that these AI applications in education risk undermining learners' independence of thought, erasing the originality of ideas, compromising academic freedom, and ultimately jeopardising academic integrity.³⁹² Equally, over-reliance on data-driven automation in education risks stripping away its humanity, undermining cultures, values, and creativity essential for developing identity, emotional intelligence, communication skills, and character—core elements of quality education in terms of the African Charter.³⁹³

Over-dependance on AI in education can also undermine diversity by limiting opportunities for student engagement and collaboration, which are vital for cultural participation.³⁹⁴ In Africa, where oral traditions, storytelling, music, dance, and communal learning are integral, AI in education must be culturally relevant, addressing local needs while preserving languages and the continent's diverse heritage.³⁹⁵

There are also key concerns surrounding regarding access to AI in education for many African learners.³⁹⁶ Many African learners face significant barriers to fully benefiting from AI-driven education due to disparities in infrastructure, electricity access, digital literacy, and

³⁹¹ Hankyoreh Human & Digital Forum, “No specific purpose’: Experts on how Big Tech attempts to create demand for AI” (2024), quoting Dr Abeba Birhane.

³⁹² African Commission, Multistakeholder consultation meeting, Kigali (above); A/HRC/56/58, Report of the UN Special Rapporteur on the Right to Education, Farida Shaheed (2024), paras 68 and 71; N Humble and P Mozelius, “The threat, hype, and promise of artificial intelligence in education” (2022) 2 *Discover Artificial Intelligence* 22; AP Ikedinachi *et al*, “Artificial intelligence, smart classrooms and online education in the 21st century: Implications for human development” (2019) 21 *Journal of Cases on Information Technology* 66 - 79; IAP Wogu *et al*, “Artificial intelligence, artificial teachers and the fate of learners in the 21st century education sector: Implications for theory and practice” (2018) 119 *International Journal of Pure and Applied Mathematics*.

³⁹³ See Article 17 of the African Charter on Human and Peoples Rights, subsection (1) read with subsection (2); R Eynon, “The rise of Big Data: what does it mean for education, technology, and media research?” (2013) 38(3) *Learning, Media and Technology* 237-240; M Sharples *et al*, “Innovating Pedagogy 2014: Open University Innovation” (2014) *Report* 3.

³⁹⁴ P Prinsloo, “Fleeing from Frankenstein’s monster and meeting Kafka on the way: algorithmic decision-making in higher education” (2017) 14(3) *E-Learning and Digital Media* 138-163.

³⁹⁵ WO Nekoto *et al*, “Participatory translations of Oshiwambo: Towards culture preservation with language technology” (2023) para 5; P Higgs, “The African Renaissance and the transformation of the higher education curriculum in South Africa” (2016) 13(1) *Africa Education Review* 87-101.

³⁹⁶ F Pedro *et al*, “Artificial intelligence in education : Challenges and opportunities for sustainable development” (2019); EO Arakpogun *et al*, “Artificial intelligence in Africa: Challenges and opportunities” in A Hamdan *et al* (eds), *The Fourth industrial revolution: Implementation of artificial intelligence for growing business success* (Springer International Publishing 2021); ON Chisom *et al*, “Review of AI in education: Transforming learning environments in Africa” (2023) *International Journal of Applied Research in Social* 5.

resource availability.³⁹⁷ Other learners also face discrimination based on gender, race and other social status.³⁹⁸ For instance, some AI tutors have discouraged girls from pursuing STEM subjects, while AI scoring systems have demonstrated cultural biases, perpetuated racial stereotypes, and relied on non-representative data.³⁹⁹ Stakeholders have also noted the challenge of surveillance, profiling, and student data extraction without consent in violation of privacy rights and principles of equity.⁴⁰⁰

Stakeholders also emphasised that when assessing AI's role in advancing the right to education in Africa, it is crucial to recognise that the continent does not face a shortage of teaching manpower but rather a lack of resources to support human teachers. Therefore, investments should prioritise empowering educators with better tools and resources, rather than replacing them with AI technologies.⁴⁰¹

³⁹⁷ ITU, Measuring digital development Facts and Figures 2023.

³⁹⁸ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 44-50; UNESCO, Artificial intelligence, and gender equality: Key findings of UNESCO's global dialogue (2021); A/HRC/57/70, Report of the Working Group on African Descent on AI and digitalisation (above) 17-73; K Goddard *et al*, "Automation bias: A systematic review of frequency, effect mediators, and mitigators" (2012) 19 *Journal of the American Medical Informatics Association* 1.

³⁹⁹ S Hussain *et al*, "Gender bias in artificial intelligence: Dynamics of algorithmic discrimination in automated recruiting processes and mitigation strategies" (2021) *Journal of Open Innovation: Technology, Market, and Complexity* 127; Y Dong and L Zhang, "How Native and Non-Native English Speakers Adapt Differently to Humans and Machine Raters" (2016) *Assessing Writing* 1-11; UNESCO, Artificial Intelligence and Gender Equality (2021); M Ekowo and I Palmer, "The promise and peril of predictive analytics in higher education: A landscape analysis" (2016) *New America* 1-38; C Novelli *et al*, "Taking AI risks seriously: A new assessment model for the AI Act" (2023) *AI & society*; G Stettinger *et al*, "Trustworthiness assurance assessment for high-risk ai-based systems" (2024) *IEEE Access*; C Novelli *et al*, 'AI risk assessment: A scenario-based, proportional methodology for the ai act' (2024) *Digital Society*; H Friedrich-Nel & D MacKinnon, "Incorporating fairness into the algorithmic world: Beyond technical solutions" (2019) *Proceedings the International Conference on Developments in eSystems Engineering* 136-141; AX Zhang *et al*, "Edge intelligence: The confluence of edge computing and artificial intelligence" (2019) 7 *IEEE Internet of Things Journal* 7457-7469; L Floridi *et al*, "AI4People—an ethical framework for a good AI society: opportunities, risks, principles, and recommendations" (2018) 28 *Minds and Machines* 689-707.

⁴⁰⁰ M Bulger, "Personalized learning: The conversations we're not having" (2024); EO Arakpogun *et al* (above); ON Chisom *et al* (above); H Roberts-Mahoney *et al*, "Netflixing human capital development: Personalized learning technology and the corporatisation of K-12 education" (2016) *Journal of Education Policy* 405-420; P Gwirayi, "Ethical implications of informed consent in open distance learning institutions" (2009).

⁴⁰¹ African Commission, Multistakeholder consultation meeting, Kigali (above).

PART V – COLLECTIVE RIGHTS OF PEOPLES

THE RIGHST OF VULNERABLE GROUPS

5. Introduction

The African Charter uniquely provides for collective rights of peoples alongside civil and political and socio-economic rights of individuals, providing a comprehensive framework for collective protections across the continent. Articles 19 to 24 enshrine key rights, including equality and freedom from domination, political and economic self-determination, development, peace and security, and a clean environment. The rapid advancement of technologies such as AI and robotics impact governance, economic activities, environmental management, and societal development, necessitating a critical examination of their effects on peoples' rights guaranteed under the Charter. Additionally, it is also necessary to look into the impact of AI and other new technologies on the rights of vulnerable groups.

5.1 Peoples' right to equality and freedom from domination

It is important to note that the African Charter does not only talk about equality of individuals but also equality of peoples. Article 19 of the African Charter provides that *"all peoples shall be equal; they shall enjoy the same respect and shall have the same rights."*⁴⁰² Rooted in the principles of freedom, equality, justice, and dignity, the African Charter's Preamble provides for African states' commitment to eradicating colonialism, neo-colonialism, apartheid, and all forms of discrimination, while promoting the aspirations and independence of African peoples. Notably, the African Charter prohibits the exploitation and domination of one people by another, a principle particularly relevant in the context of emerging technologies like AI.⁴⁰³ The concept of "data colonialism" has drawn parallels between historical resource extraction and the modern-day exploitation of data, where biased or unrepresentative datasets can perpetuate systemic inequalities and discriminatory outcomes.⁴⁰⁴ This is especially concerning in Africa, where data gaps and underrepresentation of marginalised groups are prevalent. The African Commission has stressed the importance of ensuring that AI development and governance frameworks prioritise human rights, dignity, and fairness, rejecting narratives and systems that

⁴⁰² Article 19, African Charter.

⁴⁰³ As above.

⁴⁰⁴ Y Katz, *Artificial Whiteness: Politics and ideology in Artificial Intelligence* (Columbia University Press:2020); N Couldry and UA Mejias, *The costs of connection: How data is colonising human life and appropriating it for capitalism* (Stanford University Press: 2019).

perpetuate racial or other forms of discrimination.⁴⁰⁵ For AI to align with the African Charter's principles, it must be developed using diverse, representative data and designed to uphold peoples' right to equality and freedom from exploitation.

5.2 Peoples' right to political self-determination

The African Charter affirms the inalienable right of all peoples to self-determination, allowing them to freely determine their political status and pursue their economic and social development.⁴⁰⁶ It also provides that oppressed peoples have the right to free themselves from domination, with the assistance of states, against political, economic, or cultural exploitation.⁴⁰⁷ However, the rapid advancement of AI and emerging technologies, primarily driven by Western nations and multinational corporations, poses a significant challenge to Africa's political self-determination. These technologies often prioritise the interests of their creators, potentially imposing external norms that undermine African sovereignty. For example, AI-driven surveillance and data analytics could enable external control over national policies or disrupt local decision-making. Furthermore, reliance on foreign technology risks creating dependency, weakening African nations' ability to shape independent political and economic agendas. Addressing these imbalances requires ensuring that technology development and deployment align with the principles of self-determination and respect for African sovereignty.

5.3 Peoples' right to economic self-determination

The African Charter firmly provides for the right of all peoples to freely dispose of their wealth and natural resources, ensuring these are used exclusively in their interest and without deprivation.⁴⁰⁸ It mandates states to eliminate all forms of foreign economic exploitation, particularly by international monopolies, to enable equitable access to the benefits of national resources.⁴⁰⁹ Additionally, in cases of spoliation, dispossessed peoples have the right to lawful recovery and adequate compensation.⁴¹⁰ This principle extends to

⁴⁰⁵ Resolution 473 (above); See also A/HRC/42/59, UN Working Group of Experts on the Rights of Peoples of African Descent.

⁴⁰⁶ Article 20(1), African Charter.

⁴⁰⁷ Article 20(2), African Charter.

⁴⁰⁸ Article 21(1), African Charter.

⁴⁰⁹ Article 21(5), African Charter.

⁴¹⁰ Article 21(2), African Charter.

promoting international economic cooperation grounded in mutual respect, equitable exchange, and international law. The Charter emphasises a communitarian ethos, requiring states to manage resources collectively and individually in ways that strengthen African unity and solidarity.⁴¹¹ In the AI era, where risks of exploitation and inequity are heightened, these provisions are particularly critical to safeguard Africa's economic self-determination.

The rise of AI, robotics, and emerging technologies, dominated by Western nations and corporations, threatens Africa's ability to exercise economic sovereignty. These technologies are often tailored to foreign economic interests, exacerbating dependency, and stifling local innovation. As noted by the African Commission, the extraction of Africa's critical natural resources, such as rare minerals essential for AI and robotics, frequently occurs under inequitable conditions, benefiting external stakeholders while impoverishing local communities.⁴¹² This exploitation, coupled with environmental harm and inadequate compensation, deprives African nations of the wealth needed to drive their own development and technological advancement. As external control over digital infrastructure, data analytics, and financial technologies grows, it risks skewing economic benefits away from African enterprises, further entrenching disparities. To uphold the principles of the African Charter, it is imperative to address these inequities and ensure that Africa's resources and technologies are leveraged to support local empowerment, innovation, and sustainable development.

5.4 Peoples' right to development

The African Charter obligates states to ensure the right to development, emphasising that all peoples have the right to economic, social, and cultural development with respect for their freedom, identity, and equal access to shared global heritage.⁴¹³ However, the exploitation of Africa's resources by foreign entities undermines this right, as valuable minerals and resources are extracted with little regard for environmental sustainability or community welfare. Weak regulatory frameworks and political instability allow foreign corporations to capitalise at minimal cost, leaving local populations with environmental damage, depleted

⁴¹¹ Article 21(4), African Charter.

⁴¹² See African Commission Working Group on Extractive Industries, Environment and Human Rights Violations, October 2024.

⁴¹³ Article 22, African Charter.

resources, and minimal economic benefits. This stifles Africa's development potential, as revenues from resource exploitation fail to support socio-economic progress or infrastructure development, instead enriching external stakeholders and exacerbating inequality. Such exploitation reinforces dependency, impeding the continent's ability to achieve self-sustained, equitable growth and contravening the right to development enshrined in the Charter.

5.5 Peoples' right to peace and security

The African Charter uniquely enshrines the right to national and international peace, affirming that "*all peoples shall have the right to national and international peace and security.*"⁴¹⁴ It emphasises principles of solidarity and friendly relations, aligned with the UN Charter and the AU. Given Africa's historical struggles with colonialism, violence, and conflict, this right underscores the continent's commitment to peace as a fundamental human right and reflects the necessity of breaking free from cycles of violence to achieve stability and solidarity.

In the era of AI, the significance of Article 23 of the African Charter grows as emerging technologies present both opportunities and risks to peace and security. AI can enhance peacebuilding efforts through advanced surveillance, threat detection, and conflict resolution tools.⁴¹⁵ For example, AI-powered systems can monitor borders and analyse data to detect patterns of emerging conflicts or terrorist activities, enabling timely intervention.⁴¹⁶ Additionally, AI can support conflict resolution by identifying root causes of disputes and facilitating dialogue through tools like virtual reality simulations and machine

⁴¹⁴ Article 23(1), African Charter.

⁴¹⁵ EV Garcia, "Artificial intelligence, peace and security: Challenges for international humanitarian law" (2009) *Cadernos de Política Exterior* 8; J Johnson, "Artificial intelligence & future warfare: Implications for international security" (2019) 35.2 *Defense & Security Analysis* 147-169.

⁴¹⁶ E Pauwels, "Artificial Intelligence and data capture technologies in violence and conflict prevention" (2020) *Global Centre on Cooperative Security*; S Javvaji, "Surveillance technology: Balancing security and privacy in the digital age" (2023) *International Journal of Multidisciplinary Research* 178-185; FA Khan *et al*, "AI-driven counterterrorism: Enhancing global security through advanced predictive analytics" (2023) IEEE; J Mena, *Investigative data mining for security and criminal detection* (Butterworth-Heinemann, 2003); M Yankoski *et al*, "Artificial intelligence for peace: An early warning system for mass violence" (2021) in *Towards an international political economy of artificial intelligence* (Springer International Publishing, 2021) 147-175; M Rizvi, "Enhancing cybersecurity: The power of artificial intelligence in threat detection and prevention" (2023) *International Journal of Advanced Engineering Research and Science*; Van Puyvelde *et al*, "Beyond the buzzword: Big data and national security decision-making" (2017) *International Affairs* 1397-1416.

learning analyses.⁴¹⁷ These technologies hold promise for reducing tensions and fostering collaboration in resolving disputes.

However, AI also poses significant risks to peace and security. The weaponisation of AI, such as autonomous weapons systems (AWS), raises concerns about the escalation of conflicts and the ease of resorting to violence.⁴¹⁸ Moreover, reliance on AI in critical infrastructure and decision-making introduces vulnerabilities to cyberattacks, data manipulation, and algorithmic bias, potentially destabilising systems, and exacerbating tensions.⁴¹⁹ AI-driven disinformation campaigns and social media manipulation further undermine trust in democratic institutions and fuel conflicts.⁴²⁰ To balance these opportunities and risks, it is essential for African states and the global community to adopt robust governance frameworks and human rights-based approaches, ensuring that AI is developed and deployed responsibly to contribute to a more peaceful and secure world.

5.5.1 AI and the link between the right to peace and socio-economic rights

AI holds significant potential to contribute to achieving Sustainable Development Goals (SDGs) in Africa.⁴²¹ These goals, critical for African nations, include eradicating poverty, improving health and education, and fostering economic growth. However, the realisation of these objectives depends on a peaceful and stable environment, a principle enshrined in AU Agenda 2063, which envisions “*an integrated, prosperous, and peaceful Africa*.”⁴²²

⁴¹⁷ A Mandokhail, "The transformative role of artificial intelligence in conflict resolution and peacekeeping" (2024) *NUST Journal of International Peace & Stability* 104-109.

⁴¹⁸ L Antebi, "The proliferation of autonomous weapons systems: Effects on international relations" (2019) *National Security in a "Liquid" World* 75-92; I Bode and H Huelss, "Autonomous weapons systems and changing norms in international relations" (2018) 44.3 *Review of International Studies* 393-413.

⁴¹⁹ M Brundage *et al*, "The malicious use of artificial intelligence: Forecasting, prevention, and mitigation" (2018); T Blauth, "Artificial intelligence crime: An overview of malicious use and abuse of AI" (2022); TG Lewis, *Critical infrastructure protection in homeland security: defending a networked nation* (Wiley & Sons, 2019).

⁴²⁰ I Nsude *et al*, "Creating and fighting fake news: Artificial Intelligence as double-edged sword" (2021) *Artificial Intelligence and the Media* 47; JM Garon, "When AI goes to war: Corporate accountability for virtual mass disinformation, algorithmic atrocities, and synthetic propaganda" (2022) 49 *Northern Kentucky Law Review* 181; Z Tsotniashvili, "Silicon Tactics: Unravelling the role of artificial intelligence in the information battlefield of the Ukraine conflict" (2024) *Asian Journal of Research* 3.

⁴²¹ AUDA-NEPAD Whitepaper on AI (above) 18; UN General Assembly Resolution on AI (above) 2, 3, 4, 6 and 7; UN Body on AI Interim Report (above) para 4; UNESCO Recommendation on AI (above) para 9.

⁴²² AUDA-NEPAD Whitepaper on AI (above) 19, 130.

Conflict and insecurity have long hindered Africa's progress toward achieving the SDGs.⁴²³ War and instability not only result in loss of life and displacement but also disrupt critical infrastructure, impede economic growth, and exacerbate poverty and inequality.⁴²⁴ These issues directly impact the adoption and utilisation of AI technologies. Therefore, discussions on AI's role in advancing SDGs must prioritise peace and security as fundamental prerequisites for sustainable development. As indicated above, in the Africa Charter, peace is recognised as a fundamental human right.

Global AI governance frameworks often fail to address the intersection between civilian and military AI applications. Often, military AI is excluded from regulations⁴²⁵, overlooking the potential of such technologies to exacerbate conflicts and undermine peace. African stakeholders must adopt a holistic approach that considers the interconnectedness of AI, peace, and development.

5.5.2 AI and link between right to peace and civil and political rights

The impact of AI on the right to peace is deeply interconnected with civil and political rights, serving as a foundation for safeguarding rights such as the right to life and democratic participation. In times of peace, individuals are better protected from arbitrary deprivation of life and can exercise freedoms like voting, while armed conflict leads to widespread violence, human rights violations, and the denial of basic freedoms.⁴²⁶ Discussions on AI's implications for peace must emphasise its critical role in upholding these rights. Additionally, the principles of *jus ad bellum*, which regulate the use of force under international law, are essential for maintaining peace and preventing conflict escalation.⁴²⁷ However, UN discussions on military AI, such as the Group of Governmental Experts on AWS, often overlook these principles. For African nations, whose Charter uniquely enshrines the right to peace, it is crucial to integrate *jus ad bellum* into AI governance frameworks, ensuring the promotion of human rights and stability across the continent.

⁴²³ A Sharifi *et al*, "The sustainability–peace nexus: Why is it important?" (2021) 16 *Sustainability science* 1073.

⁴²⁴ Adams, *The new empire of AI* (above).

⁴²⁵ UN General Assembly Resolution on AI (above) 2; EU AI Act, Section 2(3) (above).

⁴²⁶ P Hayden, "Constraining war: Human security and right to peace" (2004) *Human Rights Review* 35-55.

⁴²⁷ C Heyns *et al*, "The international law framework regulating the use of armed drones"(2016) 65(4) *International and Comparative Law Quarterly* 791-827.

5.6 Peoples' right to a clean environment

The African Charter uniquely provides for peoples' right to a clean environment and the African Commission has highlighted the importance of this right on the African continent.⁴²⁸ AI offers significant potential for environmental conservation through tools like data analytics, remote sensing, and predictive modelling, aiding resource management, hazard detection, and renewable energy development.⁴²⁹ However, the deployment of AI infrastructure, such as energy-intensive data centers, risks increasing carbon emissions, while AI-driven decision-making could exacerbate socio-economic inequalities and harm local communities. Balancing these opportunities and challenges is essential to ensuring AI supports the right to a clean and sustainable environment.

AI opportunities and challenges for the right to a clean environment

AI offers significant opportunities to safeguard and promote the right to a clean environment in Africa. It can enhance environmental monitoring and management through real-time data collection and analysis.⁴³⁰ For instance, satellite imagery combined with AI algorithms can track deforestation, land degradation, and pollution, enabling timely interventions. AI-powered sensors and IoT devices can monitor air and water quality, providing actionable insights for policymakers to address pollution and enforce environmental regulations.⁴³¹

AI-driven predictive modelling can also play a critical role in mitigating climate change impacts in Africa.⁴³² By analysing historical climate data, AI can inform adaptation strategies and support early warning systems for natural disasters like droughts and floods. Furthermore, AI can foster renewable energy innovation by optimising solar, wind, and hydroelectric power systems, making clean energy more accessible while reducing

⁴²⁸ Article 24, African Charter; *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v Nigeria*, 155/96, para 51.

⁴²⁹ P Dauvergne, *AI in the wild: Sustainability in the age of artificial intelligence* (MIT Press, 2020); UNESCO AI Ethics Recommendation (above) preamble, paras 17-18; EU AI Act (2024), p.12; MISA, AI Report on Southern Africa (2024) 27; UN AI Body Interim Report (above) para 16; AUDA-NEPAD Whitepaper on AI (above) 69.

⁴³⁰ Dauvergne (above); MISA (above).

⁴³¹ UN AI Body Interim Report (above) para 16; AUDA-NEPAD Whitepaper on AI (above) 69; Dauvergne (above); MISA (above).

⁴³² A Hamdan *et al*, "AI and machine learning in climate change research: A review of predictive models and environmental impact" (2024); S Akter, "Harnessing technology for environmental sustainability: Utilizing AI to tackle global ecological challenges" (2024) *Journal of Artificial Intelligence General science* 49-57; I Rutenberg *et al*, "Use and impact of artificial intelligence on climate change adaptation in Africa", 1 January 2021.

greenhouse gas emissions.⁴³³ AI-enabled smart grids can enhance energy management and stability, advancing Africa's transition to sustainable energy.

Notwithstanding the foregoing, AI's development and deployment also presents significant risks to the right to a clean environment as enshrined in the African Charter. AI technologies, including data centers and computing hardware, consume vast amounts of energy and resources during production, operation, and disposal, contributing to carbon emissions and environmental degradation.⁴³⁴ Without robust regulations and sustainability measures, the expansion of AI infrastructure could intensify environmental pressures. Additionally, AI-driven optimisation processes may inadvertently prioritise short-term efficiency over long-term sustainability, leading to resource overexploitation, pollution, and ecological imbalance. Industries such as agriculture, mining, and transportation that adopt AI systems risk generating negative externalities, including habitat destruction and biodiversity loss.

AI also poses risks of misuse and inequality. Corporations or governments may deploy AI for harmful activities like illegal logging or unsustainable resource extraction, with the opacity of AI systems enabling regulatory evasion. Vulnerable ecosystems in Africa could face heightened threats from such illicit activities. AI-driven surveillance technologies may also suppress environmental activism by monitoring and intimidating activists or indigenous communities, undermining their civil liberties and efforts to hold polluters accountable. Furthermore, unequal access to AI technologies and expertise risks exacerbating environmental inequalities, leaving marginalised communities without the tools to advocate for environmental justice. These disparities threaten to perpetuate systemic inequalities and hinder progress toward a cleaner, more equitable environment in Africa.

5.7. The rights of vulnerable groups

⁴³³ AUDA-NEPAD Whitepaper on AI (above) 161; UN AI Body Interim Report (above) para 16; BK Bose, "Artificial intelligence techniques in smart grid and renewable energy systems—some example applications" (2017) Proceedings of the IEEE 105.11, 2262-2273; JT Dellosa and EC Palconit, "Artificial Intelligence in renewable energy systems: A condensed review of its applications and techniques" (2021) IEEE International Conference on Environment and Electrical Engineering and 2021 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe).

⁴³⁴ UN AI Body Interim Report (above) paras 37 and 65; E Van Wynsberghe, "Sustainable AI: AI for sustainability and the sustainability of AI" (2021) *AI and Ethics* 213-218.

Article 18 of the African Charter provides for the rights of vulnerable groups, making it vital to examine how AI impacts group rights and advances human rights in Africa. Apart from the protection it stipulates for family as natural unit and basis of society, most specifically Article 18 (3) stipulates that

The State Shall ensure the elimination of every discrimination against women and ensure the protection of the rights of the woman

It further stipulates that the ‘State shall ensure the protection of the rights of the child.’

Article 18 (4) of the African Charter further states that ‘the aged and the disabled shall also have the right to special protection in keeping with their physical or moral needs.’

In the African context, where diverse communities and cultural identities thrive, AI technologies such as data-driven decision-making, algorithmic governance, and automated systems interact with rights of children, women, indigenous groups, the elderly and other minorities. The African Commission has emphasised the importance of protecting minority groups.⁴³⁵ This section explores the complex relationship between AI and rights of these groups through case studies, policy documents, and legal frameworks, assessing challenges and opportunities in areas like cultural preservation, indigenous knowledge protection, political participation, and inclusive governance, while emphasising equity, non-discrimination, and meaningful representation.

5.7.1 AI and the rights of children

AI technologies are increasingly influencing children’s developmental, educational, and social environments.⁴³⁶ While AI offers opportunities to enhance learning experiences and accessibility, it also raises concerns about safety, privacy, discrimination, and exposure to harmful content.⁴³⁷ Children are more vulnerable to privacy breaches due to limited

⁴³⁵ See *Centre for Minority Rights Development and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya* para 149; 241.

⁴³⁶ General Comment No. 25 (above).

⁴³⁷ R Bogani and B Schafer, “Artificial Intelligence and Children’s Rights” in E Stefanini *et al* (eds), *The Cambridge Handbook of Information Technology, Life Sciences and Human Rights* (Cambridge University Press 2022); EO Arakpogun *et al*, “Artificial Intelligence in Africa: Challenges and Opportunities” in A Hamdan *et al* (eds), *The Fourth Industrial Revolution: Implementation of Artificial Intelligence for Growing Business Success* (Springer International Publishing, 2021); M Awofiranye, “The Challenges of Using AI in Education” (After School Africa, November 2023).

understanding of data processing and consent. Additionally, algorithmic bias in AI systems can reinforce inequalities, disproportionately affecting marginalised groups.⁴³⁸ Examples include predictive policing disproportionately targeting minority youth⁴³⁹ and biased educational algorithms limiting access to opportunities. In Africa, the limited reporting on children's online experiences further exacerbates these challenges, underscoring the need for robust frameworks to address AI's impact on children's rights.⁴⁴⁰

The impact of AI on children's rights in Africa is deeply shaped by the region's socio-economic, infrastructural, and cultural challenges. Significant disparities exist in internet access between rural and urban areas and among socio-economic groups, with rural communities facing major barriers due to affordability and infrastructure.⁴⁴¹ Gender disparities further deepen these challenges, as girls in the region are less likely to have access to technology or education in STEM fields, hindering their ability to participate in the digital economy and perpetuating systemic inequities. A child rights-based approach to AI, alongside targeted investments, and interventions, is critical to bridging gaps and ensuring that underprivileged and marginalised children can benefit equitably from AI advancements.

5.7.2 AI and rights of women

Beyond what is stipulated in Article 18(3) stated above and taking the guarantees thereunder further, a Protocol to the African Charter on the Rights of Women, the Maputo Protocol, was adopted as a dedicated treaty on the rights of women on the continent

⁴³⁸ D Byelov and M Bielova, "Challenges for Children's Rights in Connection with the Development of Artificial Intelligence" (2023) *Visegrad Journal on Human Rights* 13-17.

⁴³⁹ "Predictive Policing Is Still Racist—Whatever Data It Uses" (MIT Technology Review).

⁴⁴⁰ African Committee of Experts on the Rights and Welfare of the Child, 'DAC Concept Note 2023' (2023).

⁴⁴¹ L Masenya, "Development in South Africa: Bridging The Rural-Urban Gap" (2021) 88 *The Thinker* 10; R Lembani *et al*, "The Same Course, Different Access: The Digital Divide between Urban and Rural Distance Education Students in South Africa" (2020) 44 *Journal of geography in higher education* 70; GSMA, "The State of Mobile Internet Connectivity Report 2023". According to UNICEF and ITU, for instance, only 9.3% of rural populations in Malawi have internet access, compared to 40.7% in urban areas. Broader trends reveal that just 13% of children in Eastern and Southern Africa have home internet access, compared to 59% in Eastern Europe and Central Asia. UNICEF & ITU, "How many children and young people have internet access at home? Estimating digital connectivity during the COVID-19 pandemic" (2020).

outlining women's personal, political, cultural, socio-economic and environmental rights including rights to dignity and autonomy.⁴⁴²

As with other groups, AI presents both opportunities and risks for African women, highlighting the need for a gender-sensitive approach to its development and deployment.⁴⁴³ Stakeholders have emphasised that when assessing the impact of AI on women's rights, it is essential to recognise that women are not a homogeneous group.⁴⁴⁴ Therefore, it is crucial to approach these issues through an intersectional lens to account for the diverse experiences and challenges faced by women across different identities and contexts. While AI can enhance access to education, healthcare, and economic opportunities⁴⁴⁵, as noted above marginalised women face barriers like limited connectivity, language differences, and low digital literacy, which exacerbate the digital divide.⁴⁴⁶ In areas like health, AI can improve sexual and reproductive healthcare, but gaps in data and digital access hinder underprivileged women.⁴⁴⁷ Similarly, AI-driven financial services offer potential for women's economic empowerment, yet structural inequities in credit assessment and caregiving responsibilities may perpetuate economic disadvantages without targeted interventions.⁴⁴⁸

The underrepresentation of women in AI-related fields, particularly in much of Africa, and the prevalence of gender biases in AI systems pose significant challenges.⁴⁴⁹ Biased training data and algorithmic discrimination risk reinforcing stereotypes and excluding women from the benefits of AI technologies.⁴⁵⁰ Women living in poverty, with disabilities, or facing

⁴⁴² African Union (2003). Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa; F Borokini and B Zulfa, Principles of Afro-feminist AI Data (VELAI); F Borokini et al, Engendering AI: A gender and ethics perspective on artificial intelligence in Africa. Policy" (2021).

⁴⁴³ A/HRC/40/63, Report of the UN Special Rapporteur on the right to privacy, Report on "Privacy, technology and other human rights from a gender perspective" (2019).

⁴⁴⁴ African Commission, Multistakeholder consultation meeting, Kigali (above); A/HRC/51/28, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Indigenous women and the development, application, preservation and transmission of scientific and technical knowledge" (2022).

⁴⁴⁵ UNESCO, "Artificial intelligence and gender equality: Key findings of UNESCO's global dialogue" (2021).

⁴⁴⁶ M Fodor et al, "Gender inequality in the age of artificial intelligence and automation" (2021) 55(3) *The Journal of Developing Areas* 65-78.

⁴⁴⁷ S Keller et al, "Artificial intelligence for sexual and reproductive health: investigating implications for women's health and gender equality" (2022) 4(5) *The Lancet Digital Health* E323-E330; Strathmore University.

⁴⁴⁸ L Doering, "AI credit scoring and the economic citizenship of women in the global south: Kenya as a case study" in A Datta and A Herman (eds) *A Field Guide to AI for Social Justice* (Ford Foundation, 2022).

⁴⁴⁹ Data2X, "Invisible data women: Uncounted, untapped, underutilized" (2019) UN Foundation; M Garcia et al, "Analyzing gender inequality through large-scale Facebook advertising data" (2021) 16(2) *PLoS ONE* e0247809.

⁴⁵⁰ AUDA-NEPAD, AI for Africa (above) 48, 50.

cultural and religious barriers are particularly vulnerable to these risks, as AI systems often reflect and amplify existing societal inequalities. To address these issues, African nations must adopt intersectional methodologies and gender-responsive AI governance, aligning with frameworks like the African Charter and the Maputo Protocol to ensure inclusivity.

5.7.3 AI and rights of the elderly

In Addition to Article 18(4) and elaborating the terse formulation thereunder, the Protocol to the African Charter on the Rights of Older Persons in Africa – recently adopted in 2024 – provides for comprehensive protection of the rights of older persons in Africa. The Protocol mandates States to eliminate discrimination and stereotyping and to provide equal treatment, social security, and healthcare specifically suited to older persons. The rights of the elderly are also protected in terms of the Maputo Protocol which specifically prohibits age discrimination and calls for measures tailored to the needs of elderly women.⁴⁵¹

AI has various implications for the rights of the elderly. In Africa, where the demographic of the elderly is steadily growing⁴⁵², AI's influence on human rights presents a complex interplay of opportunities and challenges. The integration of AI technologies in Africa offers potential benefits for the elderly, such as improved healthcare services, more efficient social welfare systems, and increased access to information and resources.⁴⁵³ For the elderly's right to health, AI algorithms can analyse medical data to identify patterns indicative of health conditions that often affect the elderly such as Diabetes, Malaria, arthritic, osteoporosis, Alzheimer's or Parkinson's disease, thereby facilitating timely intervention. Equally, voice-activated devices and AI personal assistants can assist with medication reminders and emergency alerts. AI-powered assistive technologies, like smart home systems and chatbots can promote the right to autonomy and independence of the elderly.

AI and emerging technologies can also cause harm to the elderly. They can perpetuate ageism that impact the mental health of the elderly.⁴⁵⁴ AI and emerging technologies can

⁴⁵¹ Protocol to the African Charter on the Rights of Women in Africa, Article 22(b).

⁴⁵² A/HRC/33/44, 2016 Report Independent Expert on the enjoyment of all human rights by older persons.

⁴⁵³ D Mhlanga, "Artificial intelligence in elderly care: Navigating ethical and responsible AI adoption for seniors" (2023).

⁴⁵⁴ WHO, "Decade of healthy ageing (2021-2030)" (2020).

promote social bias through algorithmic discrimination.⁴⁵⁵ There have been very few States who systematically collect data on rights violations against the elderly, and in the context of AI, there are risks of having poor representation of this demographic in datasets.⁴⁵⁶ There are also several intersectional issues that compound discrimination for the elderly such as gender disparities, rural-urban divide, class and socioeconomic status play, ethnicity and cultural background. Further, AI and emerging technologies can lead to violation of the elderly's right to privacy, autonomy, freedom of information, and the right to a remedy. Already, in many African nations, the elderly are deprived of their autonomy and these emerging technologies can make it worse.⁴⁵⁷ There is also the challenge of lack of accessibility as a huge number of the elderly do not have AI literacy⁴⁵⁸ and the situation is worsened by lack of explainability and transparency of most AI systems.⁴⁵⁹ In terms of many African cultures, the elderly are often taken care of by their family which is part of the communitarian ethos. There are questions as to whether AI and emerging technologies will exacerbate the decline of the African principle of "taking care of our elders" where there will be overreliance on machines, hence losing the human element in elderly care.⁴⁶⁰

5.7.4 AI and the rights of persons with disabilities

Expanding on the protection provided for in Article 18(4) for the rights of PWDs, the African Commission catalyzed the adoption of the Protocol to the African Charter on the Rights of

⁴⁵⁵ WHO, "Global report on ageism"; Kollapan (above); See also J Oloka-Onyango, "Equal opportunity, age-based discrimination and the rights of elderly persons in Uganda" (2008); K Pembe, "Gender discrimination in the elderly and its impact on the elderly health" (2007) *Archives of gerontology and geriatrics* 295-306; A Frisoli, "The South African elderly: Neglect, social contribution and the HIV/AIDS epidemic" (2016); AE Lyare *et al*, "Ageing, ageism, cultural representations of the elderly and the duty to care in African traditions" (2021) in *Essays on Contemporary Issues in African Philosophy* (Springer International Publishing, 2021) 281-299.

⁴⁵⁶ Report on the African Charter on Human and Peoples' Rights (June 2006) para 164; Kollapan (above); PE Oamen and EO Ekhatior, "The impact of covid-19 on the socio-economic rights of older persons in Africa: The urgency of operationalising the Protocol on the Rights of Older Persons" (2021) 21 *African Human Rights Law Journal* 1; I Doron *et al*, "The rights of older persons within the African Union" (2016) 10 *The Elder Law Review* 1. R Giovanni, "The disruptive power of Artificial Intelligence: Ethical aspects of gerontechnology in elderly care" (2020) *Archives of Gerontology and Geriatrics* 91.

⁴⁵⁷ Kollapan (above); Oloka-Onyango (above); Pembe *et al* (above) 295-306; Frisoli (above); Lyare *et al* (above).

⁴⁵⁸ L Carter *et al*, "Exploring the intersection of the digital divide and artificial intelligence: A hermeneutic literature review" (2020) *AIS Transactions on Human-Computer Interaction* 253-275.

⁴⁵⁹ A/78/310, UN Special Rapporteur on right to privacy, Report on "Principles of transparency and explainability in processing of personal data in artificial intelligence" (2023); T Susnjak, "Towards clinical prediction with transparency: An explainable AI approach to survival modelling in residential aged care"(2024).

⁴⁶⁰ Kollapan (above); Oloka-Onyango (above); Pembe *et al* (above); Frisoli (above); Lyare *et al* (above).

Persons With Disabilities in Africa, a landmark legal instrument that provides for the rights of PWDs. The rights of PWDs encompasses a broad spectrum of rights, including civil, political, economic, social, and cultural aspects. Key provisions include the rights to live independently and be included in the community,⁴⁶¹ personal mobility,⁴⁶² education,⁴⁶³ and health,⁴⁶⁴ ensuring equal rights for persons with disabilities. Accessibility is also a central theme,⁴⁶⁵ highlighting the need to eliminate visible and invisible barriers in physical, digital, informational, and communication domains to support independent living and full participation. When designing their AI policies, states must take into consideration these critical instruments and their provisions in as far as protection of people with disabilities is concerned.

AI and emerging technologies present both opportunities and risks for PWDs in Africa. In terms of opportunities, AI can promote inclusivity and equality in employment, education, personal mobility, accessibility, communication and independent living.⁴⁶⁶ Inventions such as AI-powered smart wheelchairs which uses computer vision, voice control and machine learning algorithms to navigate complex environments can enhance user independence.⁴⁶⁷ In Uganda, Fundi Bots has integrated AI into their robotics and programming curriculum for youth, including those with disabilities.⁴⁶⁸ Other use cases include AI-driven prosthetic limbs that can learn, perceive and adapt to individual user patterns, improving functionality and comfort.⁴⁶⁹ The Rwandan startup Digital Umuganda has developed "Common Voice Kinyarwanda," an open-source dataset and AI model for speech-to-text conversion in Kinyarwanda, which is being used to create more accessible digital content for deaf individuals.⁴⁷⁰ Lelapa AI in South Africa is undertaking similar work with isiZulu and Sesotho

⁴⁶¹ Article 19, CRPD.

⁴⁶² Article 20, CRPD.

⁴⁶³ Article 24, CRPD.

⁴⁶⁴ Article 25, CRPD.

⁴⁶⁵ Article 9, CRPD.

⁴⁶⁶ AUDA-NEPAD, "Disability not inability" (above); Y Basson, "State obligations in international law related to the right to an adequate standard of living for persons with disabilities" (2017) 21 *Law, Democracy and Development* 68.

⁴⁶⁷ L Hou *et al*, "An autonomous wheelchair with health monitoring system based on Internet of Things" (2024) 14 *Sci Rep* 5878.

⁴⁶⁸ See Fundi Bots, <<https://fundibots.org/about-us/>>

⁴⁶⁹ UNESCO, "A bionic hand that sees" (2024).

⁴⁷⁰ Mozilla Foundation, "Lessons from building for Kinyarwanda on common voice" (2022).

large languages models.⁴⁷¹ In Zambia, Viamo's "Ask Viamo Anything" platform leverages generative AI and natural language processing to provide a voice-based interface for individuals with limited literacy or digital skills to access information and services on basic mobile phones.⁴⁷² AI adaptive learning platforms, which are tailored to the unique needs of students with disabilities can provide personalised learning experiences.⁴⁷³ In the health sector, AI platforms such as the Zindi platform are useful in disease diagnosis and personalised treatment plans for PWDs.⁴⁷⁴

Notwithstanding the above opportunities, AI may worsen existing discrimination – for example, already, 70% to 80% of PWDs of working age are unemployed.⁴⁷⁵ AI systems are often trained on data sets that lack representation from PWDs.⁴⁷⁶ The Special Rapporteur on the rights of persons with disabilities highlights the risk of discrimination against PWDs when AI tools are developed and deployed in areas such as employment, education, and health care.⁴⁷⁷ He emphasises the need for active consultation and participation of PWDs in AI development.⁴⁷⁸ Equally, the Committee on Economic, Social and Cultural Rights has emphasised the importance of including persons with disabilities in scientific decision-making processes.⁴⁷⁹ Another challenge for PWDs relates to limitation on access to AI and emerging technologies caused by limited technological infrastructure, lack of enabling technology tools, low levels of AI literacy, language challenges and the general digital divide.⁴⁸⁰ These technologies are often accessible only to a minority of PWDs, depending on several intersecting factors such as race, class, socio-economic, geographic, and health

⁴⁷¹ See website at <https://lelapa.ai/>

⁴⁷² E Humeau and T Deshpande, "AI for Africa: Use cases delivering impact" (2024).

⁴⁷³ A/HRC/49/52, Report of the Special Rapporteur on the rights of persons with disabilities, *Rights of persons with disabilities*, (2021).

⁴⁷⁴ As above.

⁴⁷⁵ As Above; See also NL Mbatha "Parental stress in raising a child with developmental disabilities in a rural community in South Africa" (2023) 20 *International Journal of Environmental Research and Public Health* 3969.

⁴⁷⁶ Shrinking the 'data desert': Inside efforts to make ai systems more inclusive of people with disabilities" (2020) ; A Datta *et al*, 'Proxy Non-Discrimination in Data-Driven Systems' (2017); P Ponce, "Direct & indirect discrimination applied to algorithmic systems: Reflections to Brazil" (2023) *Computer Law & Sec Review* 48.

⁴⁷⁷ A/HRC/49/52, 2021, AI Report of the UN Special Rapporteur on people with disabilities (above).

⁴⁷⁸ A/HRC/49/52, UN Special Rapporteur on the rights of persons with disabilities report on AI (above).

⁴⁷⁹ General Comment No. 25 (2020), on Article 15: Science and Economic, Social and Cultural Rights.

⁴⁸⁰ A/HRC/49/52, UN Special Rapporteur on the rights of persons with disabilities report on AI (above); E Orkoh and W Viviers, "Gender composition of ownership and management of firms and the gender digital divide in Africa" (2021) *South African Journal of Business Management* 52.

factors.⁴⁸¹ Finally, stakeholders have raised an important concern regarding AI, emerging technologies, and disability rights warning that it can also inadvertently disempower and dehumanise them by diminishing the essential human touch in their care and support.⁴⁸² Over-reliance on robotics or other non-human AI assistive technologies risks reducing meaningful human interaction, which is often a critical component of support for this community.⁴⁸³ In view of these challenges, States are urged to include disability considerations in their AI strategies and to adhere to disability-inclusive public procurement standards.

5.7.5 AI and other groups

Article 2 of the African Charter provides for non-discrimination against listed grounds and similar grounds not so listed. Considering that the provisions of the Charter give protection to the life and personal security of all human beings irrespective of their status and identity, the African Commission adopted Resolution 275 which seeks to ensure that any one is not subjected to violence of any kind on account of their real or perceived sexual orientation. Regarding AI, stakeholders during consultations also indicated that AI technologies have the potential to impact LGBTQI people in Africa, as they do elsewhere, both positively and negatively, reshaping their access to rights and opportunities.⁴⁸⁴ AI-driven data analysis can help identify patterns of discrimination and inequality, providing critical insights for policymakers and human rights advocates to address systemic injustices. AI's applications in healthcare also hold promise, offering tailored support for sexual minorities who often face disparities in access to inclusive and affirming medical services.

However, challenges posed by AI technologies for sexual minorities are significant, especially concerning the right to non-discrimination. Many stakeholders in consultations with the African Commission have expressed concern over how AI systems, if poorly designed, can

⁴⁸¹ UN Office for Disaster Risk Reduction, "2023 Global survey report on persons with disabilities and disasters" (2023); K Crenshaw, "Mapping the margins: Intersectionality, identity politics, and violence against women of color" (1991) 43 *Stanford Law Review* 1241.

⁴⁸² A/HRC/49/52, Report of the UN Special Rapporteur on the rights of persons with disabilities, Report on "Artificial intelligence, and the rights of persons with disabilities" (2022).

⁴⁸³ This point was especially emphasised by Commissioner Lawrence Mute during the Multi-stakeholder consultation meeting organised by the African Commission in Kigali, Rwanda, 30 September – 1 October 2024.

⁴⁸⁴ This point was raised and emphasised during the multi-stakeholder consultation meeting organised by the African Commission in Kigali, Rwanda, 30 September – 1 October 2024.

perpetuate biases and reinforce existing inequalities.⁴⁸⁵ AI algorithms trained on incomplete or biased datasets may fail to recognise or fairly represent the needs and identities of sexual minorities, leading to discriminatory outcomes in critical areas like employment, healthcare, and social services. Furthermore, AI-powered surveillance tools, often deployed without robust legal safeguards, can pose significant risks to the privacy and safety of sexual minorities, particularly in regions where their rights are not legally protected or socially accepted. These make it clear that human rights-based approaches, such as conducting impact assessments and engaging affected individuals and groups in AI adaptation and governance processes, are crucial.

⁴⁸⁵ As above.

PART VI – RECOMMENDATIONS ON AI GOVERNANCE FRAMEWORK

6. Introduction

As highlighted throughout this study, Africa faces a substantial governance gap at both regional and national levels in addressing the rapidly evolving landscape of AI, robotics, and emerging technologies.⁴⁸⁶ The development and deployment of these technologies demand an effective governance framework to ensure compliance with key norms within the African human rights system. Recognising this need, the African Commission, in Resolution 473, emphasised the necessity for a comprehensive governance framework that enhances human rights protection.⁴⁸⁷ The Commission called on State Parties to "work towards a comprehensive legal and ethical governance framework for AI technologies, robotics and other new and emerging technologies so as to ensure compliance with the African Charter and other regional treaties."⁴⁸⁸ Thus, a governance framework for AI, robotics, and emerging technologies in Africa should establish principles, rules, and institutions to regulate their use, aligning advancements with regional values and legal standards, in particular, human rights.⁴⁸⁹ While AI governance frameworks may include non-binding principles like ethics and guidelines⁴⁹⁰, the significant risks and concerns posed by AI technologies necessitate their foundation in binding rules.⁴⁹¹

Indeed, stakeholders have noted that existing law at the international, regional, and national levels must form the foundation of AI governance in Africa.⁴⁹² These laws provide a robust structure for safeguarding human rights, promoting fairness, and ensuring accountability,

⁴⁸⁶ ALT Advisory, *AI Governance in Africa*, September 2022.

⁴⁸⁷ Resolution 473 (above).

⁴⁸⁸ Resolution 473 (above).

⁴⁸⁹ A Sinha and B Zulfa, "A Handbook for approaching Governance of AI in Africa" (2023).

⁴⁹⁰ See for example, UNESCO's *Recommendation on the Ethics of AI* (above); OECD's *AI Principles* (above).

⁴⁹¹ See for example, European Union *AI Act* (above).

⁴⁹² African Commission, *Multistakeholder consultation meeting*, Kigali (above).

which are critical in addressing the risks posed by AI, such as discrimination, bias, and violations of privacy. International laws, including treaties and conventions, establish universal standards, while regional instruments like the African Charter on Human and Peoples' Rights offer context-specific guidance rooted in Africa's unique socio-political realities. National laws provide localised mechanisms to enforce regulations and address specific challenges within individual states. Integrating these legal frameworks into AI governance ensures continuity, legitimacy, and coherence, preventing the creation of fragmented or contradictory policies. Moreover, relying on existing laws reinforces the rule of law, builds public trust in AI systems, and supports the equitable and ethical use of AI technologies to drive sustainable development across the continent.

Stakeholders across Africa and globally have emphasised that AI governance must not only be grounded in existing legal frameworks but must also prioritise human rights law as its guiding principle.⁴⁹³ Governance must be inclusive.⁴⁹⁴ Whether at the national, regional, or international level, human rights law provides a universal and enduring standard to ensure that AI technologies are developed and deployed ethically and equitably. While diverse approaches to AI governance may emerge, a human rights-based framework must take precedence, as it safeguards fundamental freedoms, promotes accountability, and addresses risks such as discrimination, privacy violations, and unequal access. Centering human rights in AI governance ensures that technological progress aligns with the dignity, well-being, and development of individuals and communities, making it a cornerstone for ethical and inclusive AI adoption across the African continent.

Governance frameworks for AI, robotics, and emerging technologies can be established at international, regional, sub-regional, and national levels. Ensuring consistency across these levels is essential, particularly in Africa. The following sections outline key norms at each level.

6.1 International law governance of AI

⁴⁹³ African Commission, Multistakeholder consultation meeting, Kigali (above).

⁴⁹⁴ A/HRC/56/68, UN Special Rapporteur on Contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Report on "Artificial Intelligence" (2024) paras 51-60.

Globally, various approaches to AI governance have been explored, with a key emphasis on the role of international law, particularly international human rights law. UNESCO has identified nine frameworks for governing AI and stressed that due to AI's far-reaching impact on human rights, "international human rights laws and standards must form the basis for governing AI."⁴⁹⁵ Similarly, the UN High-level Advisory Body on AI highlighted strong stakeholder support for anchoring AI governance in the UN Charter, international human rights law, and other global commitments.⁴⁹⁶ This approach has been reinforced by the UN General Assembly, the UN Human Rights Council, and other UN entities, which stress compliance with international law as essential for effective AI governance. While substantive principles of international law are central, a comprehensive governance approach must also include process principles and institutions to ensure accountability and adaptability.

Towards this global governance of AI, the African Commission has stressed the "importance of participation by African states and Africans in the development of international policies and governance frameworks on AI technologies, robotics and other new and emerging technologies."⁴⁹⁷ The Commission further emphasised that it is essential to ensure that these global frameworks are free from racial and other forms of discrimination.⁴⁹⁸ While global standards on AI, robotics, and emerging technologies are critical in informing governance frameworks at the regional level, it must be noted that global standards often emphasise issues pertinent to more developed countries, which may not fully address the unique circumstances and priorities of African societies.⁴⁹⁹

The governance of AI technologies at the international level intersects with several branches of international law, each addressing specific dimensions of AI's impact. African states have signed and ratified several international law treaties that are relevant to the governance of AI. One key branch is *jus ad bellum*, the law governing the use of force between states. AI

⁴⁹⁵ UNESCO, Consultation paper on AI regulation: Emerging approaches across the globe, 16 August 2024, pages 4-6. UNESCO refers to the following 9 governance approaches: Adapting Existing Laws Approach, Rights-Based Approach, Standards-Based Approach, Agile and Experimentalist Approach, Facilitating and Enabling Approach, Access to Information and Transparency Mandates Approach, Risk-Based Approach, Principles-Based Approach, liability approach.

⁴⁹⁶ UN High-level Advisory Body on Artificial Intelligence, Governing AI for Humanity, Final Report, September 2024, page 39.

⁴⁹⁷ Resolution 473 (above); M Musoni, "Envisioning Africa's AI governance landscape in 2024".

⁴⁹⁸ Resolution 473 (above).

⁴⁹⁹ K Wakunuma *et al*, Reconceptualising Responsible Research and Innovation from a Global South Perspective (2021) *Journal of Responsible Innovation*.

technologies, particularly in military applications such as autonomous weapons and cyber warfare, raise significant questions about compliance with *jus ad bellum* principles, including the prohibition on the use of force and the right to self-defense.⁵⁰⁰ For Africa, a continent striving for peace and stability, the regulation of AI under *jus ad bellum* is crucial to preventing conflicts exacerbated by AI-driven military technologies.⁵⁰¹ Ensuring that AI is not misused in ways that provoke aggression or undermine sovereignty aligns with the African Union's commitment to peace and security.

International human rights law (IHRL) is another critical framework for AI governance, as it establishes the rights and freedoms that AI technologies must respect. AI has far-reaching implications for rights such as non-discrimination, dignity, life, privacy, freedom of expression, and economic and social rights, all of which are protected under IHRL. In Africa, where inequality and access to resources remain pressing issues, AI governance must ensure that these technologies do not perpetuate existing disparities or infringe on rights.⁵⁰² As has been indicated, biased algorithms or surveillance technologies could disproportionately harm marginalised communities. IHRL provides a necessary standard to guide AI deployment in ways that promote dignity, fairness, and social justice.

International humanitarian law (IHL) governs the conduct of armed conflict and is particularly relevant to AI's military applications that have been referred to in this study.⁵⁰³ AWS and AI-enabled targeting technologies risk violation of IHL principles, such as distinction, proportionality, and necessity. For Africa, where several regions have experienced armed conflict, AI governance under IHL is essential to ensure that new military technologies do not exacerbate violence or lead to unlawful harm. Adherence to IHL principles ensures that the development and use of AI in warfare remain consistent with the protection of civilians and combatants' rights under international law.

Finally, international environmental law plays a vital role in the governance of AI, particularly in addressing the environmental impacts of AI development and deployment. The energy demands of AI systems, reliance on rare earth and extractive materials, and the

⁵⁰⁰ African Commission's submission on lethal autonomous weapon systems to the UN (above).

⁵⁰¹ As above.

⁵⁰² Adams, *The new empire of AI* (above).

⁵⁰³ African Commission's submission on autonomous weapon systems to the UN Secretary-General (above).

environmental footprint of data centers all raise concerns about sustainability.⁵⁰⁴ In Africa, a continent already vulnerable to climate change and environmental degradation, it is critical to ensure that AI technologies are developed in an environmentally responsible manner. International environmental law provides the framework to regulate AI's environmental impact, fostering innovation while addressing harm to ecosystems and supporting sustainable development goals. Together, these branches of international law provide a comprehensive foundation for addressing the multifaceted challenges and opportunities posed by AI, particularly in the African context.

6.2 African Union law and governance of AI

Relevant African Union (AU) law for the governance of AI is anchored in the African Union Constitutive Act, the African Charter on Human and Peoples' Rights (African Charter), and other regional human rights instruments.⁵⁰⁵ The Constitutive Act establishes key principles that guide the AU and its member states, reflecting a commitment to unity, development, and the protection of human rights across Africa.⁵⁰⁶ Central among these principles are the sovereign equality and interdependence of member states, respect for borders inherited at independence, and the prohibition of the use or threat of force.⁵⁰⁷ The AU emphasises non-interference in internal affairs while reserving the right to intervene in cases of war crimes, genocide, or crimes against humanity, underscoring its collective responsibility to prevent atrocities.⁵⁰⁸ It also upholds democratic governance, human rights, and the rule of law while condemning unconstitutional changes of government and promoting peaceful conflict resolution.⁵⁰⁹

The AU further advocates for inclusive social and economic development, gender equality, and respect for the sanctity of life and the environment. It fosters solidarity and cooperation among member states to achieve regional integration and development goals. Additionally, the AU condemns terrorism, subversive activities, and any actions destabilising the

⁵⁰⁴ A/HRC/24/41, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive Industries and Indigenous Peoples" (2013); A/HRC/18/35, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive industries operating within or near indigenous territories" (2011).

⁵⁰⁵ See AU Constitutive Act and the African Charter.

⁵⁰⁶ Article 4, AU Constitutive Act.

⁵⁰⁷ Above.

⁵⁰⁸ Above.

⁵⁰⁹ Above.

continent. These principles form the foundation of the AU's mission to build a united, peaceful, and prosperous Africa that adheres to democratic values and safeguards the rights and dignity of its people.

The African Union Constitutive Act is highly relevant to the governance of AI on the continent as it provides a foundational framework of principles that can guide the responsible development and deployment of AI technologies. The Act's emphasis on sovereign equality and interdependence among member states ensures that AI governance respects the diverse contexts and needs of African nations while fostering regional cooperation. Its commitment to human rights, democratic governance, and the rule of law underscores the need for AI systems to align with ethical principles and safeguard fundamental freedoms. For instance, the prohibition of discrimination, upholding of the right to privacy, and protection from exploitation can be pivotal in addressing potential biases and risks associated with AI technologies.

Furthermore, the Act's focus on inclusive social and economic development highlights the potential of AI to drive equitable growth and bridge digital divides across the continent. Its advocacy for gender equality and respect for the sanctity of life ensures that AI governance frameworks account for marginalised groups and prioritise human well-being. The principles of solidarity and cooperation encourage a unified approach to AI regulation, preventing exploitation by external actors and mitigating threats such as AI-driven misinformation or surveillance. By grounding AI governance in these principles, African nations can harness AI for sustainable development while ensuring it aligns with the continent's shared values and aspirations.

As has already been indicated, Constitutive Act's principle prohibiting the use of force (*jus ad bellum*) is crucial to the governance of AI on the African continent, as it ensures that AI technologies in the military domain are developed and deployed in ways that promote peace, security, and sustainable development. As AI becomes increasingly integrated into military and security operations, adherence to this principle is essential to prevent the misuse of AI in autonomous weapon systems, cyberattacks, and other aggressive applications that could destabilise regions. By upholding this prohibition, the AU can foster trust among member states, reduce the risk of conflict, and ensure that AI technologies contribute to collective security rather than exacerbate instability. Additionally, a peaceful

and secure environment is foundational for development, as it allows member states to focus on leveraging AI for economic growth, social inclusion, and addressing pressing challenges such as poverty and inequality. Integrating this principle into AI governance frameworks ensures that the continent prioritises ethical innovation and aligns technological progress with its broader goals of peace and prosperity.

As indicated throughout this study, one of the key legal frameworks central to African Union law and relevant to AI governance in Africa is the set of human rights instruments signed and ratified by African states, particularly the African Charter. These instruments provide a binding legal foundation for addressing the ethical, social, and legal challenges posed by AI technologies. The African Charter and related human rights frameworks articulate principles that are not only universal but also uniquely reflective of Africa's historical and socio-political context. The African Charter also emphasise the relevance of international human rights law. Principles such as dignity, non-discrimination, security and peace, development, and self-determination are vital for ensuring that AI technologies align with the continent's shared values and aspirations.

The principle of dignity is particularly crucial to AI governance, as it underscores the intrinsic worth of every individual. In the context of AI, this means ensuring that technologies do not dehumanise individuals or violate their fundamental rights. For instance, AI systems used in decision-making, such as automated hiring or resource allocation, must be designed to respect the humanity of those affected and avoid outcomes that undermine their dignity. Similarly, the principle of non-discrimination is critical to addressing biases in AI algorithms that may disproportionately harm marginalised groups, including women, persons with disabilities, and minority communities. AI governance frameworks must prioritise fairness and inclusivity, ensuring that technologies do not perpetuate or exacerbate existing inequalities.⁵¹⁰

The African Charter's emphasis on the right to security and peace is also highly relevant, particularly in light of the growing use of AI in military and security applications. AWS, surveillance tools, and AI-driven cybersecurity solutions must be regulated to prevent misuse that could destabilise regions or violate the right to peace. Furthermore, the

⁵¹⁰ Adams, The new empire of AI (above).

principle of development emphasises the need for AI to drive equitable economic and social progress across the continent. Governance frameworks should ensure that AI technologies address Africa's unique challenges, such as poverty, education, and healthcare, while preventing their monopolisation by a few at the expense of broader societal benefit.

Finally, the right to self-determination as provided for in the African Charter is essential to preserving the sovereignty and agency of African states in the global AI landscape. This right demands that African nations retain control over the design, deployment, and governance of AI technologies, ensuring that these systems reflect local contexts and priorities rather than being dictated by external actors.

The right to self-determination is also relevant to AI governance in as much as it relates to the right to non-exploitation of Africa's resources, including extractive minerals and data of African peoples. AI development relies heavily on rare earth minerals and other raw materials often sourced from African nations, raising concerns about unethical extraction practices, environmental degradation, and exploitation of local communities.⁵¹¹ Governance frameworks must ensure that the extraction of these resources respects the principles of sovereignty, equitable benefit-sharing, and environmental sustainability enshrined in the African Charter. By upholding these provisions, African states can prevent exploitative practices by global tech companies and ensure that resource extraction contributes to local development, respects community rights, and aligns with the continent's broader goals of self-determination and sustainable growth. Integrating these principles into AI governance safeguards not only the rights of African peoples but also the long-term viability of the resources critical to AI innovation.

Equally, regional governance of AI technologies on the African continent must prioritise the protection and equitable use of African peoples' data, guided by principles of equity, non-discrimination, and resistance to data colonialism. Data frameworks should ensure that African data is not exploited unequally or appropriated by external entities without fair benefit-sharing, as such practices perpetuate historical patterns of inequity and undermine sovereignty. By establishing robust data governance structures, African nations can protect

⁵¹¹ A/HRC/24/41, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive Industries and Indigenous Peoples" (2013); A/HRC/18/35, Report of the Special Rapporteur on the rights of indigenous peoples, Report on "Extractive industries operating within or near indigenous territories" (2011).

against discriminatory AI outcomes while fostering inclusive innovation. These frameworks must promote the fair use of data to advance local development, uphold the dignity of African peoples, and resist practices that prioritise profit over equity and justice.

6.3 National law and governance of AI

National legislation and policies can play a critical role in the governance of AI technologies on the African continent, as they serve as the primary mechanisms through which states fulfill their obligations to respect, protect, and promote human rights. African nations are already enacting laws and policies relevant to AI governance, addressing issues such as data protection, cybersecurity, and digital innovation. These efforts are vital for ensuring that AI technologies are developed and deployed in ways that align with national priorities while safeguarding the rights and freedoms of individuals within their jurisdictions. By providing clear legal frameworks and enforcement mechanisms, national legislation ensures accountability and addresses the risks associated with AI, such as bias, discrimination, and violations of privacy.

The importance of national legislation is further underscored by the fact that the primary obligation to respect human rights rests with the state. As such, AI governance at the national level must be consistent with the international and regional human rights obligations that states have committed to through treaties such as the African Charter and other international frameworks. These treaties establish binding principles, including dignity, non-discrimination, and privacy, which must guide the development of national laws and policies on AI. By aligning with these obligations, national legislation not only ensures compliance with international norms but also enhances the credibility and legitimacy of AI governance frameworks on the continent.

Consistency in language and intent between national laws and regional or international obligations is also essential for creating coherent and effective governance structures.⁵¹² Divergent or inconsistent approaches to AI regulation risk creating gaps or conflicts that undermine the protection of human rights and hinder the realisation of Africa's development goals. To address this, national policies and legislation must adopt terminology

⁵¹² T Chengeta, "The right to non-discrimination, and freedom from racial oppression should be part of the guidelines and principles in the discussion on AWS" (above).

and frameworks that reflect the human rights principles enshrined in regional and international treaties. This alignment will help African states build robust AI governance frameworks that balance innovation with ethical considerations, ensuring that AI technologies contribute to sustainable development and the well-being of all citizens.

6.4 Obligations and duties in governance of AI

Stakeholders have emphasised that the life cycle of AI technologies—from development to deployment and post-deployment—involves a diverse range of actors, including states, individuals, and legal entities such as companies and corporations.⁵¹³ An effective AI governance framework must account for the existing legal obligations of these actors, as established under international, regional, and national laws. Recognising and integrating these obligations ensures that the framework addresses accountability, compliance, and ethical responsibilities at every stage of AI's life cycle.

7.4.1 State obligations

Under international law, states have binding obligations arising from treaties, customary international law, and general principles of law, which collectively establish the legal framework for global governance.⁵¹⁴ International treaty obligations are crucial for anchoring AI governance as most of them prioritise human dignity, equality, and fairness, especially as AI technologies increasingly impact civil, political, social, and economic rights. Customary international law imposes universally binding obligations on states, regardless of whether they are party to specific treaties. Norms such as the prohibition of torture, genocide, and racial discrimination, along with peremptory norms (*jus cogens*) like the prohibition of slavery and crimes against humanity, reflect universal values and obligations. These norms are critical in the context of AI governance, ensuring that states do not exploit or deploy AI systems in ways that infringe upon fundamental rights or violate international ethical standards. States must align their domestic AI policies with these norms to avoid breaching their obligations and ensure the ethical deployment of AI technologies. Additionally, international law also underscores the importance of state accountability in

⁵¹³ African Commission, Multistakeholder consultation meeting, Kigali (above).

⁵¹⁴ See UN Charter, ICCPR, ICESCR etc.

international law.⁵¹⁵ States that breach their international obligations are required to make reparations, which may include restitution, compensation, or satisfaction.⁵¹⁶ International law also highlights the duty of states to prevent and the prohibit aiding or assisting internationally wrongful acts.⁵¹⁷ This is directly relevant to AI governance, as states must ensure that their development, deployment, and export of AI technologies do not contribute to human rights abuses or violations of international law. By embedding these state international obligations into AI governance frameworks, states can ensure accountability, prevent misuse, and foster trust in the global AI ecosystem while upholding the principles of justice and equity.

At the regional level, the existing African human rights system – through the African Charter and other human rights instruments – provide for state obligations that are critical in governance of AI, robotics, and emerging technologies. States have binding obligations to ensure the respect, protection, and fulfilment of human rights, even in the context of technological advancements.⁵¹⁸ Further, in terms of the African Charter, must establish and improve appropriate national institutions entrusted with the promotion and protection of human rights.⁵¹⁹ Thus, in face of AI, robotics, and emerging technologies, governments should enact legislation, regulations, and policies that uphold human rights standards, including transparency, accountability, and redress mechanisms. They should also foster public awareness and engage in consultations with stakeholders to ensure that these technologies align with human rights principles.

Finally, African state obligations relevant to AI governance are primarily embedded in national legislation, including constitutions, bills of rights, and sector-specific laws. Constitutions across the continent often enshrine fundamental rights such as equality, non-discrimination, life, privacy, equality, and freedom of expression, which are directly applicable to AI governance.⁵²⁰

⁵¹⁵ See The Articles on the Responsibility of States for Internationally Wrongful Acts (ARSIWA).

⁵¹⁶ Above.

⁵¹⁷ Above.

⁵¹⁸ Article 25, African Charter.

⁵¹⁹ Article 26, African Charter.

⁵²⁰ See for example, South Africa's Constitution (1996), Section 14; Kenya's Constitution (2010), Articles 28 and 35; Nigeria's Data Protection Regulation (NDPR, 2019) and Rwanda's Data Protection Law (2021).

7.4.2 Individual duties

The African Charter uniquely underscores the duties and responsibilities of individuals to their communities.⁵²¹ Its distinctive approach can offer fresh insights when examining the implications and applications of AI, robotics, and emerging technologies. In context of this study, this may translate to an emphasis on developing and using AI, robotics and emerging technologies in ways that uplift and benefit one's community, rather than merely focusing on individual benefits of the technology. As these technologies permeates societies, individuals, especially developers and policymakers, bear the responsibility to ensure AI respects and uplifts human rights. They are tasked with the duty to prevent misuse and unintended consequences. This African Charter's unique stance on duties—such as respecting fellow humans and the community—challenges us to rethink AI, robotics, and emerging technologies. It is not just about individual rights but about collective responsibility. Technology practitioners have a duty to ensure their creations respect community values and serve a greater good.

Furthermore, the African Charter emphasises the necessity of balancing individual rights with overarching societal security and welfare.⁵²² With AI, robotics, and emerging technologies becoming deeply ingrained in both our critical infrastructure and daily social constructs, their security, transparency, and fairness cannot be overemphasised. In this regard, the African Charter prompts the need for a solid regulatory structure and vigilant oversight to keep misuse at bay and ascertain that AI genuinely benefits everyone.⁵²³ The African Charter also emphasise the principle of mutual respect and tolerance⁵²⁴ which is relevant when considering some of the risks posed by AI.

⁵²¹ Article 27 of ACHPR.

⁵²² Article 27 of ACHPR.

⁵²³ As above.

⁵²⁴ Article 28 of the ACHPR.

Under individual duties, the African Charter also emphasise the need to consider the broader societal and cultural implications of one's actions.⁵²⁵ In designing and developing AI technologies, individuals must consider the societal and cultural implications of technologies they invent. The African Charter's emphasis on the individual's duty not to jeopardise national security and public safety is also relevant to the development and use of AI technologies.

7.4.3 Obligations of other actors

Technology developers and providers hold a crucial duty and responsibility in recognising the importance of upholding human rights in the AI technologies they develop and deploy within African society. At the regional level, technology developers – including legal persons – can be bound by individual duties provided in the African Charter. The African Commission has noted that AI companies and businesses have a significant impact on human rights and as such must respect their human rights obligations in Africa.⁵²⁶ The duties of companies and other legal persons are also outlined in soft law instruments which are essential for AI governance as they establish a foundation for ethical, rights-based business practices in the development and deployment of AI technologies. For example, the UN Guiding Principles on Business and Human Rights emphasise the corporate responsibility to respect human rights and provide remedies for harm, which is critical in ensuring AI systems do not perpetuate discrimination, bias, or other human rights abuses.⁵²⁷ The African Union Guiding Principles on Business and Human Rights contextualise these responsibilities within Africa's socio-economic realities, and in the context of AI governance, they can ensure that it aligns with regional priorities such as equitable development and addressing systemic inequalities.⁵²⁸ The OECD Guidelines for Multinational Enterprises provide a framework for responsible conduct across sectors, offering valuable guidance on integrating human rights, labour relations, and environmental considerations which can be adapted in governance of AI systems.⁵²⁹ Similarly, the Voluntary Principles on Security and Human Rights underscore the need for businesses, particularly those in sensitive sectors – which can include AI – to

⁵²⁵ Article 29 of the ACHPR.

⁵²⁶ Resolution 473 (above).

⁵²⁷ UN Guiding Principles on Business and Human Rights (2011).

⁵²⁸ African Union Guiding Principles on Business and Human Rights (2021).

⁵²⁹ OECD Guidelines for Multinational Enterprises (2011).

ensure AI technologies are deployed safely and ethically, avoiding harm to communities.⁵³⁰ These instruments provide an adaptable framework for embedding human rights, fairness, and accountability of AI developers, corporations, companies etc. into AI governance.

The role of AI developers extends beyond mere innovation; they must ensure that AI, robotics, and emerging technologies are designed, implemented, and maintained in ways that respect and protect human rights. The obligation to uphold human rights stems from the ethical responsibility of developers to prevent harm and promote the well-being of users. AI developers and providers must actively work to prevent AI from perpetuating biases, discrimination, or harm, and strive to create technologies that promote equity and justice. By embedding human rights principles into AI development, developers can create technologies that empower communities, support sustainable development, and enhance the overall quality of life, thereby fulfilling their moral and social responsibilities. Non-compliance with human rights can have profound negative effects on Africa, exacerbating existing inequalities and creating new forms of discrimination and injustice.

As has already been indicated, the African Charter's uniqueness is in its emphasis on individual obligations and societal welfare, which introduces a nuanced lens to the global discourse on AI. It can serve as a reminder that AI is not merely a technological tool; it is a transformative societal entity. Consequently, all stakeholders, from developers to policymakers to individual users, carry the onus of ensuring AI's ethical and equitable deployment. The African Charter's emphasis on cultural inclusivity asserts that AI development should resonate with and respect diverse cultural ethos. It encourages the global AI narrative to be more inclusive and representative, highlighting the importance of embedding local values and practices into AI systems.

Furthermore, the Charter underscores the significance of global collaboration and unity in AI, especially as the technology continues to reshape global dynamics. By promoting a duty-centric view on human rights, it provides a comprehensive framework that can guide the ethical development and application of AI not only on the continent but globally. This perspective ensures that AI technologies contribute to the common good, respecting the dignity and rights of all individuals while fostering innovation and progress. The African

⁵³⁰ Voluntary Principles on Security and Human Rights (2000).

Charter thus emerges as a pivotal reference point for integrating human rights into AI governance, advocating for a balanced approach that harmonises technological advancement with ethical imperatives.

6.5 Adequacy of existing law in governance of AI

Stakeholders emphasised that while the existing laws and obligations provide a foundational framework for AI governance, they may not sufficiently address the unique and emerging challenges posed by these technologies, underscoring the need for tailored regulations.⁵³¹ Thus, while the existing human rights framework in Africa is applicable to AI, robotics, and emerging technologies, there is a notable governance or regulatory gap at both regional and national levels. First, the continent lacks specific and dedicated laws that comprehensively address these technologies. Although there are some related laws, such as data protection legislation, these are scattered and insufficient to cover the breadth of issues presented by emerging technologies. Furthermore, AI, robotics, and emerging technologies introduce novel challenges that are not adequately addressed by current laws. For instance, the deployment of autonomous systems and the use of AI algorithms in decision-making processes—traditionally the domain of human judgment—highlight gaps in the existing human rights system.⁵³² These advancements raise new ethical and legal questions that existing frameworks are ill-equipped to handle, underscoring the urgent need for tailored regulatory measures to fill these voids and ensure the responsible and rights-respecting development and use of such technologies across Africa.

In Europe, the European Union has already enacted the Artificial Intelligence Act, marking the first binding regional legislation on AI, and the Council of Europe is presently developing a human rights convention on AI. These initiatives can serve as valuable models for African countries to develop their own regional regulations tailored to the continent's unique context and requirements.

⁵³¹ African Commission, Multistakeholder consultation meeting, Kigali (above); T Chengeta, “Autonomous weapon systems and the inadequacies of existing law: The case for a new treaty” (2022) 8 *Journal of Law & Cyber Warfare* 111–124.

⁵³² Chengeta, “Autonomous weapon systems and the inadequacies of existing law” (above).

Recognising the governance gap posed by certain AI, robotics, and emerging technologies, the African Commission became the first regional inter-governmental human rights institution to endorse the emerging concept of "meaningful human control."⁵³³ This concept aims to ensure that humans retain authority over decisions affecting fundamental rights. The Commission specifically stated: "The use during hostilities of new weapons technologies such as remote-controlled aircraft should only be envisaged if they strengthen the protection of the right to life of those affected. Any machine autonomy in the selection of human targets or the use of force should be subject to meaningful human control. The use of such new technologies should follow the established rules of international law."⁵³⁴ The emerging norm of "meaningful human control" has become increasingly prominent in discussions about the governance of emerging technologies. It can serve as a key principle to help bridge the legal gap created by AI, robotics, and other emerging technologies.

6.6 Role of African ethics and values in governance of AI

In AI governance, stakeholders highlight three key roles for ethics: filling legal gaps by addressing areas where regulations are absent and guiding the development of new legal standards; clarifying the risks and harms posed by AI technologies that require regulation; and setting a higher moral standard that goes beyond the minimum requirements of the law.⁵³⁵

Stakeholders have also observed that discussions on the role of ethics in AI governance often prioritise Western ethical frameworks.⁵³⁶ To this end, the African Commission has underscored the importance of integrating African values and ethics in AI governance framework.⁵³⁷ This emphasis aligns with the principles enshrined in the African Charter, which advocates for the recognition and protection of African cultural heritage, community solidarity, and respect for human dignity. Incorporating these values into a binding framework is crucial, as it ensures that the governance of these technologies is not only legally sound but also culturally relevant and ethically grounded. African ethics, with their

⁵³³ African Commission, General Comment 3, para 35 (above).

⁵³⁴ Above.

⁵³⁵ African Commission, Multistakeholder consultation meeting, Kigali (above).

⁵³⁶ Above.

⁵³⁷ Resolution 473 (above); see also S Segun, "Taking AI ethics from principles to practice: A guide to implementing responsible AI", March 2024.

emphasis on communal well-being and respect for individual rights, provide a unique perspective that can help shape a framework that is not merely a replication of Western models but one that resonates with the lived experiences and social realities of African peoples. By grounding the framework in these values, policymakers can ensure that the development and deployment of AI and robotics are in harmony with the continent's social norms and contribute positively to its development goals, while safeguarding the fundamental rights of its citizens.

Numerous stakeholders have underscored the pivotal role of ethics in governing AI technologies, with UNESCO emerging as a prominent contributor with its recommendations on AI ethics.⁵³⁸ A significant segment of stakeholders contends that while certain ethical principles may hold universal relevance, others are contingent upon regional contexts. Therefore, it becomes imperative for African stakeholders to assess and incorporate values that are distinctive to African communities, which may not necessarily align with global initiatives on AI ethics. The African Charter itself advocates for the recognition of African values, which highlights the importance of contextual considerations in shaping ethical frameworks for AI governance.

In its preamble, the African Charter states that the Charter was adopted by states “taking into consideration the virtues of their historical tradition and the values of African civilization which should inspire and characterize their reflection on the concept of human and peoples' rights.”⁵³⁹ Further, the Charter provides that it shall be the duty of the state to ensure “promotion and protection of morals and traditional values recognized by the community.”⁵⁴⁰ In the context of AI, it is therefore important for African states to consider the morals and traditional values of communities that may be impacted by AI.

Further, the African Charter provides that “the State shall have the duty to assist the family which is the custodian of morals and traditional values recognised by the community.”⁵⁴¹ In contemplating the impact of AI technologies on African communities, it is thus important for

⁵³⁸ UNESCO Recommendation on AI ethics (above).

⁵³⁹ African Charter, Preamble.

⁵⁴⁰ Article 17 (3), African Charter.

⁵⁴¹ Article 18(2), African Charter.

African states to consider the impact of AI on the family which is explicitly recognised as the custodian of morals and traditional values.

The African Charter equally recognises the importance of positive African culture by providing that part of the duties of Africans is “to preserve and strengthen positive African cultural values in his relations with other members of the society, in the spirit of tolerance, dialogue and consultation and, in general, to contribute to the promotion of the moral wellbeing of society.”⁵⁴²

This is in tandem with the Ubuntu philosophy prevalent in Africa, which emphasises community, interconnectedness, and mutual support. Ubuntu, which translates to "I am because we are," embodies the principles of shared humanity and collective responsibility. In essence, designing AI for Africans necessitates the proactive integration of African values and principles into both its design and implementation. The initial step in this process is to normatively identify and understand which values and principles should be embedded in AI systems.

Africa boasts rich moral traditions centred around core values of interconnectedness, solidarity, communality, and respect, all of which are encapsulated in ethical frameworks like Ubuntu. By embedding these principles, AI systems can truly resonate with the cultural and ethical fabric of African societies, ensuring that technological advancements are both relevant and beneficial to the people they are designed to serve.⁵⁴³ This provision in the African Charter emphasising the duty to preserve and strengthen positive African cultural values holds significant importance for African stakeholders when formulating policy on AI. By embedding these cultural values into AI policy, stakeholders ensure that technological advancements align with the social and moral fabric of African societies. This approach promotes AI that is ethical, inclusive, and respectful of human dignity, fostering trust and collaboration among communities. Furthermore, it encourages the development of AI systems that address local needs and challenges, contributing to sustainable development and the overall well-being of society. Integrating positive African cultural values into AI

⁵⁴² Article 29 (7), African Charter.

⁵⁴³ DO Eke *et al*, “Towards Shaping the Future of Responsible AI in Africa” in DO Eke *et al* (eds) *Responsible AI in Africa: Social and cultural studies of robots and ai* (Palgrave Macmillan, 2023).

policy not only preserves cultural heritage but also paves the way for innovative solutions that resonate with the African context and enhance the quality of life for all citizens.

Recognising and integrating African cultural values into AI policy formulation can enhance the relevance and acceptance of AI solutions among local communities, thereby fostering greater trust and engagement with these technologies. Overall, embracing the principles outlined in the African Charter serves as a guiding framework for African stakeholders to navigate the complexities of AI governance while preserving the rich cultural heritage of the continent.

6.7 Institutional roles in governance framework

As already indicated in Part II of this study, African regional institutions can play a pivotal role in the formulation and implementation of an effective, legally binding framework on AI, robotics, and emerging technologies that aligns with African human rights principles. The African Commission, for instance, can be instrumental in setting normative standards, model laws, and guiding principles that ensure these technologies are developed and utilised in ways that respect human dignity and fundamental freedoms. Similarly, other AU institutions such as the Peace and Security Council and the Pan African Parliament can contribute by addressing – through their respective mechanisms – issues related to their mandates.

Sub-regional organisations, such as the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC), are also crucial in this governance ecosystem. These bodies can tailor region-specific guidelines and regulations that reflect the unique challenges and opportunities within their respective areas. By coordinating efforts across member states, these institutions can foster a cohesive approach to regulating emerging technologies, ensuring that standards are consistently applied and respected throughout the continent.

National institutions, particularly human rights commissions, and other regulatory bodies are vital in the domestic implementation of these regional frameworks. These entities are on the front lines of monitoring compliance with human rights standards and can offer timely interventions when violations occur. They are also essential in raising public awareness about the implications of AI and robotics, providing educational resources and platforms for dialogue. Additionally, these national bodies can collaborate with judicial systems to

interpret and enforce laws related to emerging technologies, thereby ensuring that national legislation aligns with regional human rights norms.

Civil society organisations, especially human rights non-governmental organisations (NGOs), play a complementary yet indispensable role in this landscape. They can act as watchdogs, holding both government and private entities accountable for the ethical use of AI and other technologies. NGOs can engage in advocacy, pushing for stronger regulatory frameworks and providing expert input during the policy formulation process. They also serve as a bridge between policymakers and the public, ensuring that the voices and concerns of marginalised communities are heard and addressed. By conducting independent research, publishing reports, and facilitating community outreach, civil society organisations help create a more transparent and inclusive governance framework for emerging technologies in Africa.

Ultimately, the governance of AI technologies in Africa must be guided by the overarching goal of promoting human rights as provided in the African Charter, fostering societal well-being, and advancing sustainable development. By adhering to key principles such as respect for human rights, transparency, accountability, inclusivity, ethics, interdisciplinary collaboration, capacity building, data protection, privacy, and international cooperation, African countries can harness the transformative potential of AI, robotics, and emerging technologies while addressing its risks and maximising its benefits for all.

Developing comprehensive policies and regulations to govern AI, robotics, and emerging technologies is complex and requires significant resources and expertise. Interdisciplinary collaboration is also crucial for effective governance, as it brings together experts from diverse fields such as law, ethics, technology, sociology, and economics to address the multifaceted challenges posed by these technologies comprehensively. Additionally, capacity building and education play a vital role in enhancing AI governance in Africa. This involves equipping policymakers, regulators, legal professionals, and the public with the knowledge and skills needed to understand, assess, and regulate AI technologies effectively.

The rapid pace of AI development poses a challenge for policymakers who must understand the technology's nuances and anticipate its implications. Developing effective AI policies involves addressing issues such as data privacy, algorithmic transparency, bias and discrimination, cybersecurity, and the ethical use of AI. This requires not only technical

knowledge but also insights into the societal and economic impacts of AI. A lack of these means that it can be a struggle to keep up with AI developments and demands, leading to regulatory gaps that can hinder AI adoption or result in unregulated AI applications that may cause harm. In addition, the lack of local expertise in AI policy development can result in the adoption of international frameworks that may not be fully suitable for the African context. African countries need tailored policies that reflect their unique cultural, economic, and social landscapes. This includes considering local data protection needs, fostering inclusive and responsible AI development that benefits all segments of society and promoting local innovation ecosystems. International collaboration and capacity-building initiatives can play a crucial role in addressing these challenges. By partnering with global institutions, utilising regional cooperation, and investing in education and training for policymakers, African countries can build the necessary expertise and resources to develop robust AI policies and regulations. This will ensure that AI technologies are deployed responsibly and effectively, driving sustainable development, and safeguarding public interests.

6.8 Recommendations

While examining the human rights ramifications of AI, robotics, and emerging technologies in this study, various recommendations emerged concerning the actions stakeholders should take to uphold human rights.

7.8.1 Recommendation to the African Commission and the African Union

With the rapid advancement of AI across Africa, the African Commission must prioritise developing a comprehensive governance framework grounded in international human rights law. As indicated, stakeholders have stressed the importance of adopting a human rights-based approach to AI governance, ensuring that technological progress does not undermine fundamental rights and freedoms. Stakeholders stressed the need for an incremental approach to establishing a governance framework, beginning with declarations, model laws, and other measures, ultimately leading to a legally binding framework convention on AI and human rights on the continent.⁵⁴⁴

a) Declaration on AI in the civilian domain

⁵⁴⁴ African Commission, Multistakeholder consultation meeting, Kigali (above).

The African Commission should, in line with its practice⁵⁴⁵, begin by issuing an *African Declaration on the Human Rights Implications of AI in the Civilian Domain*. This document would address the impact of AI on civil and political rights, socio-economic rights, peoples', and group rights. The declaration can focus on key issues such as dignity, non-discrimination, equality, equity etc., which would guide member states in developing national policies to safeguard human rights in the application of AI technologies in civilian contexts.

b) Declaration on AI in the military domain

Equally essential is an *African Declaration on the Human Rights Implications of AI in the Military Domain*. The use of AI in military applications, particularly autonomous weapon systems, raises serious ethical and legal concerns.⁵⁴⁶ This declaration would provide a framework to evaluate and regulate the military use of AI, ensuring compliance with international humanitarian law and preventing arbitrary deprivation of life or other human rights violations.⁵⁴⁷

c) Developing a Model Law on AI

Building on these declarations and in line with its previous practice⁵⁴⁸, the African Commission should draft an *African Model Law on AI*. As defined by the African Commission, “a model law is typically a detailed set of provisions embodying the international, regional, or sub-regional standards on a particular subject, developed for the purpose of facilitating the adoption of national legislation. As the word ‘model’ suggests, a model law need not be adopted by States in its exact form, but could be adjusted to suit the legal and other realities of each State. Thus, unlike treaties, which are binding once ratified and impose obligations on States Parties, a model law is a non-binding document crafted specifically as a tool to guide law makers in translating obligations emanating from international treaties into detailed national legislation.”⁵⁴⁹ A model law on AI would serve as a template for member

⁵⁴⁵ See The Declaration of Principles of Freedom of Expression and Access to Information in Africa, adopted by the African Commission on Human and Peoples' Rights at its 65th Ordinary Session in 2019.

⁵⁴⁶ See ECOWAS, “Communiqué of the regional conference on the peace and security aspects of autonomous weapons systems” (2024).

⁵⁴⁷ See A/HRC/AC/32/CRP.1, Human Rights Council Report on human rights implications of new and emerging technologies in the military domain.

⁵⁴⁸ See African Commission, Model Law on Access to Information for Africa (2013).

⁵⁴⁹ As above.

states, providing guidance on governing AI development, deployment, and use in alignment with human rights principles. It would address critical areas such as data protection, algorithmic transparency, accountability, and the prevention of discriminatory outcomes, fostering a harmonised legal approach across the continent.

d) Establishing an African Framework Convention on AI and Human Rights

Ultimately, the African Commission and the AU should aim to establish an *African Framework Convention on AI and Human Rights*. A framework convention is generally a type of international treaty that establishes a broad set of principles, objectives, and obligations to guide cooperation and action among parties on a specific issue. Unlike detailed treaties, a framework convention provides a general structure within which more specific agreements, protocols, or measures can be developed over time to address evolving challenges. This approach allows for flexibility and progressive implementation while promoting consistency and alignment among the parties involved.

A framework convention on AI and human rights is an ideal format for governing AI at this stage due to the rapidly evolving nature of AI technologies and the urgent need to address potential governance gaps. By establishing broad principles and objectives, a framework convention provides a flexible yet robust foundation for international cooperation, ensuring that governance keeps pace with technological advancements while remaining adaptable to unforeseen developments. It allows for the progressive development of specific protocols and agreements as the understanding of AI's impacts deepens. This incremental approach ensures that critical human rights protections and ethical standards are immediately embedded in AI governance, mitigating risks while allowing time to refine and expand regulations as technologies and societal needs evolve.

An *African Framework Convention on AI and Human Rights* can draw significant lessons from existing regional and international framework conventions to establish a robust and adaptable governance structure. The recently adopted Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law

demonstrates how a rights-based approach can anchor AI governance.⁵⁵⁰ By embedding principles such as transparency, accountability, and respect for democracy and the rule of law, the framework ensures that AI systems align with societal values. Africa can adapt these principles to its unique contexts, emphasising non-discrimination, data justice, and the equitable use of resources, particularly in the extraction and application of data and minerals used in AI systems.

The *UN Framework Convention on Climate Change* (UNFCCC) offers a model for establishing a flexible framework that evolves with technological and scientific advancements.⁵⁵¹ The UNFCCC's structure, which allows for the negotiation of detailed protocols like the Kyoto Protocol and Paris Agreement, highlights the value of setting foundational principles while enabling iterative developments. An African framework convention could similarly adopt overarching commitments on human rights and AI ethics while allowing the gradual introduction of targeted protocols to address specific challenges, such as AI's role in surveillance, automated decision-making, or its environmental impact. This flexibility would ensure that the governance framework remains relevant and responsive to emerging risks.

The World Health Organization (WHO) *Framework Convention on Tobacco Control* (FCTC) underscores the importance of embedding public health and human rights principles into governance frameworks.⁵⁵² It also highlights the value of setting minimum standards that all states must meet while allowing for stricter measures where necessary. Africa could adopt a similar approach, requiring baseline commitments to prevent the exploitation of vulnerable populations, ensure fair access to AI technologies, and protect the right to development and security. This approach would empower African states to implement stricter measures aligned with their specific needs and capacities, fostering both regional consistency and national autonomy.

Finally, the *Convention on Certain Conventional Weapons* (CCW) provides an excellent example of a framework convention's adaptability to complex and evolving challenges.⁵⁵³ By allowing for the negotiation of specific protocols to address new threats, such as blinding

⁵⁵⁰ See Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law (2024).

⁵⁵¹ UN Framework Convention on Climate Change (1992).

⁵⁵² See Framework Convention on Tobacco Control (2005).

⁵⁵³ See Convention on Certain Conventional Weapons (1980).

laser weapons or explosive remnants of war, the CCW demonstrates how a flexible treaty can remain relevant over time. An *African Framework Convention on AI and Human Rights* could adopt a similar model, setting overarching principles of equity, accountability, and non-exploitation while enabling the progressive development of protocols to regulate specific AI applications as their implications become clearer. This structure would prevent governance gaps, ensure immediate protections, and promote the long-term adaptability required to manage the rapidly evolving nature of AI technologies.

e) Institutional frameworks for governance

Stakeholders also emphasised the importance of institutional frameworks in the governance framework.⁵⁵⁴ The African Commission's existing special procedures, including Special Rapporteurs and Working Groups, should be mandated to assess how their mandates are impacted by AI, robotics, and emerging technologies. These special procedures, which currently focus on issues like freedom of expression, women's rights, and the rights of vulnerable populations, could provide valuable insights into the specific human rights challenges posed by these technologies. Integrating technology impacts into their work would enable these bodies to deliver more comprehensive and targeted recommendations, ensuring that emerging issues are addressed within their established human rights frameworks. This approach would enhance the Commission's ability to respond to technology-related human rights concerns across various domains.

To address the complex and interdisciplinary nature of AI, robotics, and emerging technologies, stakeholders also emphasised that the African Commission should establish additional special mechanisms.⁵⁵⁵ A "*Working Group on AI, Robotics, and Emerging Technologies*" could be formed to focus specifically on these issues, providing expertise, conducting research, and advising on policy development. This group should include experts from diverse fields, such as technology, law, and ethics, to offer a multifaceted perspective on emerging challenges. Additionally, appointing an "*African Special Rapporteur on the Human Rights Implications of AI, Robotics, and Emerging Technologies*" would create a dedicated role for investigating rights violations, engaging with member states, and

⁵⁵⁴ African Commission, Multistakeholder consultation meeting, Kigali (above).

⁵⁵⁵ African Commission, Multistakeholder consultation meeting, Kigali (above).

coordinating with other stakeholders. This role would be crucial in promoting accountability and ensuring that human rights considerations are integrated into the governance of these technologies.

6.8.2 Recommendations to African states

Stakeholders also noted several recommendations to African states:

a) Anchor AI policies in human rights

It is imperative for African states to ensure that their AI policies and regulations are firmly grounded in human rights principles enshrined in the African Charter. This entails integrating human rights impact assessments into the development and deployment of AI technologies, with a focus on safeguarding fundamental rights in the African Charter. In their policy documents, strategies, and regulations, African states should conceptualise AI both as a tool to enhance access to human rights and as an integral component of the human rights framework. Conceptualising AI as a tool to access human rights is critical for African states as it underscores their obligation to ensure equitable access to AI technologies, enabling citizens to benefit from advancements in healthcare, education, and economic opportunities while reducing digital inequalities. On the other hand, conceptualising AI as an integral component of the human rights framework is critical for African states in formulating policies to regulate AI companies, particularly multinational corporations. This can help states shift the focus from over-commercialisation of AI to humanising AI access, ensuring that technology serves societal needs and advances human dignity.

b) Conduct AI maturity assessments

African states should prioritise the implementation of comprehensive AI maturity assessments to evaluate the readiness of their AI ecosystems. These assessments should encompass various dimensions, including technological capacity, human-impact, regulatory frameworks, and ethical considerations. By understanding the current state of AI development and deployment, states can identify areas for improvement and tailor their policies to address specific challenges and opportunities.

c) Establish effective governance mechanisms

African states should establish robust domestic governance mechanisms to oversee the development, deployment, and use of AI technologies. This includes establishing independent regulatory bodies with the authority to monitor AI systems, enforce compliance with human rights standards, and address grievances related to AI-related harms. Additionally, states should promote transparency and accountability in AI decision-making processes, ensuring that stakeholders have access to information and mechanisms for recourse in cases of rights violations.

d) Foster multi-stakeholder collaboration

Collaboration among governments, civil society organisations, academia, and the private sector is essential for promoting human rights in AI development and deployment. African states should actively engage with diverse stakeholders to solicit input, share best practices, and collectively address challenges related to AI governance. By fostering inclusive and participatory processes, states can leverage the expertise and perspectives of various stakeholders to develop contextually relevant and rights-respecting AI policies.

e) Invest in capacity building

African states should prioritise investments in capacity building initiatives to enhance the technical expertise and skills needed to navigate the complex landscape of AI governance. This includes training programs for policymakers, regulators, legal professionals, and other relevant stakeholders on the ethical, legal, and societal implications of AI technologies. By equipping stakeholders with the necessary knowledge and tools, states can ensure more informed decision-making and effective oversight of AI systems.

6.8.3 Recommendations to AI developers

Stakeholders noted the following recommendations:

a) Embed human rights principles

AI developers must integrate human rights principles into every stage of AI development, from design to deployment.

b) Conduct human rights impact assessments

Prior to developing and deploying AI technologies, developers should conduct thorough human rights impact assessments to evaluate potential risks. This involves engaging with diverse stakeholders, including civil society organizations, affected communities, and human rights experts, to identify and address any adverse effects on human rights such.

c) Ensure access and inclusivity

Developers must prioritise the accessibility and inclusivity of AI technologies to ensure that they benefit all segments of society, including marginalised and vulnerable groups. This requires designing AI systems that are culturally sensitive, language-inclusive, and tailored to diverse user needs. Additionally, developers should actively address barriers to access, such as digital literacy gaps, to promote equal opportunities for all individuals to benefit from AI advancements.

d) Establish grievance mechanisms

AI developers should establish robust grievance mechanisms to address human rights violations resulting from the use of AI technologies. This involves creating channels for individuals to report concerns, seek remedies, and hold developers accountable for any harms caused by their AI systems. By fostering transparency and accountability, developers can build trust with users and demonstrate their commitment to upholding human rights standards outlined in the African Charter.

6.8.4 Recommendations to African research institutions

Stakeholders noted the following recommendations:

a) Integrate human rights education

African research institutions should prioritise human rights education and training for AI researchers and developers.

b) Foster interdisciplinary collaboration

African research institutions should promote interdisciplinary collaboration between AI experts and human rights practitioners.

c) Conduct ethical research

Researchers should adhere to ethical guidelines and principles when conducting AI-related research. This includes obtaining informed consent from participants, protecting privacy and confidentiality, and addressing risks to human rights.

d) Promote open access and transparency

African research institutions should advocate for open access to AI research and data, promoting transparency and accountability in the development and deployment of AI systems. By making research findings, methodologies, and datasets openly available, institutions can facilitate scrutiny, peer review, and public engagement, fostering trust and collaboration in the AI research community while upholding human rights principles.