

Charting Africa's Digital Future

A STUDY ON STRATEGIES TO ENHANCE
AFRICA'S ROLE IN SHAPING GLOBAL
INTERNET PUBLIC POLICIES

AND

ESTABLISHING A HARMONISED
REGULATORY FRAMEWORK FOR INTERNET
GOVERNANCE ACROSS AFRICA

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Acronyms

ACs	Advisory Committees
AU STC CICT	AU specialised Technical Committee on Communication & ICT
AEDD	Africa–Europe Digital Dialogue
AfCFTA	Africa Continental Free Trade Agreement
AFRALO	African Regional At–Large Organisation
AFRINIC	African Network Information Centre
AI	Artificial Intelligence
AIGF	Africa Internet Governance Forum
ALAC	At–Large Advisory Committee
ALSs	At–Large Structures
APRM	African Peer Review Mechanism
ATU	Africa Telecommunications Union
AU	Africa Union
AUC	African Union Commission
BPFs	Best Practice Forums
ccNSO	Country Code Names Supporting Organisation
ccTLD	Country Code Top–Level Domain
CCWG–ACCT	Cross Community Working Group on Enhancing ICANN Accountability
CoAP	Constrained Application Protocol
CSO	Civil Society Organisation
D4D	Digital for Development
DDoS	Distributed Denial–of–Service
DNS	Domain Name System
DNSOP	Domain Name System Operations
DRI	Development Reality Institute
EAIGF	East Africa Internet Governance Forum
EC	Empowered Community
ECOWAS	Economic Community of West African States
FGI–CA	Forum sur Gouvernance de l’Internet pour l’Afrique Centrale (FGI–AC ou IGF–CA)
FIFA	Forum on Internet Freedom in Africa
GAC	Governmental Advisory Committee
GAIA	Global Access to the Internet for All (GAIA)
GDC	Global Digital Compact
GDPR	General Data Protection Regulation
GNSO	Generic Names Supporting Organisation
gTLDs	generic Top–level Domains
IAB	Internet Architecture Board
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICCPR	International Covenant on Civil and Political Rights
IEEE	Institute of Electrical and Electronics Engineers
IESG	Internet Engineering Steering Group
IETF	Internet Engineering Task Force
IGAD	Intergovernmental Authority on Development
IGF	Internet Governance Forum
IoR	Internet of Rights

IoT	Internet of Things
IP	Internet Protocol
IRTF	Internet Research Task Force
ISP	Internet Service Provider
ITU	International Telecommunication Union
ITU-D	ITU Telecommunication Development Sector
ITU-R	ITU Radiocommunication Sector
ITU-T	ITU Telecommunication Standardisation Sector
MAG	Multistakeholder Advisory Group
NAIGF	North Africa IGF
NCSG	Non-Commercial Stakeholder Group
NIGF	National IGF initiatives
NomCom	Nominating Committee
NRIs	National and Regional Initiatives
PDP	Policy Development Process
REC	Regional Economic Communities
RFC	Request for Comments
RIR	Regional Internet Registry
RSSAC	Root Server System Advisory Committee
SADC	Southern African Development Community
SAIGF	Southern Africa Internet Governance Forum
SDO	Standard Development Organisation
SO	Supporting Organisation
TLD	Top Level Domain
UDHR	Universal Declaration of Human Rights
W3C	World Wide Web Consortium
WAIGF	West Africa Internet Governance Forum
WCIT	World Conference on International Telecommunications
WGs	Working Groups
WRC	World Radiocommunications Conference
WSIS	World Summit on the Information Society
WTDC	World Telecommunication Development Conference
WTSA	World Telecommunication Standardisation Assembly

Executive Summary

This report presents findings from a comprehensive analysis of Africa's digital landscape and its engagement in key global Internet governance forums, including:

- Internet Corporation for Assigned Names and Numbers (ICANN),
- Internet Engineering Task Force (IETF),
- International Telecommunication Union (ITU),
- World Wide Web Consortium (W3C),
- Institute of Electrical and Electronics Engineers (IEEE), and
- Internet Governance Forum (IGF).

Commissioned by the African Telecommunications Union (ATU), the report offers strategic recommendations to strengthen Africa's influence in global Internet public policy and to support the development of a harmonised regulatory framework for Internet governance across the continent. It assesses the extent of African representation and participation in leadership, decision making and policy shaping roles within these forums. It also identifies key barriers – political, economic, technical and cultural – that hinder more robust engagement from African countries, organisations and individuals.

Emerging Technologies and Strategic Positioning

The analysis explores the implications of emerging technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), Blockchain, and the Metaverse on Africa's digital future. These technologies are framed as critical enablers of digital sovereignty and competitiveness, offering Africa a unique opportunity to shape global governance frameworks through a necessity-driven, human-centric lens.

Benchmarking existing governance frameworks across the continent against global best practices, the report proposes actionable steps to build a resilient, future ready regulatory architecture capable of

responding to Africa's evolving digital landscape.

Strategic Imperative: Africa's Role in Global Internet Governance

Africa's digital transformation is central to its socio-economic development and equitable participation in the global digital economy. While the continent has made notable strides particularly in intergovernmental bodies like the ITU and IGF, significant challenges remain. A persistent digital divide, driven by infrastructure gaps and high costs, continues to limit broad stakeholder involvement. The analysis highlights a disconnect between Africa's growing political engagement and its limited technical contributions to foundational standards bodies such as the IETF and W3C. This imbalance underscores institutional vulnerabilities, exemplified by the recent crisis at the African Network Information Centre (AfriNIC) which revealed the urgent need for a coordinated continental response to safeguard digital infrastructure.

Emerging technologies, including AI, Digital Public Infrastructure (DPI) and Blockchain, present both opportunities and imperatives for African leadership. The continent's pragmatic approach focused on solving real-world problems positions it to influence global governance in ways that prioritise equity and inclusion.

Participation Across Key Platforms

Africa's engagement in global Internet governance remains uneven. While political and policy level participation is growing, technical contributions particularly in standard setting bodies are still limited. For example:

- IETF: As of December 2025, only 22 Request for Comments (RFCs) had African authors, representing just 0.22% of all RFCs. Barriers include limited funding, low awareness, and capacity constraints.

- W3C: Minimal African membership with participation confined to academic institutions and tech companies in countries like Morocco, Senegal and South Africa.
- ICANN: African engagement has been a strategic focus with regional plans (FY21–25 and FY26–30) aimed at boosting participation through capacity building and outreach to underrepresented groups.
- ITU: Africa has historically shown strong engagement leveraging its government centric structure to advance regional priorities in areas such as broadband access, digital economies, and cybersecurity.
- IEEE: Participation in leadership and technical committees remains limited though individuals from Tunisia, South Africa, Egypt, and Algeria have held key roles.

Methodology and Key Insights

The report draws on a multi-method approach, including a literature review, a baseline survey, and expert interviews with stakeholders from member states, regulatory bodies, and technical communities across Africa. Findings reveal that while African engagement is increasing, it remains low due to systemic, financial, political, procedural, and linguistic barriers. These challenges hinder meaningful participation and contribute to the underrepresentation of African voices in global policy outcomes. Additionally, the lack of diversity and inclusivity in some forums undermines the legitimacy and effectiveness of decision-making processes.

Power asymmetries particularly the dominance of countries from global North, large tech companies and their proxies further constrain African influence. Internal

silos within organisations like ICANN also limit collaboration and coherence.

Navigating a Fragmented Landscape

The proliferation of Internet governance forums has created a fragmented and often overwhelming environment for African stakeholders, especially those with limited resources. The need to engage across multiple platforms with diverse agendas strains capacity and reduces the ability to participate meaningfully in any single process.

Recommendation

The report proposes a harmonised, multistakeholder led regulatory framework and offers a set of concrete, actionable recommendations. These include the establishment of a Permanent African Digital Sovereignty Task Force to protect critical digital assets, the expansion of capacity-building initiatives to bridge the technical-policy divide, and the adoption of a Pan-African DPI framework to ensure the continent controls its foundational digital layers. By implementing these strategies, Africa can transform its growing presence into profound global influence, ensuring that the Internet serves the needs and priorities of all its people.

Call to Action

The report underscores the need for coordinated continental action to address institutional vulnerabilities, build technical capacity, and ensure Africa's priorities, digital inclusion, data sovereignty and resilience are reflected in global Internet governance outcomes.

Part One

Africa's digital landscape and its engagement in Internet governance forums

Section One : Internet Governance Processes and Africa Engagement

Executive Insight:

Africa's digital transformation is at a pivotal juncture. While the continent's demographic and economic trends position it as a future digital powerhouse, its limited historical engagement in global internet governance presents both a challenge and an opportunity. A shift toward proactive, coordinated and well-resourced participation is essential to ensure Africa's digital self-determination.

1.1 Internet Governance Processes and Africa Engagement

Africa's strategic importance in the global digital landscape is increasing. Driven by a youthful population, rich natural resources, and expanding consumer markets, (United Nations Economic Commission for Africa, 2025) and a burgeoning digital economy that is transforming sectors from finance to agriculture and health. Africa's involvement in global Internet public policy has historically been limited. Politics is undeniably a critical factor in Africa's digital governance, especially when considering the thresholds of stability (Kerttunen & Tikk, 2019). The diverse interests among AU member states, combined with ineffective governance mechanisms and deficiencies in policy, strategy, and infrastructure, have significantly hampered Africa's efforts in addressing internet governance challenges.

Furthermore, regional bodies like the AUC are shaped by their historical, cultural, and political environments, which, in turn, influences their capacities and ideologies concerning issues like cyber governance (Pawlak, Tikk, Kerttunen, 2020).

However, in recent times, efforts are underway from various stakeholders to position the continent as an active co-creator of internet governance policies and decisions that serve the interests of the region. The significance of this strategic direction is emphasised by the African Union's visionary Digital Transformation Strategy for Africa (2020–2030)¹, which serves as a comprehensive framework for guiding the continent's digital future. The strategy aligns with African Union Agenda 2063 and the Sustainable Development Goals (SDGs), emphasising foundational pillars such as;

- enabling policy and regulation,
- robust digital infrastructure, and
- digital skills.

It calls for enhanced cooperation among AU member states and regional economic communities to harmonise laws and avoid fragmented, siloed approaches, laying the groundwork for a unified continental digital ecosystem.

¹ https://au.int/sites/default/files/documents/38507-doc-DTS_for_Africa_2020-2030_English.pdf

Internet governance relies on collaborative frameworks that bring together diverse actors to shape its policies and regulations. These multilateral and multi-stakeholder processes involve governments, international organisations, civil society, the private sector, technical experts, and academia. This inclusive approach ensures transparency, accountability and a reflection of all stakeholders' interests, fostering a stable, secure, and open online environment for societal benefit. As defined by the Working Group on Internet Governance (WGIG) in 2005, internet governance is "the development and application by governments, the private sector, and civil society, in their respective roles, of shared principles, norms, rules, decision making procedures, and programs that shape the evolution and use of the Internet" (De Bossey, 2005, p. 4).

In recent years, the Africa Region has demonstrated a notable increase in participation by its entities and stakeholders in key international forums. This increased level of engagement is characterised by a stronger representation of African perspectives on important issues such as infrastructure development, data governance, and the pursuit of equitable access. This presence particularly in intergovernmental spaces such as ITU has facilitated the forging of networks and alliances among African stakeholders, which serves to amplify their collective regional voice and enhance their influence globally.

Despite these strides, significant barriers continue to impede full and equitable participation. Among these are limitations in resources, encompassing not only financial constraints that hinder travel and sustained involvement but also deficiencies in technical expertise and capacity building within relevant institutions, (AUC PRIDA, 2019). These resource disparities contribute to unequal power dynamics, where established actors from more developed regions often hold greater sway in agenda setting and decision-making processes. The limited presence in formal leadership and decision making roles impacts the extent to which African priorities and perspectives are genuinely integrated into global internet policy.

1.2 Objectives and Scope of the Study

This study is commissioned by the ATU to provide strategic recommendations for enhancing Africa's role in global Internet public policies and establishing a harmonised regulatory framework for Internet governance across the continent.

The specific objectives of this study are to:

- **Assess African Leadership and Presence:** To examine the level of representation and participation of African countries, organisations and individuals in leadership, decision-making, and policy-shaping roles across key Internet governance organisations namely ICANN, IETF, ITU, W3C, IEEE, and the IGF.
- **Identify Challenges and Barriers:** To identify and analyse the political, economic, technical, and cultural barriers that limit African participation and representation in these global forums.
- **Examine the Impact of Emerging Technologies:** To assess the impact of emerging technologies like AI, Internet of Things (IoT), Blockchain and the Metaverse on

Internet governance and public policy in Africa, framing them as a critical component of a forward-looking strategy.

- **Propose a harmonised Regulatory Framework:** To evaluate existing Internet governance frameworks in Africa and benchmark global best practices to provide concrete, actionable recommendations for a harmonised, resilient, and forward-looking regulatory framework for the continent.

1.3 Rationale and Approach

This report represents a departure from a conventional assessment of Africa's standing in the global digital sphere. It is founded on the conviction that the continent's limited representation in global internet governance is a critical deficit demanding a deliberate, coordinated, and well-resourced intervention.

This document is an evidence-based roadmap. Its primary goal is to provide African institutions, governments, and stakeholders with a plan to systematically correct structural weaknesses and significantly boost Africa's influence in global digital policy. The analysis utilises a multi-dimensional methodology, which comprises a situational assessment, an examination of African participation across major governance platforms, and a perspective on emerging technologies and trends. This comprehensive approach ensures that the recommendations are rooted in the realities of Africa's digital ecosystem, informed by its challenges and opportunities.

1.4 Methodology

Research Design

The study utilised a mixed-method research design to address the strategic question of Africa's engagement in global internet governance. This approach was chosen to provide both analytical depth and contextual breadth, facilitating a comprehensive understanding of the continent's participation in multilateral and multi-stakeholder digital policy processes.

The design was structured around three components:

1. A scoping review to establish a robust contextual foundation.
2. A baseline survey to generate quantitative insights across various stakeholder groups.
3. Key informant interviews (KIIs) to capture experience-based perspectives from regional experts.

The list of engaged countries and stakeholder groups is detailed in (Annex 1).

Data Collection Methods

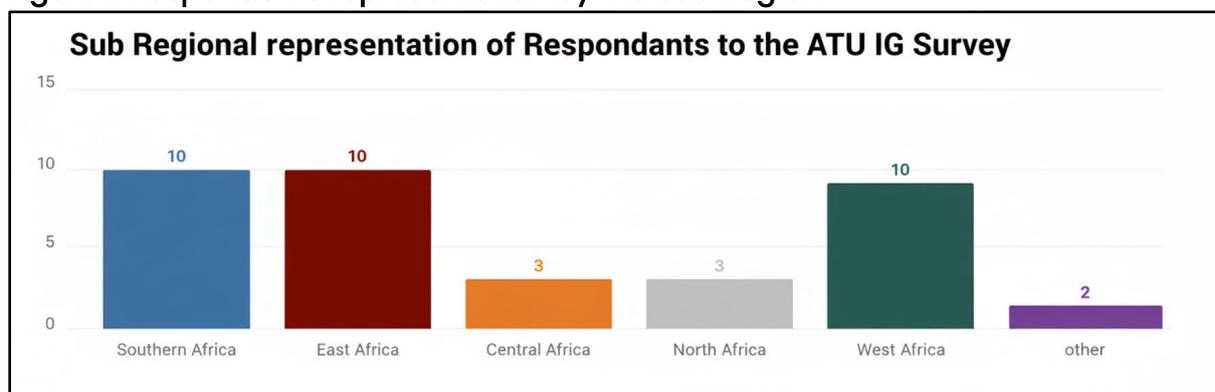
The study's data collection strategy was designed to generate actionable insights grounded in both evidence and lived experience.

- **Scoping Review:** A comprehensive review of literature, policy briefs, institutional reports, and official documents was conducted to map existing knowledge, identify thematic gaps, and establish the historical and policy context of Africa's internet governance participation. This formed the backbone of the study, ensuring that subsequent data collection was informed by prior research and aligned with continental priorities.
- **Baseline Survey:** Developed in collaboration with the ATU, the survey captured stakeholder experiences and perceptions across government, civil society, private sector, and technical communities. It included both structured questions (e.g., participation history, capacity needs) and semi-structured prompts (e.g., reflections on barriers and success stories), allowing for both quantifiable data and rich narrative input. To ensure inclusivity, the survey was translated into all African Union official languages, Arabic, English, French, Portuguese, and Spanish.
- **Key Informant Interviews:** These interviews provided deep qualitative insights from individuals with direct experience in global internet governance platforms and regional digital policy development. The interviews explored challenges, institutional dynamics, and opportunities for enhanced African leadership in digital governance.

Throughout the data collection process, ethical and data privacy standards were rigorously upheld. :

- Personal identifiers were removed from survey data,
- Participants were informed of their rights, including withdrawal and data portability,
- Qualitative data was collected with consent and stored securely,
- Access to all data was restricted to authorised researchers only.

Figure 1: Respondents representation by the Sub Region



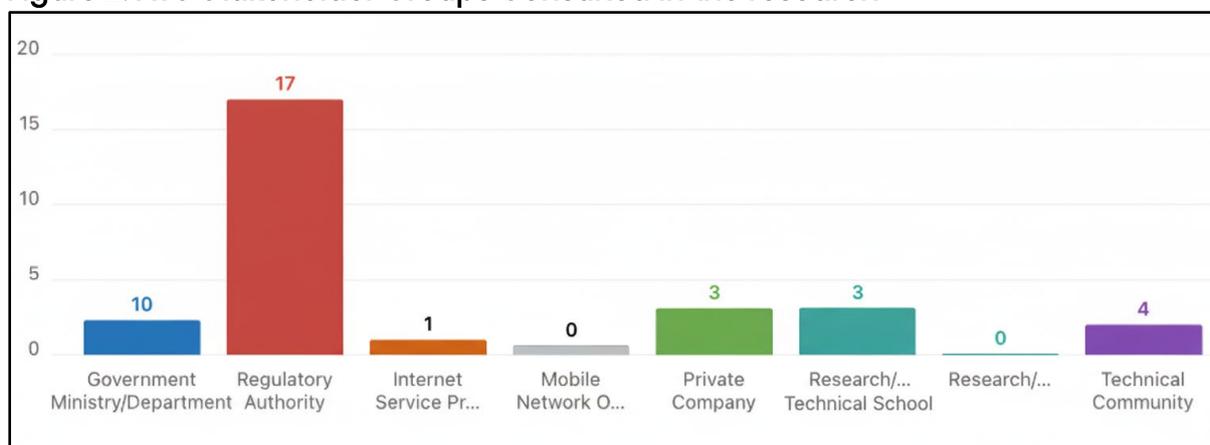
Source: Research Findings, 2025

Sampling Strategy

To accurately reflect the range and particular aspects of Africa's involvement in internet governance, a comprehensive, multi-tiered sampling approach was utilised.

- A stratified sampling approach was used to ensure balanced representation across sub-regions (e.g., East, West, Central, Southern, and North Africa), stakeholder categories, and levels of engagement. Figure 2, shows the different stakeholders consulted for this study. In total stakeholders from 28 countries in Africa participated in the survey and KIIs.
- Experts were identified through snowball sampling and purposive selection, targeting individuals with strategic roles or long-standing experience in internet governance forums such as IEEE, IETF, W3C, IGF, and regional organisations.

Figure 2: ATU Stakeholder Groups Consulted in the research



Source: Research Findings, 2025

1.5 Conclusion

This section establishes the framework for analysing Africa's engagement in internet governance. Utilising a mixed-methods approach, a scoping review, a baseline survey, and KIIs, the study captures Africa's participation, strategies, and priorities in multi-stakeholder forums. The findings will inform evidence based policy, strengthen institutions, enhance regional coordination, and support Africa's digital diplomacy. Ultimately, this work promotes a more inclusive, equitable, and sustainable digital future, ensuring African stakeholders' rights, interests, and leadership are embedded in global internet governance processes.

Section Two : Africa’s Internet Governance Engagement

Strategic Insights for Africa’s Internet Governance Engagement

- Representation gaps persist across most governance bodies, especially in leadership and decision-making roles.
- Technical gatekeeping and expertise bias limit meaningful participation.
- Multistakeholder platforms like the IGF offer inclusive spaces but lack formal decision-making power.
- Regional coordination and capacity building are essential to amplify Africa’s voice and influence.
- Targeted advocacy can help embed African priorities in global digital norms and standards.

2.1 Internet Governance Actors and Africa’s Engagement

This section delves into the existing mechanisms and modalities for African stakeholders participation, focusing on the following processes and bodies: ICANN, ITU, W3C, IEEE, the IETF and the IGF. The different modalities of engagement present significant opportunities for Africa’s active participation in these spaces. The table below summarises Africa’s engagement across key internet governance bodies, highlighting representation, civil society entry points, barriers, and strategic opportunities. It provides a snapshot of where African stakeholders stand and identifies actionable pathways to strengthen influence, promote inclusion, and shape global digital policy from an African perspective.

Table 1: Internet Governance Actors, communities & Mechanisms for Engagement

ORG	Mandate / Role	Current African Representation	Engagement Mechanisms	Barriers to African Participation	Opportunities for Influence
ICANN	Manages domain names and IP addresses	Limited formal representation in Board and SOs/ACs	NCSG (NPOC, NCUC), ALAC, public comment periods	Technical complexity, resource constraints, procedural gatekeeping	Board nominations, policy development via working groups
IETF	Develops internet protocols and standards	Low visibility of African contributors	Open mailing lists, working groups, RFC submissions	Expertise bias, English-only discussions, Global North-centric meetings	Influence on foundational internet standards, advocacy
IEEE	Develops technical standards (e.g., Wi-Fi)	Active local chapters in Africa, but limited global visibility	Standards working groups, humanitarian tech programs, reduced dues	Financial barriers, limited awareness of standards processes	Participation in standards development, Africa-focused initiatives
ITU	UN agency for telecom coordination	Strong government representation;	Sector membership, study groups, regional	Logistical challenges, limited CSO access, geopolitical dynamics	Influence through member states, regional

		most African states are members	preparatory meetings		coordination, ITU-D programs
W3C	Develops web standards (e.g., HTML, WCAG)	Regional offices in Morocco, Senegal, Southern Africa	Community groups, invited experts, language initiatives	Membership fees, technical expertise requirements	African Language Enablement Task Force, public feedback channels
IGF	Multistakeholder forum for internet governance dialogue	Growing African participation in NRIs and MAG	Open participation, NRIs, Dynamic Coalitions, BPFs	Non-decision-making nature, resource constraints	Agenda-setting, capacity building, regional influence

Source: Research findings, 2025

2.2 ICANN

ICANN is crucial for the internet's functionality, primarily by managing and coordinating the essential resources of domain names and address space (Weitsenboeck, 2014). This responsibility involves acting as the internet's "address book," assigning unique identifiers like domain names (e.g., .com, .org) and Internet Protocol (IP) addresses. The organisation's policy development process is a consensus based and multistakeholder in nature. In line with its fundamental values and commitments, these processes are intended to be "open, transparent and bottom-up, multistakeholder policy development processes that are led by the private sector (including business stakeholders, civil society, the technical community, academia, and end users), while duly taking into account the public policy advice of governments and public authorities" (ICANN, 2025).

ICANN's Structure

ICANN uses a multistakeholder governance model. This structure features Supporting organisations (SOs) and Advisory Committees (ACs) that provide expert recommendations on domain name policy, security, and government relations. The ICANN Board utilises this community input to inform its decisions, which ICANN staff then implement to ensure the Domain Name System (DNS) operates stably (ICANN n.d.a). This collaborative framework emphasises inclusivity, consensus, and accountability.

ICANN's complex governance and voting processes are designed to balance the power and often conflicting interests of its diverse stakeholders (Chatham House, 2020). The multi-layered organisation includes a representative board, various community councils, committees, and Supporting organisations (SOs). ICANN features three SOs and four Advisory Committees (ACs), detailed in Table 2.

Table 2: ICANN organisations

The three Supporting organisations (SOs)	The four Advisory Committees (ACs)
1. Address Supporting organisation (ASO)	4. At-Large Advisory Committee (ALAC)
2. Generic Names Supporting organisation (GNSO)	5. Governmental Advisory Committee (GAC)
3. Country Code Names Supporting organisation (ccNSO)	6. Root Server System Advisory Committee (RSSAC)
	7. Security and Stability Advisory Committee (SSAC)

Source: ICANN, n.d.

The Address Supporting organisation (ASO)

The ASO plays an important role in global Internet governance by uniting representatives from the five Regional Internet Registries (RIRs): AFRINIC, APNIC, ARIN, LACNIC, and RIPE NCC. Its membership primarily consists of Internet Service Providers (ISPs) and internet engineers. The ASO's main responsibilities are reviewing global IP address policy recommendations and advising the ICANN Board. It standardises the policy development process across all RIR communities. Policy is developed via RIR meeting discussions and dedicated mailing lists.

The ASO AC plays a key role in coordinating global policy development for the internet number community. This council has 15 members, with each RIR designating three representatives. In addition to policy coordination, the ASO AC is tasked with selecting appointees for the ICANN Board, the ICANN Nominating Committee, and various other ICANN groups. The council holds monthly teleconferences, with interested parties, (ICANN, 2024).

The Generic Names Supporting organisation (GNSO)

The GNSO serves as the policy development body for generic Top-Level Domains (gTLDs). Its diverse membership comprises representatives from various stakeholders, including gTLD registries, ICANN-accredited registrars, intellectual property interests, internet service and connectivity providers, businesses, and non-commercial interests. Through a multistakeholder process driven by working groups and teams, the GNSO unites these different stakeholders and other parts of the ICANN community to formulate gTLD policy recommendations (ICANN, 2018a).

The Non-Commercial Stakeholder Group (NCSG)

NCSG functions as the home within ICANN's GNSO for CSOs and individuals involved in developing policy for generic gTLDs. Its primary role is to ensure that non-profit organisations and individuals focused on the non-commercial and public interest aspects of domain name policy have a voice and representation within the GNSO and other ICANN policy processes (NCUC, 2025a). The NCSG is composed of two distinct constituencies: the Non-Commercial Users Constituency (NCUC) and the Non-Profit Operational Concerns Constituency (NPOC).

The Not-for-profit Operational Concerns Constituency (NPOC)

The NPOC, part of the NCSG, addresses operational concerns for not-for-profit and non-governmental organisations that register domain names. Its main focus is how DNS policies affect these organisations' ability to achieve their non-commercial missions and maintain operational readiness. Engaging with the ICANN community, the NPOC emphasises how current and proposed policies uniquely impact their operations and service delivery (NPOC, 2019), covering issues like domain registration, DNS expansion, fraud, abuse, and using the DNS for information sharing with their members and communities.

The Non-Commercial Users Constituency (NCUC)

The NCUC, the GNSO's representative body, advocates for non-commercial internet communication and activity within ICANN's policy-making and board selection. Its diverse membership includes CSOs focused on internet freedoms and human rights, academic institutions, NGOs from developing countries, religious and cultural organisations, and individuals who share a non-commercial policy perspective (NCUC, 2025).

The At-Large Community

Representing the interests of internet users globally, ICANN's At-Large community is comprised of 267 At-Large Structures (ALSes) and over 200 Individual Members. These members are organised into 5 Regional At-Large organisations (RALOs) and include internet-related consumer rights groups, academic organisations, and public-minded individuals. Their collective purpose is to contribute to policies that influence the technical coordination of the DNS. Within the At-Large community's bottom-up, tiered structure, the At-Large Advisory Committee (ALAC) is the primary organisational home for the voice and concerns of the individual internet user. Representing the At-Large community, the 15-member ALAC consists of two members selected by each of the five RALOs and five members appointed by ICANN's NomCom. The role of the ALAC is to consider and provide advice on the activities of ICANN as they relate to the interests of individual internet users. The work of the At-Large community takes place primarily in working groups divided into three tracks: policy advice, operations, and community engagement. At-Large structures conduct their work through regular teleconferences and active participation during ICANN public meetings (ICANN, 2019b)

The Governmental Advisory Committee (GAC)

The GAC is the principal forum for government involvement within ICANN. Established in 1999 with 17 participating states and 6 intergovernmental organisations, its membership has expanded significantly over the years. Currently, the GAC comprises 183 members (national governments and distinct economies recognised internationally) and 39 observers (including multinational governmental and treaty organisations, as well as public authorities) (ICANN, 2021a). The GAC's primary responsibility is to advise the ICANN Board on public policy matters, particularly those where ICANN's activities or policies might intersect with national laws or international agreements (ICANN, 2021b).

GAC consensus advice holds a specific status under the ICANN Bylaws and must be duly considered by the ICANN Board. Should the Board propose actions inconsistent with the

GAC's consensus advice, it is obligated to provide justification for its decision and attempt to find a mutually acceptable resolution with the GAC (ICANN, 2021).

2.2.1 Africa participation in ICANN (2022–2025)

African participation in the ICANN has seen a strategic shift from passive engagement to active leadership and technical contribution over the last three years (2022–2025). This period marks the culmination of the Africa Regional Plan for FY2021–2025 and the transition to the FY2026–2030 strategy.

Leadership Roles (2022–2025)

African representation in ICANN's "empowered community" and supporting organisations has improving with individuals holding key positions in the Board of Directors and various Councils. The table show the leadership positions during the period under review.

Table 3: Key African Leadership Positions

Name	Country	ICANN Body	Role / Term
Catherine Adeya	Kenya	ICANN Board	Director (Audit Committee Chair)
Alan Barrett	South Africa	ICANN Board	Director (Technical Committee)
Biyi Oladipo	Nigeria	ccNSO Council	Vice-Chair (2022–2028)
Ali Hadji Mmadi	Comoros	ccNSO Council	Council Member (2024–2027)
Lawrence Olawale-Roberts	Nigeria	GNSO Council	Business Constituency (Term to 2027)
Benjamin Akinmoyeje	Nigeria	GNSO Council	Non-Commercial Stakeholder (Term to 2027)
Molehe Wesi	South Africa	ccNSO Council	Council Member (2023–2026)

Sources: ICANN Board of Directors (2025); ICANN ccNSO Council (2025); GNSO Council (2026).

General Participation and Outreach

General participation is measured through the Fellowship Program, NextGen@ICANN, and regional forums. African stakeholders represent approximately 20–25% of all fellowship applicants and recipients, the highest among all ICANN geographic regions. Participation from the African region is split between in-person and virtual attendees. The data shows a notable spike during ICANN80 (Kigali, 2024), where local accessibility drove attendance to nearly 600 regional participants.

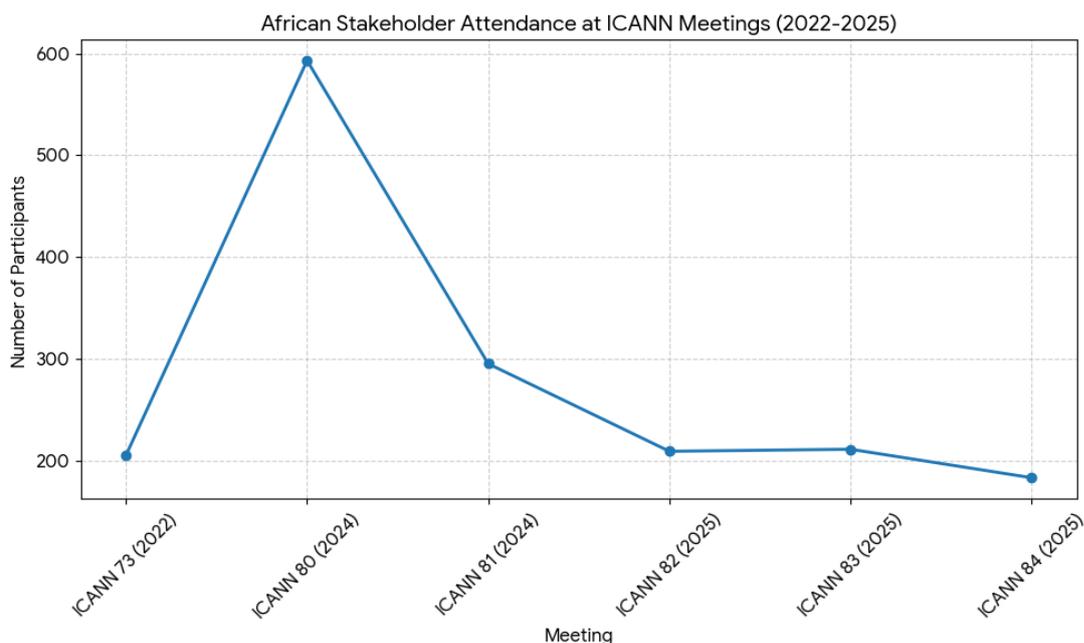
Table 4 : African Participation Data by Meeting

Meeting Event	Year	Total African Participants	Percentage of Global Attendance
ICANN 73 (Virtual)	2022	205	13.0%
ICANN 80 (Kigali)	2024	593	~28.0%

ICANN 81 (Istanbul)	2024	295	13.9%
ICANN 82	2025	209	10.9%
ICANN 83	2025	211	11.1%
ICANN 84	2025	183	8.6%

Data compiled from ICANN "By the Numbers" Technical Reports (2022-2025).

Figure 3: African Stakeholders attending ICANN Meetings (2022-2025)



African Participation by Category (Estimated 2022-2025)

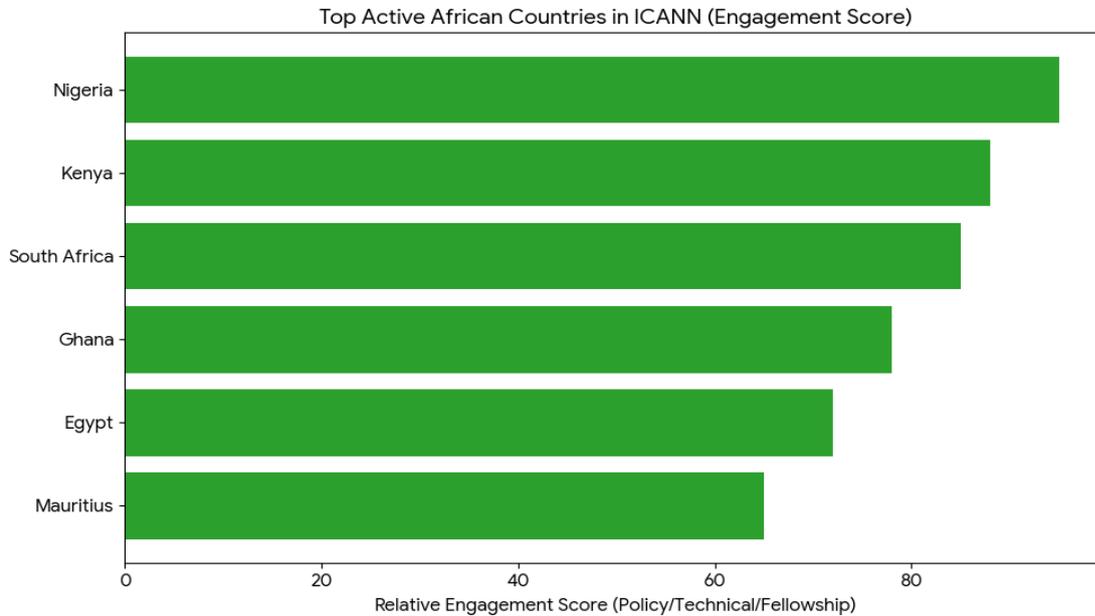
Based on the ICANN Africa Regional Plan reports, the following countries consistently show the highest levels of engagement in policy development and capacity building. The last three years saw the deployment of ICANN Managed Root Server (IMRS) clusters in Nairobi, Kenya (2022) and other strategic locations to improve DNS resilience.

Table 5 : Active Countries by Engagement Type

Country	Engagement Area	Recent Milestone
Kenya	Infrastructure & Gov	Host of IMRS Cluster
Nigeria	Policy & Commercial	GNSO Council seats; high Registrar density
South Africa	Technical & Board	Home to .africa registry; two current Board members
Rwanda	Governance	Hosted ICANN80 (Kigali, 2024)
Ghana	Education & Outreach	Host of 2025 Africa Engagement Forum (Accra)

Egypt	IDNs	Leader in Internationalized Domain Names (and North African engagement.
Mauritius	Regional governance	Historical hub for AFRINIC and regional governance dialogues.

Figure 4: Active Countries in ICANN processes



A major driver of participation in the last four years has been the Coalition for Digital Africa, launched in late 2022. This initiative focused on three key areas: Infrastructure, by deploying IMRS clusters in Nairobi and other cities; Capacity Building, which trained over 5,000 African stakeholders in 2024 alone through the Global Stakeholder Engagement team and Universal Acceptance (UA), with Africa hosting 19 of the 52 global UA Day events in 2024, emphasising multilingualism in the DNS.

2.3 The IETF

The IETF is the leading standards development organisation (SDO) for the internet (IETF n.d.a). Its core mission is the technical development and evolution of the protocols and standards that form the internet's underlying infrastructure. These standards, published as Requests for Comments (RFCs), cover essential areas such as security, routing, network protocols, and applications. The IETF's work is crucial for maintaining the internet's interoperability, scalability, and security, which in turn facilitates continuous innovation and growth (Internet Society, 2025). The organisation employs a collaborative, open, and decentralised approach, where technical experts and engineers participate in working groups to propose, discuss, and refine internet standards.

Participation in the IETF is open to anyone; there is no formal membership. Individuals can become involved by subscribing to a working group's mailing list or by registering to attend an IETF meeting. All participants are considered volunteers and are expected to act in an

individual capacity. The IETF's governance structure features a leadership hierarchy, including the Internet Engineering Steering Group (IESG) and the Internet Architecture Board (IAB). The IESG is tasked with the technical management of IETF activities, including verifying that proposed standards satisfy the necessary criteria for approval. In contrast, the IAB offers strategic oversight and guidance, helping to define the IETF's long-term direction.

Beyond its working groups, the IETF is also supported by various advisory and administrative bodies like the Internet Research Task Force (IRTF) and the Internet Assigned Numbers Authority (IANA). These entities collaborate with the IETF, enabling its mission and guaranteeing that its standards are effectively implemented.

The IETF Decision-making Process

The IETF employs a "rough consensus" model for decision-making, as noted in IETF, 2014. Instead of relying on formal votes, standards are adopted based on the general agreement of the working group focused on a specific subject.

The standard-setting process involves the following stages:

- Working Groups: Experts interested in a particular topic form a specialised working group.
- Discussion: Proposals are submitted as Internet-Drafts and undergo extensive discussion via mailing lists and at IETF meetings. There are no fixed timelines for these discussions.
- Revision: Drafts are modified and updated based on the feedback received and ongoing discussions.
- Consensus: Once a rough consensus is achieved, the working group submits the document to the Internet Engineering Steering Group (IESG).
- IESG Review: The IESG assesses the document for technical quality and ensures it aligns with existing standards.
- Publication: If the IESG approves the document, it is published as a Request for Comments (RFC), officially establishing it as an internet standard.

Working Groups and their Roles

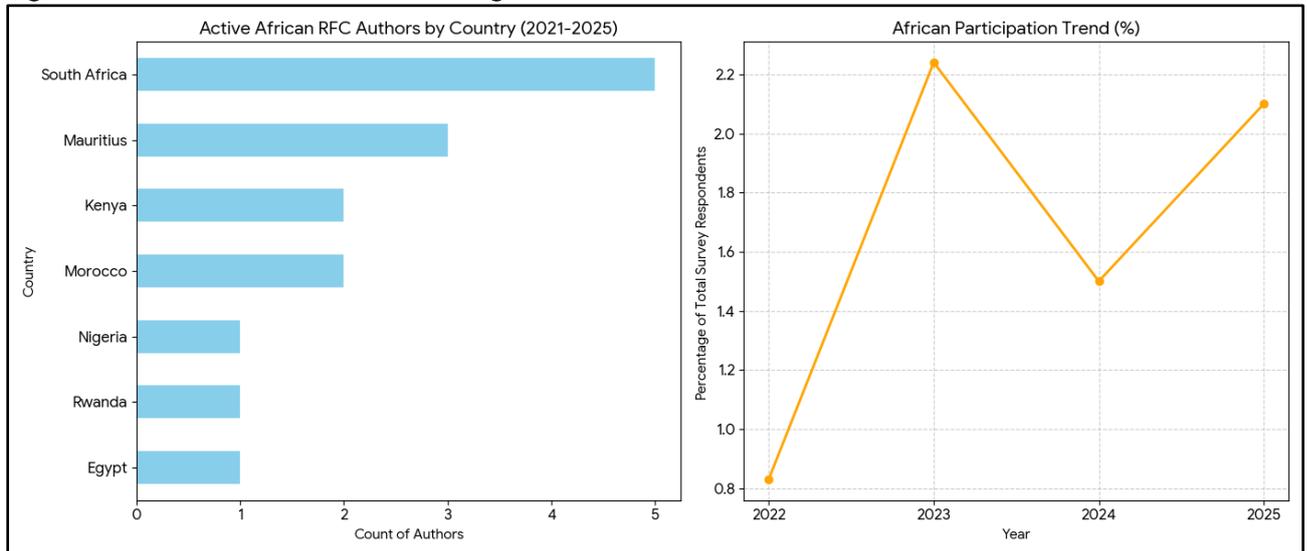
IETF's foundation lies in Working Groups (WGs), which drive protocol and standard development based on community interest. Discussions via mailing lists and meetings ensure standards reflect collective knowledge. Each WG is guided by chairs who manage activities, drafts, and coordination. WG expertise is key to the success of IETF standards. Though technical, CSO participation is crucial for incorporating societal concerns, human rights, privacy, accessibility, and the impact on marginalised communities into technical standards.

2.3.1 Africa participation in IETF (2022–2025)

African participation in the IETF has transitioned from passive observation to active contribution over the last three years (2022–2025). While the continent's overall share of

participation remains small compared to other regions, a dedicated "core" of African engineers has successfully navigated the standards process to publish high-impact RFCs and hold strategic leadership positions. There was a notable increase in 2023–2024, likely due to increased outreach efforts through the IETF Fellowship and the PRIDA (Policy and Regulation Initiative for Digital Africa) program.

Figure 5: African countries contributing to RFCs



African Leadership Roles (2022–2025)

African representation in IETF leadership is characterised by individuals holding roles in Area Directorates, Working Group (WG) Chairs, and influential review teams. In addition activity is ranked based on a combination of RFC authorship, meeting attendance, and leadership scores. General participation in IETF is measured by attendance (hybrid/remote) and mailing list activity. The shift to hybrid meetings has favored African participation by reducing the visa and travel barrier.

Table 6: Africans active in IETF activities

Name	Country	IETF Leadership/Role	Focus Area
Mohamed Boucadair	Morocco	Area Director (IESG - OPS Area)	Operations, IPv6, Routing
Loganaden Velvindron	Mauritius	WG Chair (ACE), SECDIR Reviewer	Security, IoT, Crypto
Ben Maddison	South Africa	Key Contributor (SIDROPS, Routing)	RPKI, BGP Security
Andrew Alston	Kenya	Active Contributor (6MAN, RTGWG)	IPv6, Routing Architecture
Dawit Bekele	Ethiopia	ISOC VP Africa (IETF Outreach)	Community Engagement

Table 7 : Active African Countries (2021–2025)

Country	Primary Sector	Key Activity
South Africa	Academic/ISP	RPKI, Routing Security, IPv6
Mauritius	Registry (AFRINIC)	Security (TLS), DNS, IoT
Morocco	Telecom/Research	Operations, IPv6, Vehicular Networking
Kenya	Tech Hubs/ISP	Routing, Community Access (GAIA)
Egypt	Government/Academia	Localization, Security, DNS
Rwanda	Research	Content Delivery, Network Measurement

African Contributions to RFCs (2022–2025)

The last three years have seen several critical RFCs authored or co-authored by African engineers, particularly in the fields of Routing Security (RPKI) and IPv6.

Table 8: African contributors to RFCs

RFC Number	Date	Author(s)	Title/Focus
RFC 9829	2025	Ben Maddison	Handling of RPKI CRL Number Extensions
RFC 9631	2024	D. Henriques, A. Alston	The IPv6 Compact Routing Header (CRH)
RFC 9582	2024	Ben Maddison	A Profile for Route Origin Authorizations (ROAs)
RFC 9707	2024	Theophilus Benson	Barriers to Internet Access of Services (IAB)
RFC 9323	2022	Ben Maddison	A Profile for RPKI Signed Checklists (RSCs)
RFC 9365	2023	Nabil Benamar *	IPv6 in Vehicular Environments (IPWAVE)

**Contributors mentioned in working group drafts and related sessions.*

2.4 The IEEE

The decentralised structure of the IEEE is integral to its significant role in Internet governance, particularly through its emphasis on technical standards and policy. The organisation is set up to foster collaboration among its members, aiming to develop and improve the technological underpinnings of the internet. The IEEE Standards Association (IEEE-SA) is the primary body responsible for this governance function. The IEEE-SA is tasked with creating global standards for a broad spectrum of technologies, many of which are essential to the functioning of the internet.

- The IEEE-SA develops many of the technical standards that ensure the interoperability and functionality of internet hardware and protocols. A well-known example is the IEEE 802 family of standards, which includes the 802.11 standard for Wi-Fi.

- The standards are developed through an open, consensus-based process that allows a wide range of stakeholders—including engineers, researchers, academics, government officials, and industry representatives—to participate and contribute. This approach ensures that the resulting standards are technically sound and widely accepted.
- IEEE also engages with policymakers and governments to provide technical expertise and advice on Internet-related issues. It advocates for an open, transparent, and multi-stakeholder model of governance, which aligns with its own internal processes.

Participation in IEEE

IEEE provides numerous ways for individuals to get involved in its work and contribute to global technology development.

- Local Chapters and Sections: IEEE has local sections and chapters in many African countries. These local units organise events, workshops, and conferences, providing a platform for members to network, share knowledge, and collaborate on projects.
- Reduced Dues and Sponsorship: The IEEE offers a Special Circumstances program with reduced membership dues for individuals in countries with a low Gross National Income. This helps make membership more accessible to professionals and students across Africa. Specific societies, like the IEEE Instrumentation & Measurement Society, also have dedicated Africa Initiatives that provide financial support for local events, free memberships, and travel grants.
- Young Professionals (YP) Affinity Group: The IEEE Young Professionals affinity group is designed to help recent graduates and young professionals transition into their careers. It offers networking opportunities, career development resources, and leadership training.

Technical and Policy Contributions

- Standards Participation: Any interested individual can participate in the development of IEEE standards by joining a standards working group. This allows African professionals to directly influence the creation of new technologies and ensure that the needs of the continent are considered.
- Conferences and Events: IEEE sponsors and organises numerous conferences and technical events throughout Africa, such as the IEEE Africa Entrepreneurship Summit and AfriCon. These events provide opportunities for researchers and engineers to present their work, exchange ideas, and stay current on emerging technologies.
- Humanitarian Technology: The IEEE Smart Village and IEEE SIGHT (Special Interest Group on Humanitarian Technology) programs offer opportunities for members to apply their technical skills to address societal challenges in underserved communities. These projects often focus on areas like renewable energy and sustainable development, which are particularly relevant to many parts of Africa.

2.4.1 Africa participation in IEEE (2022 –2025)

African participation in the IEEE has seen a strategic shift between 2022 and 2025, transitioning from general membership to active leadership and standards development. As of June 2025, the combined Europe, Middle East, and Africa (EMEA) region reached approximately 6,700 members in the Communications Society alone, with an overall society growth rate of 8.79% (Schober et al., 2025). As part of Region 8 (Europe, Middle East, and Africa), the continent has established the IEEE Africa Council to centralise its influence. The IEEE Africa Council is a coordinating body within IEEE Region 8 that brings together various Sections and Subsections across the continent. As of 2026, the Council is composed of 17 primary administrative units, which represent the most active IEEE hubs in their respective countries. The following countries have established formal Sections or Subsections that form the core of the IEEE Africa Council

Table 9: Countries representing the IEEE Africa Council

Region	Member Countries / Sections
North Africa	Algeria, Egypt, Libya, Morocco, Tunisia
West Africa	Burkina Faso, Ghana, Liberia, Nigeria
East Africa	Ethiopia, Kenya, Sudan, Tanzania, Uganda
Southern Africa	Botswana, Mauritius, South Africa, Zambia

Source: IEEE 2026

Leadership Roles and General Participation (2022–2025)

African professionals have increasingly secured positions within the IEEE Board of Directors and major society boards. A significant milestone is the rise of African representation in the Communications Society (ComSoc) and Power & Energy Society (PES), where regional directors now oversee multi-million dollar investments for local chapters (Schober et al., 2025). Recent efforts focus on localising global frameworks to suit African infrastructure included;

- Digital Governance: Zambia has pioneered participatory digital strategy frameworks that align with IEEE’s goals for interoperable digital public infrastructure (Kabwe et al., 2024).
- Energy Transition: South Africa and Zambia are leading the development of standards for Grid-Forming Inverters and Microgrids to stabilise mining and rural electrification (Ngundu & Matemane, 2023).
- AI Safety: Participation in international forums regarding AI Safety Governance and interoperability has increased, ensuring Global South perspectives are included in technical standards for autonomous systems (UNU, 2026).

Table 10 : Active African Countries by IEEE Membership & Activity (Estimated 2025)

Country	Key Focus Areas
South Africa	Sustainable Energy, AI, Telecommunications
Nigeria	Health Informatics, Power Systems, ICT
Egypt	Robotics, Electronics, Standards
Kenya	Digital Transformation, Mobile Connectivity
Zambia	Mining Electrification, Digital Governance

Source : Research findings, 2025

2.5 ITU

ITU is a specialised agency of the United Nations (UN), coordinates global telecommunications networks and services. It governs the internet by setting international standards, allocating radio frequency spectrum, developing technical standards for seamless network connectivity, and improving digital access worldwide (ITU, 2025a). The ITU has three sectors: Radiocommunication (ITU-R), Telecommunication Standardisation (ITU-T), and Telecommunication Development (ITU-D).

The ITU's membership includes 194 national governments (Member States with voting rights) and over 1,000 companies and organisations (Sector Members, Associates, and Academia) that develop standards and coordinate global spectrum and infrastructure policy (ITU, n.d.a). While only Member States vote, Sector Members contribute to discussions and consensus. Other organisations and individuals can attend as observers (Article 25 of the ITU Convention).

Structure of ITU

The structure of ITU involves the Plenipotentiary Conference: This is the supreme decision-making body of ITU. It meets every four years to set the general policies, adopt four-year strategic and financial plans, and elect the organisation's leadership and council members.

The Council: The council acts as the governing body between plenipotentiary conferences. It comprises 48 member states elected by the Plenipotentiary Conference, ensuring equitable regional representation. The Council prepares the agenda for the Plenipotentiary Conference, manages the Union's work program, and approves budgets (ITU, n.d.b).

- ITU-R: The ITU-R sector focuses on the efficient management and use of the radio-frequency spectrum and satellite orbits. It develops international standards for radiocommunication systems to ensure their seamless interoperability.
- ITU-T: The sector develops global standards for telecommunications networks and services, including those related to the internet. These standards ensure interoperability and facilitate the interconnection of networks across borders.
- ITU-D: This sector promotes and supports the development of telecommunications and ICT infrastructure and services in developing countries. It focuses on bridging

the digital divide and promoting access to affordable communication technologies.

General Secretariat: This body provides administrative and logistical support to ITU's activities. It is headed by the secretary-general, who is elected by the Plenipotentiary Conference. Table 3 offers an overview of the three key sectors within ITU, i.e., ITU-R, ITU-T, and ITU-D. It also identifies the primary conference or assembly associated with each sector and the purpose and activities of these conferences/assemblies. Lastly, it notes the year of the next scheduled conference for each sector, offering a snapshot of the ITU's upcoming activities.

Table 11: ITU sectors

Item	ITU-R	ITU-T	ITU-D
Sector	Radiocommunication	Telecommunication Standardisation	Telecommunication Development
Mandate	Coordinates the allocation of Radio Frequency Spectrum and adopts radiocommunication recommendations (Art 13 ITU Constitution)	Studies technical, operational and tariff questions and adopts recommendations to standardise telecommunications (Art 17 ITU Constitution)	Facilitates and improves telecommunications development (Art 21 ITU Constitution)
Conference /Assembly	World Radiocommunications Conference (WRC)	World Telecommunication Standardisation Assembly (WTSA)	World Telecommunication Development Conference (WTDC)
Description	Considers revisions to the ITU Radio Regulations	Defines the work programme, working methods, and the structure of study groups for the following four years in ITU-T	Defines the work programme, working methods and the structure of study groups for the following four years in ITU-D
Occurrence	Every 3–4 years	Every 4 years	Every 4 years
Next Conference	2027	2028	2025

Data Source: ITU, n.d

Decision-making Processes and Procedures

The decision-making processes within the ITU generally aim for consensus, requiring the agreement of all member states for decisions to be adopted. Consequently, this can sometimes lead to outcomes that favour a particular geo-political orientation. In the ITU-R and ITU-T sectors, technical standards and issues are developed by study groups and working parties. These groups comprise experts from various member states, industry, and other stakeholders.

Furthermore, the ITU convenes world conferences focused on specific themes, such as the World Conference on International Telecommunications (WCIT). These events serve as platforms for member states and other stakeholders to discuss and negotiate international regulations and agreements pertinent to ICTs.

ITU Study Groups

ITU study groups are venues for ITU members to work collaboratively in responding to the priorities of the ITU membership. Each ITU study group is responsible for progressing ITU’s work in a specific field of the ITU’s mandate. These groups develop the technical basis for ITU agreements and associated activities. Study groups serve as the primary mechanism for developing international standards and recommendations for the ICT sector. They bring together experts representing governments, industry, academia, CSOs and other stakeholders. This facilitates the development of globally harmonised standards and recommendations.

2.5.1 Africa participation in ITU (2022 –2025)

African participation in the ITU has reached a historic peak over the three years (2022–2025). This period is defined by a significant shift from being "policy takers" to active "policy makers," marked by the election of African nationals to the highest levels of ITU governance and a strong presence in the ITU Council. The 2022 ITU Plenipotentiary Conference (PP-22) held in Bucharest, Romania, was a landmark event for the continent. For the first time, African leaders were elected to head two of the three ITU Bureaus simultaneously. Dr. Zavazava's role is particularly critical as it oversees the digital inclusion agenda for developing nations, while Dr. Jamoussi leads the global technical standards for 5G, IoT, and AI (African Union, 2022).

Table 12: showing elected officials in high level ITU

Position	Name	Country	Term
Director, Telecommunication Development Bureau (BDT)	Dr. Cosmas Zavazava	Zimbabwe	2023–2026
Director, Telecommunication Standardization Bureau (TSB)	Dr. Bilel Jamoussi	Tunisia	2023–2026
Radio Regulations Board (RRB) Member	Mandla Samuel Mchunu	South Africa	2023–2026

Source: ITU 2025

General Participation and the ITU Council

Africa holds 13 of the 48 seats on the ITU Council, making it one of the largest regional blocs (Heritage Foundation, 2022). This ensures that African priorities, such as bridging the rural-urban digital divide and securing affordable broadband, remain at the forefront of the global agenda. African participation is not limited to government officials. There has been a 13% annual growth rate in internet penetration across Sub-Saharan Africa, which has spurred increased involvement from African private sector members and academia in ITU Study Groups (Astuti & Ayinde, 2025).

While participation is continent-wide, these countries consistently leads in terms of delegation size and technical contributions:

Table 13: Africa participation in ITU

Country	Key Area of Activity	Participation Metric
Egypt	Radiocommunications (WRC-23)	Hosted WRC-19; Major contributor to 5G spectrum policy.
Nigeria	Standardization & Cybersecurity	Lead negotiator for African common positions on data privacy.
Kenya	Digital Innovation	Hub for mobile money and "Silicon Savannah" regulatory models.
South Africa	Satellite & Infrastructure	Re-elected to the RRB; leader in satellite coordination.

Source: Research Findings 2025

2.6 W3C

The W3C is an international organisation that develops open standards to ensure the long-term growth of the Web. It functions as a neutral body where diverse stakeholders, including companies, governments, and the public, collaborate to create the foundational technologies that make the Web work. W3C's structure and operations directly contribute to Internet governance by promoting a decentralised, accessible, and interoperable online environment.

W3C Structure and Internet Governance

The W3C is a public-interest, not-for-profit organisation that operates under a multistakeholder model. It was founded by Tim Berners-Lee, the inventor of the World Wide Web. Its core structure and processes are designed to foster global collaboration and consensus.

The W3C is primarily composed of member organisations, which include businesses, academic institutions, government agencies, and non-profits. These members pay fees on a sliding scale based on their size and location, with special considerations for organisations in developing countries. The actual work of developing standards is done in various groups:

- Working Groups: These are responsible for producing W3C recommendations (Web standards). Participation is generally limited to W3C members and invited experts.

- Interest Groups: These groups explore new and emerging Web technologies, often serving as a precursor to a working group. They are open to members and invited experts.
- Community Groups: These groups are open to anyone and serve as a public forum for discussions and the incubation of new ideas. They can also publish their own reports and specifications.

The W3C is guided by a Board of Directors with a member majority, ensuring a clear and accountable governance structure. This board guides strategic direction and operations. The W3C's contribution to Internet governance is rooted in its role as a technical standards body. Rather than creating top-down rules, it governs the Web through the development of open, royalty-free, and interoperable standards. This ensures that the Web remains a single, global platform and prevents it from fragmenting into proprietary, closed systems. W3C standards like HTML, CSS, and XML are the backbone of the Web, and its work extends to critical areas like web accessibility (WCAG), privacy, and security.

2.6.1 Africa Engagement with W3C (2022 –2025)

The W3C has a number of regional offices, including in Morocco and Senegal, as well as a Southern Africa Office. These offices play a crucial role in promoting W3C standards locally, engaging with regional stakeholders, and encouraging organisations to join and participate. To address financial barriers, the W3C offers reduced membership fees for small companies and non-profit organisations located in developing countries, as categorised by the World Bank.

Africans can participate in the W3C's work through several channels:

- Community Groups and Mailing Lists: Anyone can join W3C's Community Groups for free. This is a vital way to engage in discussions, contribute ideas, and get involved in the initial stages of standards development without the financial commitment of full membership. Members can also subscribe to public mailing lists to follow discussions and provide feedback.
- Public Feedback and Review: The W3C's standards development process is open, and all specifications are made available for public review. This allows individuals and organisations to provide feedback on drafts, influencing the final outcome of a standard.
- Invited Experts and Sponsorships: Individuals with specific expertise can be invited to participate in working groups even if their organisation is not a member. The W3C also has an Invited Experts Support Fund to assist with the costs of participation in meetings and activities.
- Language-Specific Initiatives: The W3C has specific projects, like the African Language Enablement task force, which works to address gaps in African language support on the Web. This provides a direct avenue for African experts to contribute their knowledge and ensure that Web technologies are better suited for African languages and scripts.

African participation in the W3C has historically been lower than other regions. While African representation in the permanent Board of Directors remains limited, the region

exerts influence primarily through AFRINIC (the Regional Internet Registry for Africa), which maintains a presence in global internet governance discussions and W3C Advisory Committee meetings. AFRINIC has seat on the W3C Advisory Committee, participates in critical decision-making processes, including the review of group charters and the election of leadership bodies like the Advisory Board and the Technical Architecture Group, ensuring that African interests are represented at the highest levels of web strategy. Beyond formal governance, AFRINIC acts as a regional coordinator by leveraging its Government Working Group and partnerships with organisations like Smart Africa to harmonise continental digital policies with W3C norms, such as web accessibility (WCAG) and digital identity.

AFRINIC also facilitates technical participation by providing data-driven research on African network performance ensuring that upcoming standards are optimised for the region’s unique infrastructure while its fellowship and capacity-building programs empower local experts to contribute directly to W3C Working Groups.

At the end of 2025, W3C has over 450 member organisations globally. The table shows heavily concentration of members in north America

Table 14: Participation by Region

Region	Membership Share (Approx. %)	Primary Participation Focus
North America	66%	Core Architecture, Browser APIs, AI
Europe	~15%	Privacy, Data Governance, Media
Asia/Pacific	~14%	Mobile Web, E-Commerce, 5G/6G
Africa	<2%	Accessibility, i18n, FinTech

Source: W3C 2025

2.7 The IGF

The IGF is an annual, non-decision-making forum that facilitates multistakeholder dialogue on internet governance issues. Established by the Tunis Agenda during the World Summit on the Information Society (WSIS) in 2005, its mandate was extended for another decade by the UN General Assembly in 2015. The IGF provides a platform where representatives from governments, industry, civil society, academia, and the technical community can discuss various internet governance issues on an equal footing. Its core mandate involves offering this multistakeholder venue to discuss policy issues, exchange best practices, enhance capacity building efforts, and work toward improving internet access in developing countries (Estier, 2024).

The IGF is founded on a set of core principles :

- Openness: The IGF maintains an open forum where all stakeholders, regardless of background, can engage in discussions and contribute their perspectives. This inclusivity encourages diverse viewpoints in internet governance debates.
- Inclusiveness: The IGF strives to include all stakeholders, encompassing governments, civil society, the private sector, the technical community, international organisations, and academia. This multistakeholder approach ensures the representation and consideration of all perspectives.
- Bottom-up approach: The IGF operates on a bottom-up approach, where the agenda and discussions are driven by the interests and concerns of the stakeholders themselves. This ensures that the IGF remains relevant and responsive to the evolving needs of the internet community.
- Non-output oriented: The IGF is not a decision-making body. Its primary function is to facilitate dialogue and the exchange of information. This allows for open and frank discussions without the pressure of reaching a consensus or producing negotiated outcomes.
- Multistakeholderism: The IGF is built on the principle of multistakeholderism, recognising that effective internet governance requires the collaboration of all stakeholders. This approach guarantees that all voices are heard and that decisions are made through a collaborative process.

The Structure of the IGF

The IGF operates through several key components:

- Annual IGF meeting: This yearly global event is the centrepiece of the IGF, taking place in a different host country each year. It features a diverse range of formats, including workshops, panel discussions, open forums, and networking opportunities, facilitating the exchange of ideas and best practices on internet governance.
- NRIs (National and Regional Initiatives): These independent meetings are organised at national and regional levels, mirroring the multistakeholder model of the global IGF. They provide a platform for addressing internet governance issues specific to local and regional contexts.
- Best Practice Forums (BPFs): These forums delve into specific internet governance themes, such as cybersecurity, access, and child online protection. They generate policy recommendations and reports that contribute to the development of best practices in these areas.
- Dynamic Coalitions: These issue-specific groups are formed by stakeholders who share a common interest in addressing particular internet governance challenges.
- Multistakeholder Advisory Group (MAG): This committee plays a crucial role in advising on the programme and themes for the annual IGF meeting. Its members represent a diverse range of stakeholders, including governments, civil society, the private sector, the technical community, and international organisations, ensuring a multistakeholder perspective in shaping the IGF's agenda.

2.8 Conclusion

This section has mapped key internet governance forums, each offering distinct engagement opportunities and challenges for Africa. ICANN's multistakeholder model, while offering entry points like the NCSG and ALAC, suffers from *technical gatekeeping* due to procedural complexity and resource demands, marginalising underrepresented voices. Technical standards bodies (IETF, IEEE, W3C) are open and consensus-driven, allowing African experts to shape protocol development. However, their technical focus risks *expertise bias*, potentially undervaluing social perspectives. Geographic and language barriers also limit African participation. The ITU, a UN agency, provides structured access for its African government members, though logistical and resource issues hinder consistent engagement. The IGF offers an open dialogue platform for agenda-setting, but its non-decision-making nature necessitates advocacy elsewhere. Effective engagement requires strategic understanding of governance, power dynamics, and influence pathways.

Section Three, African focused Internet Governance Actors and Communities

This section examines the indigenous mechanisms and collaborative frameworks that empower African stakeholders to define the continent’s digital future. Rather than viewing participation through a global first lens, this analysis centers on the African-led bodies and homegrown processes including AFRINIC, the African Union (AUC), the ATU, and regional NOGs that translate global technical standards into local developmental impact. The following table highlights the strategic role of these African-oriented communities, mapping their barriers, and pathways available to amplify the African voice in global digital policy.

Table 15: African focused Internet Governance Actors, communities & Mechanisms for Engagement

Entity	Mandate	Current African Representation	Engagement Mechanisms	Barriers to African Participation	Opportunities for Influence
AFRINIC	Manages IP addresses and ASNs for the Africa region.	High: Board and community are primarily African.	Policy Development Process (PDP), Public Policy Meetings (PPM).	Legal disputes (e.g., Cloud Innovation), board instability, and "sub judice" constraints.	Shape regional IP policies; leadership in the Number Resource Organization (NRO).
AfNOG (Network Operators Groups)	Technical capacity building and networking for engineers.	High: Practitioner-led; includes sub-regional NOGs (e.g., ngNOG, TzNOG).	Annual workshops, mailing lists, and "Chix" program for female engineers.	Funding for physical meetings, language diversity (English/French/Portuguese), and brain drain.	Influence local infrastructure standards and peering through AfPIF.
AfTLD (Registries/Registrars)	Represents African Country Code Top-Level Domains (ccTLDs).	High: Members are national registries (e.g., .ng, .ke, .za).	AROC (African Registrar Operations Course), regional workshops.	High cost of global accreditation, lack of registrar competition, and technical debt.	Harmonizing domain policies across the continent; promoting the .africa gTLD.
AfIGF (African IGF)	Regional platform for multi-stakeholder policy dialogue.	High: Governed by a Multi-Advisory Group (MAG) of African experts.	Annual regional forum, sub-regional IGFs (West, East, North, etc.).	Lack of binding policy power, dependence on donor funding, and digital divide gaps.	Drafting the "African Declaration on Internet Rights"; feeding regional priorities into the Global IGF.
Smart Africa	Accelerates digital transformation via 40+ African heads of state.	Full: intergovernmental and African-led.	CAIGA (Council of African IG Authorities), MoUs with ICANN/ITU.	Criticised for "top-down" gov-centric approach vs. the traditional multi-stakeholder model.	Aligning national ICT laws; massive scale for infrastructure investment and "Digital Sovereignty."

AUC	Executive arm of the AU; sets the "Digital Transformation Strategy for Africa."	Full: Represented by AU Member States (55 nations).	Specialized Technical Committees (STCs), Ministerial meetings, PRIDA program.	Bureaucratic "top-down" friction, slow ratification of treaties (e.g., Malabo Convention), and funding gaps.	Defining the "African Digital Compact"; harmonising data protection and AI ethics across the continent.
ATU (African Telecommunications Union)	Specialized agency for ICT and Radio Spectrum coordination.	Full: Member States + Associate Members (private sector/vendors).	African Preparatory Meetings (APMs) for ITU World Conferences (WRC, WTSA).	Financial arrears from members; dominance of large telcos over smaller stakeholders.	Unified African positions at the ITU; regional spectrum harmonization for 5G and satellite.
AfREN (African Research & Education Network)	Umbrella for regional research networks (NRENs like UbuntuNet, WACREN).	High: Collaboration between African universities and researchers.	AfREN annual meetings, AfricaConnect projects, NREN community lists.	High cost of cross-border fiber transit; "isolation" of researchers due to lack of local NREN funding.	Driving "Open Science" in Africa; lowering internet costs through dedicated academic backbones.
AfCERT (African CERT)	Coordination of Computer Emergency Response Teams across Africa.	High: Driven by national security and technical agencies.	Annual conferences, threat-intelligence sharing workshops.	Lack of skilled cybersecurity personnel; low trust/data sharing between rival nations.	Enhancing regional cyber-resilience; setting standards for African incident response.
AfICTA (Africa ICT Alliance)	Private sector-led alliance of ICT associations.	High: Represents African tech businesses and startups.	Business forums, public-private partnership (PPP) dialogues.	Fragmented private sector; difficulty in competing with global "Big Tech" lobbying.	Promoting "Local Content" policies; advocating for pro-startup regulations and digital trade.

Source: Research Findings, 2026

3.1 African Network Information Centre (AFRINIC)

AFRINIC, is the RIR for Africa and one of the five RIRs globally, each serving a specific geographical region. It is responsible for the management and allocation of critical internet numbering resources, IPv4 and IPv6 addresses and Autonomous System Numbers (ASNs) to the African internet community. AFRINIC's operational structure is based on a community driven, and bottom-up Policy Development Process (PDP). This means that the policies governing the allocation of resources are developed, discussed, and ratified by the community which include internet service providers, academic institutions, government bodies, and civil society that uses them, ensuring they are directly responsive to the unique and evolving needs of the African internet ecosystem.

AFRINIC's structure is typically comprised of

1. The Membership: Consists of all organisations that have received resources from AFRINIC. The members have the ultimate authority, exercised through voting on

policy proposals and electing members to the Board of Directors and the Policy Development Working Group chairs.

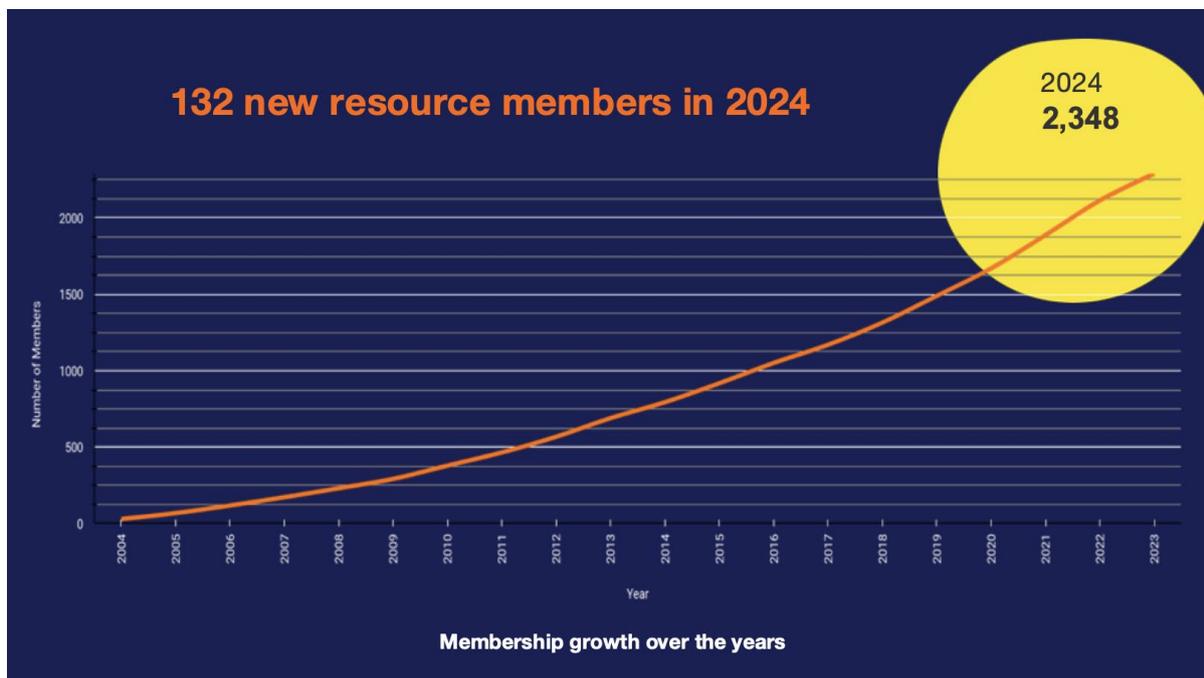
2. The Board of Directors: Elected by the membership, the Board is responsible for the overall governance, fiduciary oversight, and strategic direction of the organisation.
3. The Secretariat/Staff: The professional team responsible for the day-to-day operations, implementing the policies approved by the community, and providing services to the membership.

AFRINIC Policy Development Process

This is the core mechanism where the community proposes, discusses, refines, and adopts policies regarding resource allocation. It is managed by Policy Development Working Groups (PDWGs), often chaired by elected community members, and operates with transparency and openness. The PDP operates on a model of open discussion and consensus. Proposed internet numbering policies are first submitted to and debated rigorously on open mailing lists, which serve as a critical platform for continuous, asynchronous engagement among all stakeholders. Following this initial digital scrutiny, proposals that gain community support proceed to Public Policy Meetings (PPMs). These meetings are held twice yearly and serve as the final crucible for policy ratification. This mechanism guarantees that the policies ultimately adopted reflect a broad consensus and are deeply rooted in the practical realities faced by local Internet Service Providers (ISPs), network operators, and other technical practitioners across the continent.

Its membership base has grown significantly, exceeding 2,300 entities. This membership represents a wide spectrum of the African digital landscape, including national governments and regulators, civil society organizations advocating for digital rights and inclusion, the academic and research community, and, most prominently, technical practitioners (ISPs, network engineers, etc.). This vast and inclusive community spans all 54 African countries, making AFRINIC a truly pan-African institution (AFRINIC 2024). The active participation of this diverse group in the PDP is what legitimizes AFRINIC's role and ensures its stewardship of IP address management remains fair, transparent, and acutely sensitive to the continent's rapid digital transformation.

Figure 6: Showing AFRNIC Membership in 2025



Source Afrinic 2024

The primary challenge for AFRNIC is its governance vulnerability to legal warfare. Unlike intergovernmental bodies, AFRNIC is a private company limited by guarantee under Mauritian law, making it susceptible to litigation that can freeze its entire operation. In 2024 it had more than 50 lawsuits and the freezing of bank accounts (Digital Watch Observatory 2025). This institutional paralysis resulted in the appointment of an Official Receiver, effectively stalling board-led strategic initiatives and preventing the election of new directors for years. The impact of this governance crisis significantly weakens Africa's voice in the Number Resource Organisation (NRO). While other regions are rapidly coordinating on global IPv6 security standards, AFRNIC's internal instability has limited its ability to lead.

3.2 African Union Commission (AUC)

The AUC utilises a top-down, intergovernmental modality centered on the Digital Transformation Strategy for Africa (2020–2030). Its primary goal is the creation of a Digital Single Market by 2030. While it excels at state-level inclusion, the AUC faces a "representation paradox" where ambitious continental frameworks often lack the granular input of the local technical community and the private sector, which are responsible for 90% of infrastructure deployment.

A critical barrier is the implementation certification gap. While the AUC can draft comprehensive strategies, such as the *Continental AI Strategy* adopted in July 2024, implementation is often siloed. Research shows that 16 months post-adoption, 83% of AI funding was concentrated in just four countries, highlighting a failure to enforce equitable regional development (Ajuzieogu 2025). Furthermore, intergovernmental resolutions are non-binding until ratified, meaning frameworks like the Malabo Convention on Cybersecurity remained dormant for years despite urgent regional threats.

3.3 African Telecommunications Union (ATU)

The ATU functions as the AU's specialised agency for telecommunications, working primarily through African Preparatory Meetings (APMs) to coordinate "Common African Positions" (AfCP) for ITU conferences. This modality allows Africa to act as a unified voting block, which is essential given that the continent holds 55 of the 193 votes in the ITU. Associate membership allows for private sector participation, though the influence of large multi-national vendors often outweighs local startups.

A challenge for the ATU is financial and technical dependency on external stakeholders. Many member states face arrears in dues, forcing the ATU to rely on partnerships with international tech giants for capacity-building programs. This dependency can inadvertently prioritise global commercial interests over local African technical needs. For instance, while the ATU successfully defended the UHF band at WRC-23, some critics argue that the reliance on foreign-funded technical studies can bias the long-term roadmap for spectrum allocation (ATU 2024).

The ATU's influence is most visible in its ability to secure satellite orbital slots and spectrum for rural connectivity. However, when African unity falters, the impact is severe.

3.4 African Network Operators Group (AfNOG)

AfNOG is the premier technical community for African engineers, operating as a voluntary, bottom-up forum. Its modality focuses on peer-to-peer training and the development of local Internet Exchange Points (IXPs). AfNOG lacks formal legal status, relying on a merit-based "community of practice." This allows for maximum agility and technical honesty, but provides no political or regulatory leverage.

The primary challenge for AfNOG is resource sustainability and "brain drain." As a volunteer-run organisation, it lacks the permanent staff necessary to monitor the enforcement of its technical recommendations at a national level. While AfNOG trains engineers on BGP security, it cannot compel a state-owned ISP to implement these standards. This lack of enforcement power contributes to Africa's high rate of "tromboning" where local traffic is routed through Europe keeping internet costs in some regions as high as 5.7% of monthly income, far above the UN's 2% target (Global Voices Advox 2025).

Despite these weaknesses, AfNOG's influence on infrastructure is undeniable. Through the AfPIF (African Peering and Interconnection Forum), it has successfully helped shift local traffic from 10% to over 50% in leading markets like Kenya and South Africa (Internet Society 2025). However, in regions where AfNOG has less presence, such as landlocked Central African nations, the lack of a local technical community has resulted in internet costs that are 300% higher than those in peered regions (African Business 2025).

3.5 African Research and Education Network (AfREN)

AfREN is the collaborative umbrella for regional Research and Education Networks (RENs), including WACREN (West and Central Africa), UbuntuNet Alliance (Eastern and Southern Africa), and ASREN (North Africa). Its modality is a "federated partnership" designed to provide dedicated high-speed connectivity to universities and research centers. As of 2025, AfREN-related networks serve over 1,500 institutions across the continent (WACREN 2025).

The primary barrier for AfREN is the "last-mile" funding gap and fragmented national policies. While the regional backbones (e.g., AfricaConnect3) provide international fiber, the cost of "backhaul" from a country's border to a rural university remains prohibitively high due to local telco monopolies. A core weakness is its inability to enforce "Open Science" mandates; while AfREN promotes data sharing, individual universities often maintain closed silos due to a lack of institutional policy or technical capacity (MDPI 2021).

AfREN's influence is proven through its ability to negotiate bandwidth price reductions by pooling demand. However, a verifiable example of the impact of limited influence occurred in 2024, where several landlocked Central African universities remained disconnected from the global research grid because their national governments failed to grant "tax-exempt" status to NREN equipment. This resulted in researchers in these regions being 80% less likely to participate in international COVID-19 genomic sequencing collaborations compared to their peered counterparts in Kenya or South Africa (WACREN 2025).

3.6 Africa Computer Emergency Response Teams (AfricaCERT)

AfCERT functions as a coordinator for National Computer Emergency Response Teams (CERTs) across Africa. Its modality is centered on information sharing and analysis, operating through trusted technical workshops and threat-intelligence mailing lists. Stakeholder diversity includes government security agencies, military cyber-units, and increasingly, private sector financial institutions.

The challenge for AfCERT is low sovereign trust. Cybersecurity is often viewed through a national security lens, making countries hesitant to share data about active breaches with regional neighbors. Furthermore, AfCERT lacks the mandate to enforce minimum security

standards; it can issue "Alerts," but cannot compel a nation to patch critical infrastructure. This is exacerbated by a massive cyber-skills gap, with Africa facing a shortage of an estimated 100,000 certified security professionals in 2025 (Interpol 2025).

AfCERT's strategic value was highlighted in Operation Serengeti 2.0 (August 2025), a joint operation with Interpol and AFRIPOL that disrupted criminal networks across 19 countries, seizing \$140 million in illicit funds (World Economic Forum 2025). However, the "lack of influence" is visible in the persistent ransomware vulnerability of African municipalities. In early 2025, several South African and Nigerian local governments suffered prolonged outages because they lacked the "incident response" frameworks AfCERT has long advocated for, leading to a total estimated economic loss of \$500 million (Interpol 2025).

3.7 Smart Africa

Smart Africa is an alliance of 42 African Heads of State committed to creating a "Single Digital Market" by 2030. Its modality driven by the Smart Africa Secretariat and validated by a Board of Directors comprised of Presidents. Stakeholder diversity is heavily skewed toward the executive branch of governments and large private partners (e.g., GIZ, ITU, and global tech firms).

The primary barrier is the "political-technical disconnect." Resolutions passed at the Presidential level (such as the *One Africa Network* for free roaming) often face stiff resistance from national regulators and private telcos who fear losing roaming revenue. Smart Africa lacks "supranational" power; it cannot legally override a national regulator's decision, making its blueprints (e.g., the *Digital Health Blueprint 2025*) more of a "suggestion" than a mandate (Smart Africa 2025).

Smart Africa's influence is undeniable in its "Agenda Setting" role. In 2025, it successfully launched the Africa AI Council to lead the continent's AI transformation (Smart Africa 2025). However, the impact of its enforcement weakness is seen in the One Africa Network (OAN). Despite a resolution for "Free Roaming," as of late 2024, only a handful of countries (mostly in the EAC and Smart Africa corridors) had fully eliminated roaming charges, meaning millions of Africans still pay "international" rates to call across borders, stifling intra-African trade (GIZ 2025).

3.8 Africa ICT Alliance (AfICTA)

AfICTA is a private sector led alliance representing ICT associations from over 30 African nations. It advocates and lobbies, inclusion of business voice in the multistakeholder model. Membership is mostly national business associations, and struggles to attract small and informal "startup" sector that dominates much of Africa's tech landscape.

AfICTA often competes for the attention of African policymakers against well-funded global tech giants. Because it is a non-profit alliance, it lacks the financial resources to conduct the massive "capacity building" programs that government agencies often demand in exchange for policy influence. Its resolutions are purely advisory, and it has no power to stop governments from passing "social media taxes" or "internet shutdown" laws that harm its members (GSC Online Press 2025).

AfICTA is a regular contributor to the UN Internet Governance Forum (IGF), ensuring African business interests are reflected in the *Global Digital Compact*. However, its lack of domestic influence was evident in 2024-2025 when several African nations introduced "Digital Service Taxes" without consulting local ICT associations. This resulted in a 12% increase in the cost of digital tools for local SMEs, as global platforms passed the tax costs directly to African end-users (auDA 2025).

3.9 African Top Level Domain Organization (AfTLD)

AfTLD is the representative body for African Country Code Top-Level Domains (ccTLDs) like .za, .ke, and .ng. It is focused on technical training and policy advocacy for registries and registrars. Stakeholder diversity is centered on the "DNS Industry," including technical registry managers and government-appointed regulators.

The main barrier for ccTLD uptake has been trust and awareness. Many African businesses still prefer .com or .net over their national ccTLDs due to a perceived lack of technical stability or prestige. AfTLD cannot "force" a country to lower its domain registration prices; consequently, a .ng domain might cost ten times more than a .com domain, leading to a low penetration rate (AfTLD 2025). Furthermore, many registries lack DNSSEC implementation, making African domains more susceptible to "cache poisoning" attacks (OECD 2025).

AfTLD has been instrumental in the .africa gTLD launch, promoting a continental digital identity. However, the lack of local registrar accreditation remains a weakness. In 2025, statistics showed that over 70% of African domain registrations were still processed by non-African registrars (e.g., GoDaddy), meaning the "digital rent" leaves the continent. This lack of a local registrar ecosystem is cited as a primary reason why the African DNS industry contributes less than 1% to the global domain market (ICANN 2020).

Section Four : Unlocking Africa's influence in global IG processes

Strategic Insights Box: Unlocking Africa's Influence in Internet Governance

- Structural barriers, not lack of interest drive underrepresentation.
- Technical gatekeeping and language dominance exclude diverse voices.
- Corporate influence and procedural opacity skew governance outcomes.
- Fragmentation and silos hinder collaboration and policy coherence.
- Strategic investment in capacity, coordination, and relevance is essential to elevate Africa's role from observer to co-creator.

4.1 Barriers to Engagement within Internet Governance Processes

This section examines the obstacles to the Africa region's involvement in internet governance. It synthesises findings from key informant interviews, the baseline survey, and the literature review conducted for this study, identifying the consistent barriers encountered by African stakeholders across various internet governance forums.

A significant pattern identified in the study is the limited participation in key internet governance discussions and processes especially technical standards making bodies. This lack of engagement is attributed to several factors: resource constraints including lack of technical capacity, financial, coordination and communication challenges, complex procedures, and bureaucracy associated with some spaces. The study also highlights insufficient diversity and inclusivity, along with the existence of silos. Disparities in influence within crucial internet governance processes are a persistent problem, as evidenced by interview and survey data. This issue arises from various factors, including policy and regulatory obstacles, the ongoing digital divide, and the lack of alignment among organisational priorities.

4.2 Limited Participation in Internet Governance Discussions

Key informants interviews from member states and regulatory bodies reveal a recurring pattern of limited participation in important internet governance discussions and processes particularly technical standards making bodies such as IEEE, W3C and IETF. Underrepresentation in IG discussions, driven by factors like resource limitations, the character of the forums, and the complexity of the IG environment, has severe ramifications. Respondents argue that this insufficient participation leads to policies that do not adequately address the needs of all stakeholders. This, in turn, risks widening the digital divide and impeding the internet's capacity to foster social and economic advancement in the Africa region.

The Coordination Gap

A significant institutional challenge for Africa is the lack of coordinated strategy. Klls pointed to a "lack of a coordinated approach regionally or within countries" and a general absence of cohesion among diverse groups. National governments, often constrained by limited capacity and resources, and sometimes viewed as less effective in generating domestic data and research on internet policy, frequently adopt "the agendas of inter-governmental or donor organisations. This reliance on external, donor-driven narratives means that Africa's specific developmental priorities are not effectively or consistently advocated for in international forums. As a result, the continent's voice is fragmented, and its interests could easily be marginalised in complex, long-term global policy discussions.

Financial Constraints

While financial resources are often cited as a primary barrier to participation in internet governance forums, the reality is more complex. Even for those with the capacity and interest to participate, a myriad of institutional and procedural hurdles limits their effective engagement. A survey of African internet governance stakeholders found that a lack of financial resources was the main factor preventing effective participation for 87% of respondents. This financial barrier is compounded by logistical challenges, such as difficulties in obtaining visas and the high costs of international travel. The impact of these issues is demonstrated by the stark drop in African participation at the IGF, attendance was 44% when the event was hosted in Ethiopia in 2022, but plummeted to 8% the following year when it was held in Japan. This phenomenon has been termed "conference inequity" for African researchers, who are over three times more likely to encounter visa obstacles compared to their North American and European counterparts.

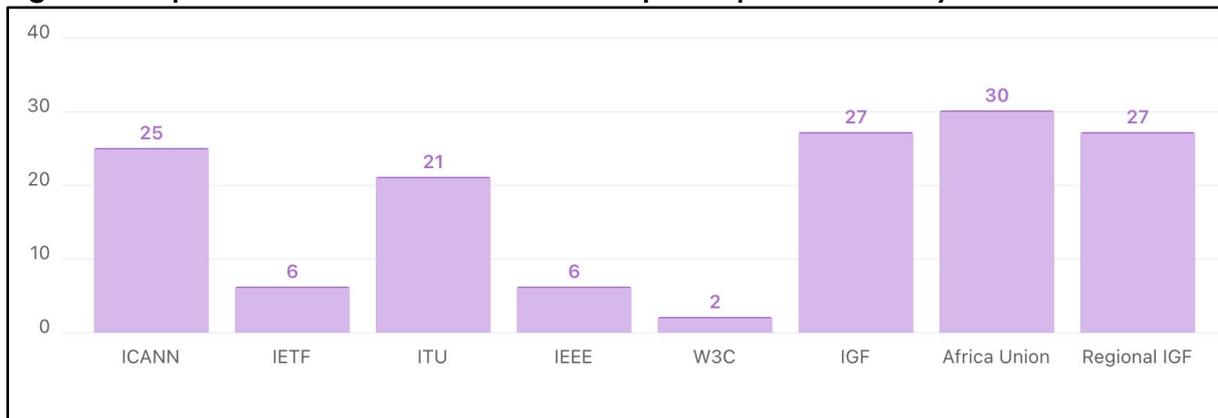
While global bodies like the W3C have acknowledged these barriers by offering reduced membership fees for developing countries, the perception of being a "western commercial alliance" persists, and many potential participants remain unaware of the available support programs. For example, despite many journals, including those of the IEEE, waiving fees for researchers from low- and middle-income countries, over 75% of African researchers surveyed were unsure if applicable journals offered these waivers. This suggests that the problem is not merely the absence of a solution but a systemic failure of information dissemination, where the responsibility for bridging this knowledge gap falls on the global institutions themselves.

Although some processes involve a large chunk of the work being carried out online such as mailing lists, one key informant noted that when it comes to in-person participation, 'the cost of a flight to an ICANN meeting in North America or Europe is unaffordable for the average African participant. Figure 3 shows that most African participants prioritise the AUC and regional IGF organised processes. Technical standards making bodies such as IETF, IEEE and W3C are not top on the priorities list.

While recognising that limited financial resources for travel pose a significant challenge for African IG stakeholders wishing to attend global and regional meetings in person. This challenge is not unique to Africa and affects many countries worldwide. However, since the

COVID-19 pandemic, online participation has become a standard and widely accepted practice in many IG processes. Increasingly, African stakeholders are using remote participation tools to contribute meaningfully to discussions. This is a great opportunity that African stakeholders should utilise given ongoing budget constraints at both national level and within institutions that traditionally provide travel support.

Figure 7: IG processes African Stakeholders participate in last 5 years



Source; Research Findings, 2025

Technical Jargon and Communication

Another significant barrier to engaging in internet governance is the lack of technical expertise on intricate and evolving issues. Internet governance issues can be complex and rapidly evolving, and this often requires specialised knowledge that many African stakeholders may not possess. Interviewed key informants from member state Ministries of ICT reveal that spaces like the IETF, IEEE and W3Cs are usually not priority spaces for most African governments as the issues are considered to be for the global north. In addition the procedures and rules for these technical bodies tend to discourage participation. To get involved, one needs to learn these rules and customs, and the learning curve is usually steep for non-technical participants.

Communication difficulties, primarily the language barrier, significantly exacerbate this gap. A key finding from KIIIs is that IETF work is conducted almost entirely in English, often involving rapid exchanges filled with technical jargon during meetings. This environment poses a substantial challenge for non-English speakers or those using English as a second language. While simultaneous interpretation could assist in meetings, survey responses indicate the barrier goes deeper than just translation.

Procedures and Bureaucracy

Government oriented stakeholders in the region prioritise multilateral processes such as ITU sector processes. While ITU's procedures and processes may seem difficult to navigate, especially for new members, the level of participation is generally high and is on an upward trend for African nations. Increasingly, African countries are not only participating but are also assuming significant leadership and active roles in the ITU's work, particularly

within the Study Groups of the Radiocommunication (ITU-R), Telecommunication Standardisation (ITU-T), and Telecommunication Development (ITU-D) Sectors.

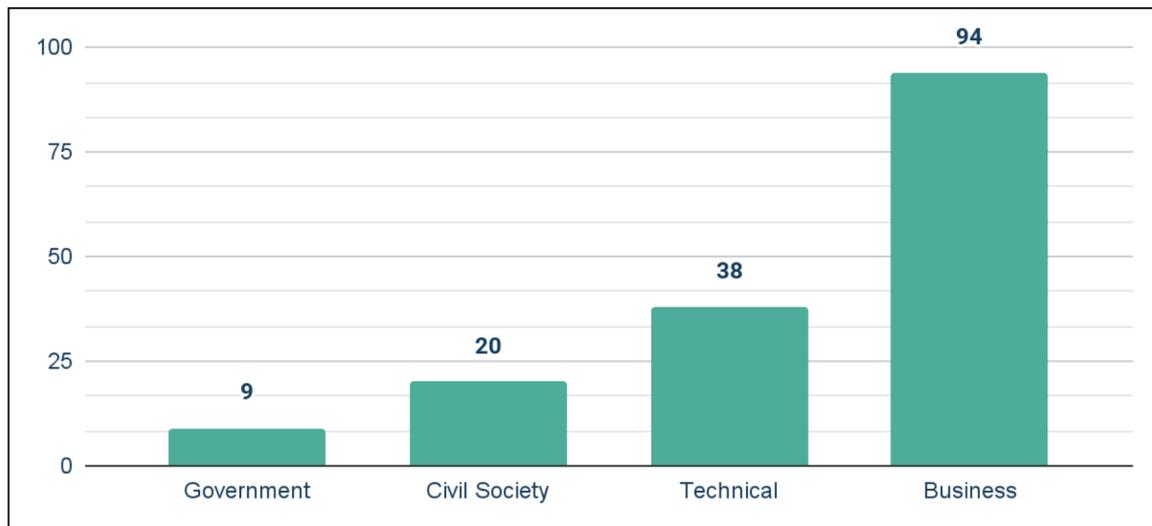
This heightened engagement is critical, as it ensures that the continent's challenges and priorities in spectrum management, standardisation, and development are effectively addressed in global policy making. In addition ATU has made concerted efforts to coordinate African positions, which contributes to the continent's greater influence. The tangible evidence of this growing influence can be seen in the assumption of key positions. For example, during the 2022 Plenipotentiary Conference (PP-22), African candidates were elected to important roles, including regional representation on the Radio Regulations Board (RRB) and various Council Working Groups, demonstrating a commitment to taking on governance responsibilities. African experts are also increasingly taking on roles such as Vice-Chairs of Study Groups and Rapporteurs for specific Questions.

4.3 Diversity and Inclusivity

The escalating significance of digital diversity has emerged as a crucial issue. The internet's inherent strength stems from its capacity to serve as a platform for a wide array of voices and perspectives, all of which are vital to its dynamism (Ayub, 2024). A recurring challenge in internet governance engagement is the lack of diversity in stakeholder representation. Research indicates limited diversity among participants specifically concerning gender, ethnicity, and background particularly within standard-making organisations. Forums such as ICANN and the IETF suffer from systemic representational bias, as a large percentage of participants hail from Western Europe or North America and are primarily employees of major technology companies, according to Knodel and Salasar (2023). This imbalance embeds a monoculture, often white, male, and Global North within groups like the IETF, which can effectively alienate those who do not share that identity.

Insufficient inclusivity, particularly concerning government participation, is evident in ICANN's leadership structure. For example, in 2022, government representatives held less than 10% of the leadership positions across ICANN's various constituencies, as illustrated in the Figure below. Furthermore, it is crucial to recognise that not all these leadership roles carry equal weight; some positions are merely observer roles and lack voting rights.

Figure 8 : Stakeholder group of individuals in ICANN leadership roles in 2022



Data source: Férdeline, 2022

The existing scenario within ICANN's structures exhibits a historical bias, heavily favoring business influence, as highlighted by Férdeline (2022). Commercial interests currently hold 58% of leadership positions across the board. While this is a complex issue that will take time to resolve, it underscores the critical need for ICANN to prioritise and achieve diverse representation.

The prevailing lack of diversity presents a substantial obstacle to sustaining membership growth, potentially leading to a gradual decrease in community participation over time. ICANN's community is predominantly composed of long-standing members, suggesting a general deficit of varied perspectives, experiences, and ideas. Furthermore, a key expert at the ICANN 81 meeting noted that the highly technical nature of discussions often discourages newcomers, resulting in their low long-term involvement. This factor partially explains the continued engagement of only long-standing members, which in turn exacerbates the underrepresentation of newer perspectives.

Geographic diversity is also a concern. African participation in the IETF for example remains relatively limited compared to technical experts and industry representatives, based on data from IETF reports in 2021, 2022, and 2023. As a result, the unique needs and perspectives of the Africa region are underrepresented, leading to potential biases and overlooking critical issues.

4.4 Existence of Silos Undermining Collective Efficacy

The effectiveness of multistakeholder collaboration is consistently hampered by the persistence of silos, which stem from insufficient cross-community engagement. This fragmentation results in initiatives that are less cohesive and diminishes the likelihood of achieving sustained outcomes. The negative consequences of these silos are evident in various aspects. For example, policy development, particularly within working groups, frequently stalls because different stakeholder groups adopt rigid positions. Consequently,

the resulting policies often fail to represent the interests of the broader stakeholder community.

While African experts contribute to IEEE standards, particularly in telecommunications and power systems, African sub-regional working groups often fail to effectively synthesise the continent's diverse needs (e.g., low-cost infrastructure, off-grid solutions). This 'silo' effect prevents a unified African input into the global IEEE process, resulting in standards less suited for typical deployment challenges in many African countries.

The same applies for IETF where silos emerge when input is limited to a few elite academic individuals or research networks. Africa input to the IETF has been documented to be less than one percent of all RCFs submitted..

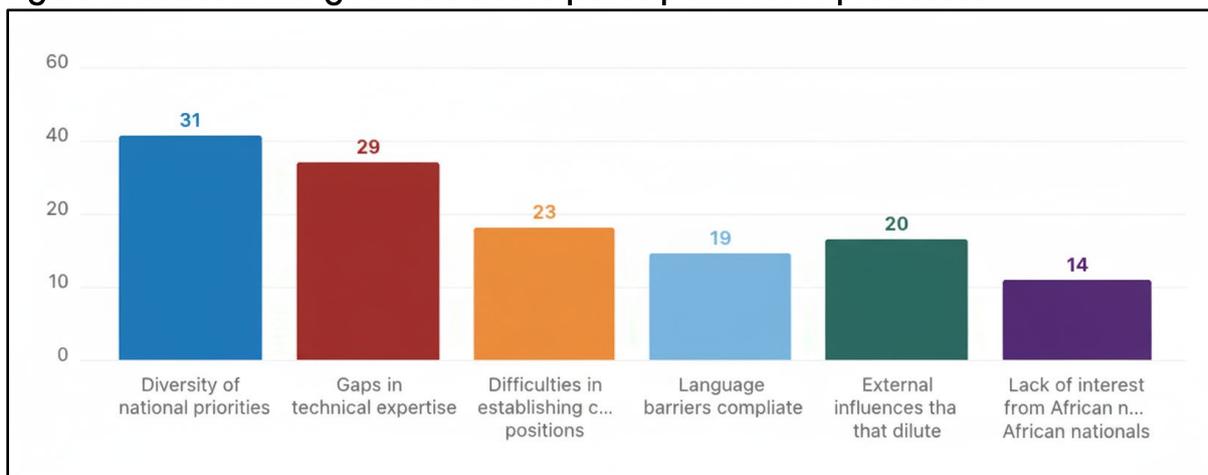
4.5 Digital Divide

Africa's ambition for a commanding voice in global digital affairs is hampered by a persistent internal fragmentation. The reality is that while the infrastructure is expanding, a significant gap remains between coverage and actual usage. These internal fences are not just a matter of connection, they cripple the formation of a unified community of African professionals and citizens who could collectively champion African interests and shape the destiny of the internet. This deficit in digital engagement mutes Africa's voices in global forums, limits the ability to conduct vital research, collaborate across borders, and keep pace with the relentless evolution of internet governance.

4.6 Internet Governance and National Priorities

Key informants interviews revealed that another obstacle limiting engagement in internet governance spaces is that many face challenges in aligning internet governance discussions with national priorities, which often limits their motivation to actively participate in such forums. This misalignment typically arises from a perceived lack of relevance or immediate impact on the core issues. For instance, smaller countries in Africa may have urgent national priorities resulting in IG issues being sidelined. Survey results for this study indicate that national priorities are among the top reasons why some countries are not actively engaged in IG processes, followed by gaps in technical expertise as shown in figure 9.

Figure 9: Issues limiting Africa’s active participation in IG processes



Source: Survey results, 2025

4.7 Conclusion

This section has highlighted the key challenges Africa region faces in engaging with internet governance processes. A primary challenge is underrepresentation in key bodies such as ICANN, IEEE, and the IETF, which risks biased decision-making and the exclusion of African perspectives. Furthermore, policy barriers and the pervasive digital divide restrict engagement. Compounding this, some African nations prioritise pressing national issues over internet governance involvement, further diminishing diverse representation. Overcoming these obstacles demands access to resources, promoting capacity building, and guaranteeing the inclusion of diverse voices in shaping the internet's future.

Section Five : Opportunities for Africa to actively engage with IG processes

Key insights box: Africa's opportunities in global internet governance:

- African stakeholders can participate in IETF and IRTF working groups to influence protocols on privacy, and IoT security.
- Programs like EMODIR, travel grants, and mentorship opportunities from IETF, ICANN, and IGF help overcome barriers to participation and support African newcomers.
- Africans can join ICANN's SOs/ACs (e.g., ALAC, GNSO, ccNSO), use platforms like ICANN Learn, and engage in the Empowered Community to shape domain name and internet policy.
- ITU- study groups offer relevant entry points for African CSOs and member states to contribute to global ICT standards.
- African stakeholders can engage in global and regional IGF meetings, dynamic coalitions, and youth initiatives to raise local issues and influence global iIGFance

5.1 Opportunities for African Participation in IG Processes

This section examines opportunities for the African region to engage in crucial internet governance fora, specifically the W3C, IEEE, IGF, ICANN, IETF, and ITU. Based on insights gathered from key informants, a literature review, and baseline survey data, it proposes concrete entry points for African stakeholders who are new to these spaces and outlines strategies to strengthen existing participation. The findings highlight innovative, respondent-shared strategies for Africa to build relevance, gain momentum, and secure and maintain a voice in decision-making. The overarching aim, driven by the experiences and recommendations of those actively engaged in these efforts, is to empower Africa to make significant contributions to the growth and sustainability of a globally connected, open internet accessible to all.

5.2 Opportunities for Africa in IEEE

Africa can significantly enhance its technical capacity and foster innovation by strategically engaging with the IEEE framework. A key avenue involves leveraging IEEE's emphasis on humanitarian technologies and sustainable development. This platform enables African engineers to spearhead projects addressing pressing local challenges, such as pioneering off-grid power solutions through initiatives like the IEEE Smart Village, or developing accessible and affordable medical devices.

To further amplify its impact, the region could actively host more IEEE regional conferences, like AFRICON. These events offer a vital opportunity to showcase local research and cultivate connections within a global professional network. Furthermore, the establishment

and expansion of student branches and technical chapters within African universities are crucial. These initiatives train the next generation of engineers and researchers, cultivating a talent pipeline that is both globally competitive and locally relevant. Africa region has experts active in IEEE that could provide the backbone for such initiatives.

5.3 Opportunities for Africa in W3C

A major opportunity is in the area of digital inclusion and localisation. Africa can contribute significantly to W3C's work on internationalisation, ensuring that web standards support a vast array of African languages and writing systems. By participating in W3C's Community and Working Groups, African developers and experts can advocate for and help create standards that address challenges specific to the continent, such as low-bandwidth environments and mobile-first usage. The W3C's reduced membership fees for developing countries and its establishment of regional offices, such as those in Morocco and Senegal, are key entry points that can be further utilised to increase African representation and influence in shaping a web that is truly accessible to all.

5.4 Opportunities for Africa Engagement in IETF and IRTF Processes

The IETF plays a crucial role in shaping the internet. For Africa, understanding and engaging with the IETF is vital. The IETF operates through various WGs, each focused on a specific area of internet technology. In addition, the IRTF delves into the internet's longer-term challenges. This includes exploring emerging technologies and their potential impact on society. Many African stakeholders, especially member states, actively address technology, economic development, and regulatory frameworks, among other critical areas related to internet governance.

The following non-exhaustive list of research groups and working groups (Table 4) provides some important spaces relevant to Africa that could serve as entry points due to cross-cutting issues.

Table 16 : IETF and IRTF working groups and research groups relevant

Group	Name of Group	Focus/Mandate	Strategic Interest in Africa
IRTF	GAIA (Global Access to the Internet for All)	Researching and solving technical, social, and economic barriers to global Internet access, especially in underserved regions.	Addressing the Digital Divide: Directly focuses on low-cost/community network models and finding paths to achieve a 10x reduction in access costs, which are vital for rural and low-income populations.

IETF	Security (SEC) Area WGs (e.g., TLS, SIDR)	Developing and standardizing protocols for securing the Internet, including transport encryption (TLS) and routing security (RPKI via SIDR).	Building Trust and Resilience: Essential for securing e-commerce and digital government services. RPKI implementation is crucial for preventing route hijacking and maintaining network stability across national and regional backbones.
IETF	V6OPS / 6MAN (IPv6 Operations/Maintenance)	Operational guidance and maintenance standards for the deployment and transition to IPv6.	Sustaining Growth: Africa faces IPv4 exhaustion. Full and correct IPv6 deployment is a non-negotiable step for sustained growth in users and devices, and for enabling future technologies like IoT.
IETF	OPS Area WGs (e.g., OPSAWG, NMOP)	Developing protocols and best practices for network operation, monitoring, management, and troubleshooting.	Improving Operational Efficiency: Standards improve network stability and reliability in environments with power/resource constraints. Essential for professionalizing operations and optimizing traffic at Internet Exchange Points (IXPs).
IRTF	NMRG (Network Management Research Group)	Research into the long-term future of network management, including autonomic networking and network automation.	Scaling and Future-Proofing: Automation is key to managing large, complex, and rapidly scaling networks with limited operational staff. This research helps African operators move towards self-managing, more resilient networks that are cheaper to run.
IETF	Routing (RTG) Area (e.g., IDR, PALS)	Standardizing protocols for routing within and between networks (e.g., BGP updates, Segment Routing, LDP).	Optimizing Core Networks: Efficient and modern routing protocols are fundamental for building high-speed, low-latency regional backbones and transit networks. Participation ensures African network requirements are considered in the evolution of core Internet infrastructure standards.

Data sources: IETF, n.d.a / IRTF, n.d

5.4.1 Initiatives Addressing Engagement Challenges in the IETF

The IETF utilises several onboarding initiatives, primarily coordinated by the Education, Mentoring, and Outreach Directorate (EMODIR). EMODIR is central to this effort, offering tailored resources and educational opportunities for a diverse range of participants. These audiences include newcomers, general attendees, specific community groups, and IETF leadership, such as working group chairs (IETF 2024). Furthermore, EMODIR manages mentoring programs designed to expedite the integration of new participants into productive roles within the IETF.

In addition to this internal initiative, the IETF offers external programs designed to lower barriers to participation. These programs could potentially help African stakeholders bridge certain gaps and enable them to participate in IETF meetings in person, thereby building and expanding their networks with stakeholders from civil society, academia, and industry. Examples of these external programs include:

- IRTF Diversity Travel Grants (available per IETF meeting)
- The Public Interest Technology Group (PITG) travel assistance fund
- The IETF Policy Program, supported by the Internet Society

5.5 Opportunities for Africa engagement with ICANN

This section draws upon insights gathered from key interviews conducted for this study. The perspectives provide context and inform the analysis presented.

5.5.1 Policy Development

African participation in ICANN's policy development can be significantly enhanced through active engagement in ICANN's SOs and AC according to KIs. Specific avenues for this deeper involvement include joining the ALAC to represent individual internet users, the GNSO, and ccNSO for engagement concerning country code top-level domains. One interviewee stressed the importance of African stakeholders proactively forming coalitions with other groups and consistently monitoring policy implementation to assess impact and identify unforeseen consequences.

ICANN actively encourages engagement from new participants by offering a variety of beginner resources. Specifically, newcomers can enhance their foundational understanding of ICANN concepts, policy development, and the DNS by utilising the interactive courses available on the ICANN Learn platform. A structured introduction to ICANN's role and ecosystem is also provided through participation in the 'ICANN for Beginners Virtual Program' webinar series. Furthermore, new participants are advised to proactively identify and engage with ICANN communities that align with their specific policy interests.

5.6 Opportunities for Africa Engagement in ITU

Study Groups and Focus Groups

An active opportunity for African stakeholders is through joining and contributing to ITU Study Groups. These study groups serve as the primary forums where technical standards and recommendations are formulated. African stakeholders, especially member states delegates can offer input on issues such as accessibility, affordability, and the broader societal impact of technology. At each WTDC, WRC, or WTSA, member states define key study questions that guide the groups' work for a four-year period. These questions cover a range of topics, from broadband deployment and cybersecurity to e-health and environmental impact. The study groups hold regular meetings where members contribute expertise, share case studies, and debate solutions. Based on their findings, they produce guidelines and recommendations that serve as valuable resources for countries and organisations implementing ICT projects and policies.

In addition to study groups, ITU's focus groups augment the study group work programme by providing an alternative working environment for the rapid development of specifications in their chosen areas. Focus groups are now widely used to address needs as they emerge and when they are not covered within an existing study group. The key difference between study groups and focus groups is that the latter enjoy greater autonomy in organising themselves. Focus groups can be created very quickly, are usually of limited duration, and can choose their own working methods, leadership structure, financing, and types of deliverables. This can provide an opportunity for stakeholders seeking to raise awareness around specific issues.

Some study groups tend to attract more participants from developing countries, including Africa, due to their work on social issues. These include ITU-T Study Group 9 (broadband cable and TV networks), ITU-T Study Group 20 (internet of things and smart cities), ITU-D Study Group 1 (enabling environment for ICT development), and ITU-D Study Groups 1 and 2 (ICT applications and cybersecurity). A non-exhaustive list of ITU-T study groups that are particularly relevant for Africa is in Table below.

Table 17 : ITU-T study groups relevant for Africa region

Study Group	Issues Covered
ITU-T SG2	Operational Aspects of Service Provisioning, Numbering, Routing, and Networks: SG2 deals with the operational aspects of telecommunication networks and services, including numbering, routing, network management, service quality, and interoperability. They work on standards for efficient network operation, service provisioning, and interconnection between different networks.
ITU-T SG3	Economic & Policy Issues; Responsible for tariff and accounting principles for international telecommunications. The group also studies the economic and regulatory impact of the Internet, new services (like OTT), and the convergence of services and infrastructure. It aims to develop regulatory models and frameworks to support these changes.
ITU-T SG5	Environment, EMF & Circular Economy Develops standards related to electromagnetic compatibility (EMC), human exposure to electromagnetic fields (EMF), and protection against lightning. It also focuses on the role of ICTs in combating climate change, promoting energy efficiency, and managing e-waste to support a circular economy.
ITU-T SG9	Broadband Cable & TV Works on international standards for broadband cable and television networks. Note: For the 2025–2028 study period, this group will be consolidated with SG16 to form a new Study Group 21.
ITU-T SG11	Protocols, Testing & Combating Counterfeiting Develops signaling requirements, protocols, and test specifications for telecommunication networks. A significant area of its work is combating counterfeit and stolen devices by establishing technical requirements and frameworks, such as a Centralised Equipment Identity Register (CEIR). It also addresses signaling security.
ITU-T SG12	Performance, QoS & QoE; This group is responsible for standards on performance, Quality of Service (QoS), and Quality of Experience (QoE). Its work spans the entire communication chain, from terminals and networks to services like speech, video streaming, and augmented reality (AR). It also develops guidance for using machine learning to predict QoS and manage network performance.
ITU-T SG13	Future Networks Studies the requirements, architectures, and capabilities of future networks (FNs). This includes work on softwarisation, artificial intelligence (AI), machine learning, quantum networks, and trusted ICT infrastructure. It also studies fixed, mobile, and satellite convergence, and networking aspects of quantum key distribution networks (QKDN).
ITU-T SG15	Transport, Access & Home Develops international standards for the global communication infrastructure. This includes optical transport networks (OTN), fiber- and copper-based access networks (like GPON and DSL), and in-home networks. The group also works on network management, resilience, and disaster recovery.

IoT, Smart Cities & Communities; Develops international standards for the Internet of Things (IoT) and Smart Cities and Communities (SC&C). This includes work on interoperability, architectural frameworks, data analytics, sharing, and management. It also addresses security, privacy, and trustworthiness for IoT systems and establishes Key Performance Indicators (KPIs) to evaluate smart city initiatives.

Data source: ITU, 2025.

Regional Engagement

Another opportunity for African stakeholders to engage with ITU is through its Regional and sub regional Offices, which offer opportunities for localised engagement on telecommunications issues specific to different regions. New members seeking to engage with ITU can increase their effectiveness by focusing on specific areas of interest within ITU's mandate. Building relationships with relevant stakeholders is essential. Developing expertise in ITU processes and telecommunications issues, along with clearly communicating concerns and recommendations, contributes to successful engagement.

5.7 Opportunities for Africa engagement with the IGF

Annual IGF Meetings and Intersessional Work

One of the primary ways African stakeholders can engage with the IGF is through participation in the annual global IGF meetings. These gatherings bring together stakeholders from governments, the private sector, the technical community, academia, and civil society to discuss pressing internet governance issues. Participants can also offer input to the IGF agenda and planning meetings through the work of the Multistakeholder Advisory Group (MAG). At the IGF itself, members can attend and intervene in sessions, workshops, and main events, both online and in situ. Additionally, members can organise side events or networking sessions to highlight their perspectives and priorities. The annual meetings also provide opportunities to engage in open forums and dynamic coalitions – whose work is ongoing throughout the year – fostering collaboration and knowledge-sharing among diverse stakeholders. Dynamic coalitions, for instance, focus on topics such as accessibility, blockchain, and internet rights, providing opportunities to join existing groups or propose new ones. By contributing to coalition outputs, such as reports or guidelines, members can help shape the discourse on priority internet governance issues and drive meaningful change. Members can build partnerships with other stakeholders to co-organise events or initiatives, participate in other intersessional work such as policy networks or best practice forums, and share their perspectives in collaborative outputs like policy recommendations or joint statements.

The IGF offers online participation options, ensuring broader multistakeholder engagement. Members can engage in events via online participation tools and live streams, submit questions or comments remotely, and participate through online forums and social media discussions. This flexibility allows participants to contribute to the IGF's work regardless of geographic or financial constraints.

National, Regional, and Youth IGF Initiatives

Raising regional and even country-specific internet governance issues would not only strengthen the relevance but also position to effectively advance regional priorities and contribute to solving critical national and regional challenges. A KII explained how one member from Ghana gained relevance and strategically positioned itself as a respected partner to other governments, and the business sector through its active participation in the organisation of a local IGF. The outcomes and recommendations from these initiatives can then be shared at the global IGF, ensuring that local perspectives inform broader discussions. This decentralised approach allows members to address issues that are particularly relevant to their communities while contributing to the global dialogue on internet governance.

5.8 Conclusion

This section has examined the most important avenues through which African stakeholders can actively engage in critical internet governance processes, particularly within the IEEE, W3C, IGF, the IETF, ICANN, and ITU. The section also addressed the barriers encountered when engaging with these technical communities and highlighted initiatives like EMODIR and travel grants to enhance participation. By strategically identifying entry points, strengthening capacity, and promoting collaboration, stakeholders can amplify their influence and make meaningful contributions to the evolution of internet governance. This ensures that the governance framework reflects the diverse needs and values of communities worldwide, fostering a more equitable and inclusive digital future.

Section Six: Impact of Emerging Technologies on IG and Policy in Africa

This section examines the impact of emerging technologies on IG and policy in Africa. Africa's current governance frameworks, largely designed for connectivity expansion, are inadequate for navigating the complex ethical, regulatory, and strategic challenges posed by datafication, algorithmic decision-making, and hyperconnectivity. Drawing on regional priorities agreed at the ITU by African member states, national strategies, and multistakeholder dialogues, it highlights the imperative for adaptive, rights-respecting, and harmonised policy responses to ensure Africa harnesses technological transformation for equitable development and retains agency over its digital future.

6.1 Introduction

The global internet ecosystem is undergoing a transformation driven by emerging technologies such as AI, IoT, Blockchain, and Metaverse. These technologies hold immense transformative potential for Africa. According to Oloyede, et. al. (2024), the digital economy could fundamentally reshape the African continent by enabling smart infrastructure in education and healthcare, promoting digital finance, enhancing precision agriculture, and modernising various other sectors. This digital transformation, however, is critically dependent on robust ICT infrastructure, particularly the internet, facilitated and accessed using a wide range of technologies including the use of new and emerging technology.

Research by Weber (2015), underscores the urgent need to revisit and rethink traditional internet governance and policy frameworks. This is because some of these evolving new and emerging technologies raise complex and pressing questions around internet access costs, data sovereignty, cybersecurity, digital ethics, cross-border data flows, and infrastructure readiness (Okolo, Chinasa T., 2024). As these technologies increasingly drive digital economic change, the imperative for effective and adaptive governance becomes more urgent. This is because historically, Africa's digital policy focus has been on expanding basic connectivity for Telecommunications/ICTs. However, the rise of emerging technologies demands a shift toward more sophisticated governance frameworks capable of addressing multi-dimensional challenges, including internet affordability, data ethics, digital sovereignty, and regulatory gaps (Drake, William J., Cerf G. Vinton, and Wolfgang Kleinwächter, 2016). Without timely and adaptive regulatory reforms, the spread of AI and other emerging tools could lead to the loss of control over citizen data, particularly to foreign technology giants.

In addition, the high cost of internet access remains a significant barrier to widespread technology adoption. Africans currently pay three to five times more for internet access compared to people in other regions (West, Darrell M. 2015), a disparity that undermines national digital sovereignty and inclusive development goals. Therefore, the core challenge is no longer solely bridging the connectivity gap. The central imperative now is navigating the governance shifts demanded by technologies intrinsically reliant on massive data flows, opaque algorithmic decision-making, and hyperconnected systems.

Some of these new and emerging technologies amplify existing vulnerabilities like regulatory fragmentation and cybersecurity. The potential erosion of digital sovereignty to external platforms, the normalisation of algorithmic surveillance, and the risk of 'governance by default' as innovation outpaces policy is also a challenge. This is because across the continent, the rapid uptake of digital tools often outpaces the ability of governments and regional bodies to establish coherent and harmonised internet governance structures.

6.2 Emerging Technologies Reshaping the Landscape

Artificial Intelligence

AI is increasingly becoming a cornerstone of digital innovation across African sectors such as healthcare, agriculture, and public administration. For example, Rwanda and Ghana have leveraged AI-driven applications to enhance rural healthcare access and optimise government service delivery, demonstrating AI's potential to bridge developmental gaps. Kenya's comprehensive AI Strategy (2025–2030) highlights governance priorities including data protection, cybersecurity, and the ethical deployment of AI technologies (Cooper et al., 2025). The African Union's Continental AI Strategy further advocates for inclusive AI systems that align with Africa's socio-economic contexts (Bayingana, M, 2020.). Despite these advances, challenges remain, notably in enforcement capabilities and uneven technological capacity across nations. AI governance in Africa therefore requires robust frameworks that not only encourage innovation but also safeguard human rights, transparency, and accountability.

Internet of Things (IoT)

IoT is rapidly expanding across Africa, facilitating novel applications such as smart metering for utilities and environmental monitoring in agriculture. These technologies hold promise for efficiency gains and enhanced data-driven decision-making. However, IoT governance is hindered by fragmented regulatory environments. This is because many national ICT policies lack specific provisions for IoT security and spectrum management. The absence of harmonised regional regulations exacerbates these issues, while also impeding interoperability and consistent enforcement of standards (ITU, 2022). To fully harness IoT's benefits, African policymakers must collaboratively develop governance structures that address cybersecurity risks, privacy, and equitable access.

Blockchain and Trust Architectures

Blockchain technologies, epitomised by Nigeria's launch of the eNaira Central Bank Digital Currency (CBDC) in 2021 (Abdullahi, Marsuk, et al, 2024), exemplify Africa's foray into decentralised digital finance and trust mechanisms. Blockchain's potential to increase transparency, reduce transaction costs, and empower unbanked populations is widely recognised. Nevertheless, regulatory ambiguity persists concerning the legal status of smart contracts, energy consumption concerns, and the integration of blockchain within existing financial and legal systems. The lack of harmonised blockchain governance frameworks

across African countries restricts widespread adoption and complicates cross-border interoperability.

Metaverse/Extended Reality XR

Immersive technologies, encompassing the metaverse and extended reality (XR), are gaining momentum in sectors such as education, cultural heritage preservation, and digital commerce. These virtual environments create new digital spaces that challenge traditional governance paradigms due to jurisdictional ambiguity, content moderation complexities, and intellectual property (IP) rights management. African policymakers currently face a dearth of regulatory frameworks tailored to these novel domains. Crafting inclusive and adaptable governance mechanisms that protect user rights while fostering innovation in virtual spaces will be vital to harness the metaverse's potential for social and economic development.

5G and Beyond

The deployment of 5G infrastructure across countries such as South Africa, Kenya, and Nigeria heralds a new era of ultra-fast connectivity, enabling applications from smart cities to industrial automation. However, these rollouts have revealed dependencies on foreign technology vendors and reveal fragmented policies around spectrum allocation and infrastructure management. The governance of 5G networks involves not only technical regulation but also concerns around national digital sovereignty, data privacy, and security. Proactive African engagement in upcoming global standards for 6G and beyond will be critical to ensure that the continent's infrastructure sovereignty and strategic interests are preserved.

Cloud and Edge Computing

Cloud and edge computing technologies underpin many emerging digital services by enabling real-time data processing and distributed computing closer to end users. Applications in agriculture and telehealth benefit significantly from such architectures. However, reliance on multinational cloud service providers risks perpetuating external control over African data assets. This raises critical questions about data sovereignty, national security, and economic dependency. African governments are therefore challenged to develop policies that incentivise the growth of local data centers and edge infrastructure, ensuring that digital sovereignty is maintained while fostering technological innovation.

Satellite Voice Communication and Broadband Services

Satellite now offers both voice and broadband technologies. Initiatives like SpaceX's Starlink, offer promising solutions for bridging the digital divide by providing connectivity in remote and underserved regions. Yet, these technologies complicate traditional governance frameworks which have historically centered on terrestrial infrastructure. Issues such as licensing, spectrum management, IP address allocation, and cross-jurisdictional regulation require new approaches to digital governance. African regulatory

bodies must collaborate regionally to develop coherent policies that protect national sovereignty while embracing the connectivity benefits of satellites.

Digital Identity Systems

Digital identity systems, increasingly piloted across Africa. They aim to enhance access to public and private services through biometric and digital credentials. These systems facilitate service delivery, financial inclusion, and e-government initiatives. However, concerns arise around surveillance, exclusion, and potential misuse of personal data. Governance frameworks governing digital identity must include mandatory impact assessments, transparency mechanisms, and legal safeguards that protect individual rights and ensure equitable access. Addressing these governance challenges is essential to avoid digital disenfranchisement and to build trust in national identity ecosystems.

Virtual Private Networks (VPNs)

VPNs represent a significant, yet often overlooked, technological shift with profound implications for internet governance in Africa. VPNs, which encrypt user traffic and route it through servers in other jurisdictions, are used for a variety of purposes, including enhancing personal security, accessing geo-restricted content, and circumventing state-imposed internet restrictions or censorship (Schuls, W., & Hoboken, J. V, 2016). This technology directly challenges traditional, territorially based internet governance models. For African regulators, the widespread use of VPNs creates a dualistic governance challenge. On one hand, VPNs are a critical tool for journalists, activists, and businesses to protect sensitive communications from interception and to maintain access to the global internet during state-imposed shutdowns, thus upholding digital rights and ensuring business continuity (Bloggers of Zambia et al. v. AG, 2021, Jensen, M, 2006). On the other hand, they complicate the enforcement of national laws concerning content regulation, taxation, data localisation, and cybersecurity by obfuscating user activity and location from national authorities. This erosion of jurisdictional visibility forces a re-evaluation of governance mechanisms that rely on geographic control. A cohesive African policy stance on VPNs must therefore navigate this tension, potentially recognising their role in protecting privacy and access while developing nuanced, rights-respecting frameworks to address legitimate security concerns without resorting to outright bans that are often ineffective and rights-infringing.

6.3. Emerging technologies vs Internet tensions in Africa

Emerging technologies bring practical governance tensions to the fore across the globe however we focus on a diverse African context. For example, Nigeria's eNaira initiative highlights the complex interplay between financial innovation and sovereignty. While the Central Bank Digital Currency aims to improve financial inclusion, challenges around algorithmic transparency and the adequacy of regulatory oversight have limited public trust and adoption. This case underscores the delicate balance governments must strike between fostering innovation and ensuring accountability in digital finance. Another example is Nigeria's deployment of IoT-enabled smart electricity meters. It raised debates on consumer privacy and data ownership. While these smart meters increase billing

accuracy and efficiency, the lack of clear policies around who controls and can access consumer data introduces potential for misuse. Similarly, in Senegal, rural edge computing initiatives have significantly improved service delivery in underserved communities but have exposed policy gaps concerning digital equity and data governance, emphasising the need for inclusive policy frameworks that address rural digital rights.

Rwanda's national AI strategy exemplifies proactive governance intent, with explicit goals to integrate AI across sectors such as agriculture and healthcare. However, limitations in institutional capacity and uneven technological readiness constrain full implementation. In Egypt, the adoption of AI-assisted hospital triage systems has improved healthcare efficiency but raises pressing questions about transparency and accountability in AI decision-making, particularly when human oversight is limited. Zimbabwe's use of facial recognition technology for border security illustrates urgent civil liberties concerns in the absence of comprehensive legal frameworks, highlighting how rapid technological adoption can outpace governance readiness.

6.4 Impact of Emerging Technologies on IG Discourse in Africa

This section seeks to explore how these emerging technologies have altered the thematic focus, institutional mandates, and governance outcomes within key internet governance fora.

ITU-D's African Priorities

Historically, African regional priorities within WTDC were focused almost exclusively on foundational elements: infrastructure build-out, policy Harmonisation, spectrum management, and digital broadcasting migration. These priorities, notably emphasised during WTDC-10 and WTDC-14, reflected Africa's stage of digital development at the time—addressing critical gaps in connectivity, human capital, and regulatory coherence. However, a discernible transition began with WTDC-17, where a modest yet significant inclusion of themes such as broadband innovation, digital economy, and internet trust and security marked the beginning of a broader vision. This phase represented a transitional mindset wherein infrastructure was not the terminal goal but rather a conduit for economic and social transformation.

The most substantial shift occurred at WTDC-22 (Kigali), where African regional priorities underwent a notable pivot. The agenda foregrounded digital transformation, cybersecurity, and the establishment of innovation ecosystems. The framing of infrastructure now emphasised its role as an enabler for inclusive digital economies and services. WTDC-22's priorities pointed to a continental realisation of achieving meaningful connectivity is no longer sufficient unless accompanied by robust mechanisms for data stewardship, AI governance, ethical standards, and cross-sectoral coordination.

By April 2025, during the African preparatory meetings for WTDC-25, this trajectory matured into a full-fledged digital governance agenda. For the first time, priorities explicitly incorporated the systemic governance of data and AI, trust, cybersecurity, and socio-economic resilience. A detailed examination of AFR1 to AFR6—the six pillars of the 2025 African Regional Initiatives—reveals a sophisticated governance architecture.

This progression suggests an expansion from technical engineering challenges to socio-political governance considerations. The strategic positioning of emerging technologies at the heart of ITU-D's regional governance initiatives marks a shift where control over infrastructure is no longer as decisive as control over data, algorithms, compute capacity, and standards. It reflects an implicit recognition that these elements will define value creation, regulatory autonomy, and digital sovereignty in the years ahead. Furthermore, an important undercurrent is the growing receptivity of African regulators to community network models—rural cooperatives, local ISPs, and indigenous network providers—particularly where commercial investment in infrastructure is absent. WTDC-25's emphasis on financing tools and spectrum reform offers policy levers to foster such decentralised connectivity models, especially in least-developed countries (LDCs). This inclusive approach complements broader objectives of affordability, accessibility, and rights-based governance.

Table 18 : Evolution of ITU-D Regional Priorities

WTDC Edition	Key Priorities	Internet Governance Shift
WTDC-10/14	Infrastructure, human capacity, broadcasting	Foundational (access-driven)
WTDC-17	Broadband, digital economy, trust/security	Transitional (socio-economic focus)
WTDC-22 (Kigali)	Digital transformation, innovation, cybersecurity	Strategic (infrastructure as enabler)
WTDC-25	AI/data governance, trust, resilience	Systemic (tech governance and inclusion)

Source: Research Findings 2025

African Internet Governance Forum

Between 2018 and 2022, AfIGF entered a transitional phase where themes such as AI, 5G, IoT, and fintech began to feature prominently. Events like AfIGF 2018 in Khartoum explicitly addressed digital economy and technological innovation. These discussions coalesced around the growing realisation that digital infrastructure alone could not deliver equitable development without governance mechanisms that addressed the nature, risks, and regulation of emerging technologies. By 2023, a new paradigm emerged. At the AfIGF and the African Peer Review Mechanism (APRM) Digital Cooperation Forum, AI governance, cross-border data flows, and platform accountability were no longer peripheral, they were central to shaping digital futures. Sessions explored how AI influences public service delivery, elections, and education, underscoring the urgency of developing continental frameworks that address ethical use, local language biases, data protection, and cross-border cybercrime.

The 2025 AfIGF in Dar es Salaam further entrenched this shift. It featured high-level dialogues on "AI and IoT for Africa's Next Generation," placing youth innovation, climate resilience, and data ethics at the heart of regional digital strategies. Importantly, it also reflected institutional consolidation: the adoption of the Continental AI Strategy and the

African Digital Compact by ICT ministers in 2024 showed a deepening of continental coordination in the realm of emerging tech governance.

Table 19 : Evolution of AfIGF Focus Areas

Period	Emphasis	Technologies	Governance Issues
2010–2014	Infrastructure, access	Mobile, IoT	Minimal
2015–2018	Policy dialogue	Nascent AI, fintech	Inclusion, regulation
2019–2022	Tech innovation	AI, 5G, LEO	Ethics, trust, security
2023–2025	Strategic tech governance	AI, blockchain, IoT	Data sovereignty, identity, inclusion

Source: Research Findings 2025

The AfIGF’s evolution offers five key insights:

1. Strategic Shift: Emerging technologies have transitioned from peripheral topics to central governance themes.
2. Policy Convergence: National and regional policies now draw from AfIGF outputs, promoting harmonised frameworks.
3. Youth & Innovation: A focus on youth-driven innovation positions emerging tech as a growth vector.
4. Cross-Sector Dialogue: The discourse now integrates agriculture, finance, healthcare, and education.
5. Ethical Frameworks: Discussions increasingly emphasise algorithmic fairness, transparency,

AU specialised Technical Committee on Communication & ICT (AU-STC-CICT)

The AU-STC-CICT initially centred on ICT infrastructure, policy Harmonisation , and continental digital transformation frameworks such as the Digital Transformation Strategy for Africa (2020–2030). With the accelerating importance of emerging technologies, the committee has advanced normative mechanisms such as the continental AI strategy, ethical AI frameworks, and data sovereignty initiatives embedding these within AU policy architecture (Njoroge, J. W. (2024). This body has transformed from a technical coordination entity into a foundational continental institution shaping Africa’s policy ecosystem for AI, data governance, and innovation ecosystems.

UN Internet Governance Forum (UN IGF)

African participation in the UN IGF early on prioritised digital inclusion, connectivity, and capacity-building reflecting the development needs of the continent. As emerging technologies gained prominence post-2018, African stakeholders began leading discussions on algorithmic bias, AI fairness, language inclusion in AI models, and critiques of global AI policy frameworks framing Africa as a global norm-shaper rather than a passive recipient of policies (Wakunuma, Kutoma, et al., 2022). The continent has evolved from presenting developmental challenges to spearheading ethical and inclusive AI governance dialogue at the global level. The United Nations Global Digital Compact (GDC) and the World Summit on the Information Society (WSIS)+20 review process present a

pivotal platform for Africa to transition from norm-taker to norm-shaper. These processes aim to establish new principles for an "open, free, and secure digital future for all" (United Nations, 2023).

6.5 The Impact of Emerging Technologies on Internet Governance

Over the years, the governance of the internet has been anchored in territorial models, where different players manage specific aspects of the internet architecture. With this model, IP address blocks are allocated to regional registries, telecommunications licensed by national regulators, and content oversight bound to domestic legal frameworks. This architecture reflected a world in which connectivity was largely terrestrial, traffic routes were geographically predictable, and jurisdictional authority could be exercised through physical infrastructure control. Emerging technologies are now eroding these foundations. The resulting shift is not merely technical but structural, prompting questions about sovereignty, accountability, and inclusivity in a rapidly globalising digital ecosystem. This section examines one of the most illustrative examples of such disruption before expanding to broader governance implications. By analysing both the risks and the strategic opportunities these changes present, it becomes possible to envision governance models that are less bound by geography and more attuned to functionality, equity, and resilience in a post-territorial internet.

Structural Disruptions

The current internet governance architecture built on principles of multistakeholderism, technical standardisation, and geographically bounded coordination faces growing disruption from emerging technologies. These technologies are not only redefining the internet's physical and logical infrastructure but are also unsettling long-held assumptions around jurisdiction, sovereignty, access, and accountability. The proliferation of low-Earth orbit (LEO) satellites, cloud-native networks, artificial intelligence, and decentralised technologies is pushing governance frameworks to their limits. These disruptions manifest in three significant transformations:

Jurisdictional Fluidity

Satellite-based internet services such as Starlink (SpaceX), OneWeb, and Project Kuiper (Amazon) introduce a paradigm shift in how IP addresses are allocated and how jurisdiction is applied. Unlike traditional terrestrial networks, satellite systems provide global connectivity through non-terrestrial infrastructure, bypassing the need for locally provisioned IP addresses. In the traditional model, IP addresses are distributed regionally by RIRs according to users' geographic locations. This model has supported jurisdiction-specific regulation. However, satellite providers often allocate IP addresses globally. For instance, a user in Nigeria or Kenya using Starlink may be assigned an IP address registered in the United States or Europe. This undermines region-specific content regulations, complicates cybercrime jurisdiction, and obstructs government oversight and digital sovereignty. This decoupling of geography from IP identity introduces governance challenges such as:

- Enforcement difficulties: National regulators struggle to impose tax, licensing, or content laws.

- Security and surveillance: Law enforcement loses visibility into domestic digital activity.
- Shutdown resistance: Satellite architecture impedes the implementation of state-imposed internet blackouts or filters.

Yet, alongside these disruptions lie opportunities for constructive rethinking. Satellite internet is rapidly bridging connectivity gaps in underserved and rural regions across Africa, providing high-speed access where terrestrial networks have failed. The use of globally provisioned IP addresses, rather than signaling loss of control, may point toward a new governance paradigm one that emphasises functional governance (technical resilience, privacy, availability) over territorial control.

Furthermore, the governance disruptions caused by global technologies underscore the operational and economic necessity of developing robust local internet infrastructure, particularly Internet Exchange Points (IXPs). IXPs are physical locations where multiple networks meet to exchange traffic locally. When African networks peer at local IXPs, rather than routing domestic emails or video calls through servers in Europe or North America, they reduce latency, lower connectivity costs, enhance user experience, and improve network resilience (Internet Society, 2020). The promotion of IXPs is, therefore, a critical operational strategy for asserting a measure of digital sovereignty. It keeps local traffic within national or regional borders, making it subject to local laws and regulations and reducing external dependencies. This is a tangible response to the challenges posed by satellite networks and global cloud services. Initiatives like the African IXP Association (AF-IX) and the AU's support for regional IXPs are foundational to building a more resilient, affordable, and governable African internet infrastructure, directly countering the centrifugal forces of emerging technologies.

Centralisation of Control

Artificial intelligence and cloud computing are centralising control over digital infrastructure and content governance. AI now mediates critical layers of the internet stack, including content moderation, traffic management, security protocols, Predictive analytics among others. These AI systems, largely operated by a handful of global technology firms (e.g., Meta, Google, Microsoft, Amazon), often function as non-transparent, transnational gatekeepers. Their algorithms determine what content is visible, what is prioritised, and what is restricted all outside traditional regulatory frameworks. Most of these services are governed by the policies of their home countries (e.g., the U.S.), leaving African states with little recourse to demand transparency, fairness, or regional customisation. The dependency on cloud hyperscale further exacerbates the concentration of control. Even when African data centers exist, traffic is often routed through servers located in Europe or the U.S., limiting national control over data flows, surveillance, and cybersecurity policy.

Decentralisation and Fragmentation

In contrast to centralising technologies, decentralised systems such as blockchain-based DNS (e.g., Ethereum Name Service, Handshake) and edge computing are fragmenting the governance ecosystem. These technologies allow the creation of naming systems and communication protocols that exist outside the ICANN-controlled Domain Name System

(DNS) and traditional ISP hierarchies. While these tools can foster resilience and local autonomy, they also raise difficult governance questions:

- How are disputes resolved in decentralised namespaces?
- Who is responsible for content moderation or illegal activities on blockchain-based networks?
- How can states regulate edge computing nodes operating independently?

These technologies risk creating "splinternets" incompatible sub-networks governed by conflicting norms, protocols, or authorities. The lack of interoperability and accountability could erode the universal and open nature of the internet.

Table 20 : Impact of Emerging Technologies on Internet Governance Structures

Emerging Technology	Governance Domain Affected	Impacts	Examples
LEO Satellite Internet	IP Allocation, Jurisdiction	IP-geolocation mismatch, loss of national control, cross-border enforcement gaps	Starlink IPs in Africa tied to US allocations
Artificial Intelligence	Content Policy, Infrastructure	Opaque moderation, algorithmic governance by foreign private actors	Meta and Google AI content filters
Blockchain & Decentralised DNS	Naming Systems, Legal Authority	DNS fragmentation, lack of dispute resolution mechanisms	Handshake, Ethereum Name Service (ENS)
Cloud-native Infrastructure	Infrastructure Sovereignty	Cloud dependency, cross-border data routing	Microsoft routing African traffic via Europe
Quantum & Post-Quantum Tech	Encryption, Security	New security standards, devaluation of legacy trust systems	ITU-T SG17 efforts on post-quantum encryption

6.6 Key Governance Challenges in Africa's Emerging Tech Landscape

The continent's adoption of emerging technologies such as AI, biometrics, blockchain, and satellite internet often bypasses traditional development stages, a phenomenon widely referred to as "technological leapfrogging." While this leapfrogging offers the potential to close long-standing developmental gaps, it also introduces significant governance challenges due to underdeveloped institutional ecosystems, weak regulatory infrastructures, and external dependencies. Africa's technological landscape is shaped by a dual reality: on one hand, it is home to some of the fastest-growing digital economies and most innovative mobile-based solutions in the world; on the other, it faces structural vulnerabilities related to digital exclusion, cyber insecurity, regulatory lag, and limited sovereign control over digital infrastructure. This section explores key governance challenges currently defining the continent's emerging tech trajectory.

Regulatory Lag and Institutional Gaps

One of the most pressing structural challenges in Africa's digital evolution is the growing misalignment between the pace of technological innovation and the responsiveness of regulatory and governance frameworks. New technologies such as generative AI, autonomous systems, and fintech platforms are evolving rapidly, often outpacing the ability of governments to develop and implement appropriate legal and ethical guardrails. As of 2024, only five out of Africa's 54 countries—Kenya, Rwanda, South Africa, Mauritius, and Egypt—have published national strategies to govern AI (Preko, M and Boateng, S. L, 2025). The lack of such frameworks in most countries reflects a policy vacuum at a time when AI is being embedded into critical systems like health diagnostics, financial risk scoring, and surveillance. This regulatory inertia is compounded by a severe skills deficit within public institutions. Research indicates that fewer than 20% of African regulatory bodies possess sufficient literacy in AI, blockchain, or data science, which inhibits effective policymaking and enforcement. Consequently, policies tend to be reactive, piecemeal, and often outdated by the time they are introduced. Furthermore, enforcement capacity remains weak. For example, Nigeria's National Data Protection Commission (NDPC) reported investigating fewer than 5% of data breaches in 2023 due to limited funding and personnel (Juma, Isaac, and Bukola Faturoti, 2025).

This under-enforcement compromises data privacy and consumer protection and reduces public trust in digital services. To bridge this regulatory gap, some African countries have begun experimenting with regulatory sandboxes and innovation zones. Rwanda's drone corridors, where autonomous aerial vehicles are tested under controlled conditions, and Nigeria's fintech sandbox are notable examples. These platforms offer policymakers a controlled space to understand emerging technologies, test policy approaches, and iterate governance tools. However, their impact is often localised and temporary, and without regional coordination or institutional mainstreaming, they remain insufficient to address continent-wide policy challenges.

Digital Inequality and Authoritarian Risks

While the mobile-first model has helped Africa achieve high mobile phone penetration, stark digital divides persist in broadband access, device affordability, and digital literacy. Fixed broadband penetration remains below 0.5%, and as of 2021, only 43% of the continent's population had internet access, with significant disparities between urban and rural regions (ITU, 2021). These inequalities are compounded by the rise of surveillance technologies. Digital identity systems, facial recognition software, and algorithmic decision-making often introduced without adequate oversight have the potential to morph into instruments of digital authoritarianism. Without comprehensive legal safeguards, such as transparency requirements, data protection laws, and grievance redress mechanisms, these systems risk eroding civil liberties and institutional accountability. Furthermore, the phenomenon of digital colonialism exacerbates this issue. Many African governments rely on external platforms, cloud services, and digital infrastructure owned by foreign corporations. These actors often extract value both economic and data-based without adequate local reinvestment or governance oversight. This lack of digital sovereignty perpetuates structural dependency and limits Africa's ability to shape its own digital future.

Foreign Dependency and Sovereignty Risks

Africa's digital infrastructure is deeply reliant on foreign technology providers. Major cloud services (e.g., Amazon Web Services, Microsoft Azure, and Google Cloud), satellite broadband networks (e.g., Starlink), and mobile platforms are predominantly operated by non-African entities. The implications of this dependence are multi-dimensional. First, it undermines national control over critical infrastructure and data flows. For example, most regional internet exchanges, data centers, and AI compute capabilities are owned and governed by international corporations. This reduces Africa's bargaining power in global digital policy forums and increases exposure to cross-border data governance risks. Second, it raises unresolved questions about jurisdiction and accountability. The use of satellite-based internet bypasses traditional national gateways, complicating regulatory authority over content, services, and IP address allocations. In regions served by Starlink, for instance, users access the global web through non-territorial infrastructure, rendering conventional regulatory models obsolete. Finally, this external reliance restricts local innovation ecosystems. Without sovereign control over standards, networks, and compute capacity, African developers and startups face structural disadvantages in the global technology race. Strategic investments in open-source platforms, local data centers, and indigenous satellite programs are urgently needed to reverse this trend.

Cybersecurity Governance Deficits

The rapid digitisation of public services, financial systems, and critical infrastructure has significantly expanded Africa's cyberattack surface. According to Cybernexus's 2024 report, the continent witnessed a 23% year-on-year increase in weekly cyberattacks per organisation. Countries like Ethiopia scored as high as 98% on the cyber-risk index, with Nigeria, Uganda, Ghana, and Kenya all exceeding 50%. In Nigeria alone, organisations reportedly faced approximately 3,759 cyberattacks weekly in 2024 well above the global average. INTERPOL's 2025 Africa Cyberthreat Assessment ranks Nigeria third on the continent for ransomware incidents, with 3,459 detections recorded in a single year (INTERPOL, 2025). Despite the growing threat landscape, cybersecurity capacity remains inadequate. Most national Computer Emergency Response Teams (CERTs) lack sufficient funding, skilled personnel, and real-time threat intelligence capabilities. This limits their ability to detect, share, and respond to cross-border cyber incidents effectively.

Continental frameworks such as the AU Malabo Convention on Cybersecurity and Personal Data Protection, and technical expert bodies like the AU Cybersecurity Expert Group, aim to promote regional Harmonisation. However, uneven ratification, lack of implementation capacity, and competing national interests have slowed progress. Addressing this challenge requires not just better laws, but also sustainable investments in cybersecurity training, infrastructure, public-private partnerships, and regional cyber diplomacy.

Policy Fragmentation and Continental Integration Challenges

Africa's digital market is currently characterised by fragmented regulatory regimes and divergent policy priorities, which manifest in multiple dimensions. For instance, while Nigeria

enforces strict data localisation requirements in the name of data sovereignty, Kenya actively promotes cross-border data flows. Similarly, Rwanda has established a liberal AI sandbox that encourages innovation, in stark contrast to the more restrictive regulatory environments of other states. South Africa's Protection of Personal Information Act (POPIA) represents one of the most comprehensive and robust privacy frameworks on the continent, whereas many countries still lack dedicated data protection legislation altogether.

These disparities generate significant compliance challenges for both start-ups and multinational digital service providers operating across borders, and they also constrain Africa's broader ambitions under the AfCFTA. In recognition of these challenges, the AfCFTA Protocol on Digital Trade, adopted in 2024, seeks to establish harmonised rules across eleven critical domains, including data governance, digital identity, electronic payments, and cybersecurity. Yet, the success of this protocol will ultimately hinge on the political will of African Union member states to reconcile sovereignty concerns, align domestic legislation, and implement shared regulatory frameworks.

Absent such harmonisation, Africa risks entrenching digital silos that restrict innovation, limit the scalability of markets, and weaken the potential of continental platforms to compete effectively on the global stage. The future of Africa's digital economy will therefore depend not only on the adoption of emerging technologies, but also on the continent's capacity to govern them effectively. As innovation accelerates, Africa must cultivate regulatory agility, strengthen institutional capacities, and deepen regional collaboration. Building inclusive, future-proof, and interoperable governance frameworks is not optional but imperative, ensuring that digital transformation advances the public interest, safeguards sovereignty, and contributes to the empowerment of African societies.

6.7 Conclusion

The rise of emerging technologies has revealed the inadequacies of legacy regulatory models that were originally designed to address access and infrastructure gaps alone. Today, the continent confronts more complex challenges: real-time regulation, digital rights protection, cross-border data flows, cybersecurity threats, and the geopolitical stakes of computational sovereignty. While the pace of digital adoption across Africa is encouraging, the corresponding regulatory preparedness remains uneven. However, Africa should not be a passive recipient of global technological forces. Continental and national actors should begin asserting normative agency through platforms such as the African IGF, AU Digital Strategy, and national AI and data strategies. This section presents a road map which should serve as a blueprint for reclaiming digital agency. By institutionalising inclusive governance processes, fostering homegrown innovation, protecting data rights, and building continental resilience, Africa can reimagine internet governance for the emerging technology era while reflecting African values, protect African interests, and promote an inclusive, just, and sovereign digital ecosystem.

Section Seven: Recommendations

Strategic Insights Box: Enhancing African Engagement in Internet Governance: Key Levers for Strategic Influence

- Build technical capacity through fellowships, mentorships, and open-source engagement.
- Embed African voices in working groups and standards-setting bodies.
- Leverage regional platforms like AfIGF and AFRINIC for coordinated advocacy.
- Foster cross-sector coalitions to bridge technical and policy expertise.
- Monitor representation and impact through a continental accountability framework.
- Align internet governance with regional development priorities via RECs and AU strategies.

7.1 Enhancing African Stakeholder Engagement in Internet Governance

Strategic and deeper engagement by Africa in IG spaces is important to shape a digital future that addresses the continent's priorities. While forums like the IGF are important, enhancing Africa's influence requires a shift towards more active participation across all stakeholder groups in the technical bodies that establish internet standards and protocols, namely IEEE, IETF, ICANN, W3C, and ITU. This section provides recommendations for African stakeholders to enhance their involvement in these crucial technical spaces.

7.2 Strengthening Technical Expertise and Localised Approaches

To effectively influence global technical forums, African stakeholders, a diverse group encompassing CSOs, academic institutions, and practicing engineers must cultivate a strong and comprehensive technical foundation. This foundational knowledge is crucial for meaningful engagement and requires a deep understanding of the protocols, standards, and evolving technologies being deliberated within these influential bodies. Achieving this level of technical proficiency can be accomplished through a multi-faceted approach that includes:

Investing in technical training: Establishing dedicated fellowship and mentorship programs that specifically focus on the technical aspects of internet governance. These programs should provide financial support and training for individuals to participate in IETF working groups, ICANN policy development processes, and W3C standards-setting activities. This empowers local stakeholders to contribute meaningfully to technical discussions rather than just reacting to them.

Developing local case studies: Using localised data and examples to illustrate the real-world impact of technical decisions. For example, presenting data on how a specific protocol affects network performance in low-bandwidth environments common in Africa can be a powerful advocacy tool in the ITU or IETF. This approach grounds technical debates in the realities of African internet users.

Encouraging open-source contributions: African stakeholders should actively encourage their technical experts and developers to contribute to open-source projects relevant to internet infrastructure. This not only builds capacity but also provides a pathway to becoming a recognised voice within technical communities.

7.3 Strategic Engagement with Standard-Setting Bodies

Instead of merely observing from the sidelines, African stakeholders should strategically embed themselves within the structures of key technical organisations, prioritising active participation in specific working groups within bodies like the IETF and W3C. For instance, W3C has an "African Layout Task Force" dedicated to exploring gaps in support for African languages on the web (W3C, 2024).

Collaborating with regional technical communities: Strengthening partnerships between various stakeholders and regional technical communities like the AFRINIC is vital. These partnerships can create a bridge between policy advocacy and technical implementation, ensuring that the continent's specific infrastructure challenges are addressed in global forums. The ITU also has regional groups for Africa, such as ITU-T SG3RG-AFR, which focus on issues relevant to the region (ITU, 2024).

7.4 Fostering Collaboration

Effective engagement requires moving beyond siloed efforts and building strong, collaborative networks. **Cross-sector partnerships:** African stakeholders should forge deeper partnerships with academic institutions, the private sector, and other CSOs to pool resources and expertise. For instance, collaborating with a university's computer science department can provide African stakeholders with technical research and data to support their advocacy, enhancing their credibility in forums like the IEEE. The IEEE itself has an "Africa Working Group" within its Smart Village initiative, focused on increasing African representation and projects (IEEE, 2024).

Regional coalition building: Strengthening regional initiatives and coalitions, such as the African Internet Governance Forum (AfIGF), is crucial. These platforms allow for the consolidation of African voices and the development of unified positions on key technical and policy issues. This collective approach amplifies the continent's influence in global spaces like the IGF and ITU (AfIGF, 2024).

Mentorship and knowledge exchange: Establishing platforms for continuous knowledge exchange and peer-learning is essential. Stakeholders should create forums and networks where experienced practitioners can mentor new entrants and where technical and policy experts can learn from each other. This builds a sustainable pipeline of African leaders in internet governance.

7.5 Establish a Continental Emerging Technologies Governance Framework

Leverage existing African Union instruments such as the *Malabo Convention*, *AU Digital Transformation Strategy*, and the *Smart Africa Alliance Model Laws* to create a harmonised governance blueprint. This framework should guide national policies on AI, blockchain, IoT, digital identity, and data governance. The ATU in close collaboration with the AU Commission, should assert a proactive role in global technical and policy standardisation bodies (e.g., ITU, IETF, IEEE, ISO). This involves coordinating African member states to present unified positions on standards related to 5G/6G, AI ethics, IoT security, and satellite interoperability. By leading rather than following standardisation, Africa can ensure that future technologies are compatible with continental needs, such as affordability, scalability in rural areas, and respect for human rights. Therefore, ATU should establish a dedicated working group to monitor emerging standards, build technical capacity within member states, and develop common African proposals, thereby shifting from a position of implementation to one of influence.

7.6 Recommendations for Strengthening Continental Coordination

The "weight of silence" that initially met the AfriNIC crisis highlighted a critical deficiency in continental coordination and protection mechanisms for digital assets. To prevent such a crisis from recurring and to protect future digital public goods, a new institutional approach is required.

- Establish an **African Digital Sovereignty Task Force (ADSTF)**: This body, operating under the African Union and the African Telecommunications Union, could serve as a rapid-response unit to protect African digital assets and institutions from legal, political, or technical attacks. Its mandate would be to provide coordinated legal, diplomatic, and technical support in real time, directly addressing the collective vulnerability exposed by the AfriNIC crisis.
- Develop and Champion a **"Common African Position" (CAP)** on Key Issues: Building on the existing practice in the ITU, African nations should formally develop and present a unified front on emerging issues like AI governance, data privacy, and digital taxation in all relevant forums, including ICANN, the IGF, and the IETF. The fragmented approach that has characterised past engagement weakens Africa's collective bargaining power and dilutes its voice on the global stage.

7.7 Recommendations for Targeted Capacity Building

The limited African technical contribution to standards bodies like the IETF and W3C is a fundamental weakness that must be addressed. Expand and formalise Schools of Internet Governance (SIGs) and Technical Fellowships: Programs like the African School on Internet Governance (AfriSIG) and national Schools for Internet Governance (SIGs) must be scaled up and sustainably funded. Their curriculum should be expanded to include modules on how to engage with highly technical forums like the IETF and W3C, as well as hands-on training in DNSSEC and BGP security. This will build the next generation of African technical

experts, enabling them to move beyond policy advocacy to active protocol and standards development.

The capacity challenge is situated within a vibrant, yet often fragmented, ecosystem of existing capacity-building initiatives across the continent. A comprehensive strategy must first leverage and amplify the successes of these foundational programs. Africa is rich with organisations dedicated to IG and technical capacity development, whose efforts provide a strong baseline for the proposed expansion:

Organisation	Key Initiative	Impact
Internet Society (ISOC)	Next Generation Leaders (NGL) Program, Chapters & Fellowships: Provides training and resources on IG, policy, and technical topics, fostering the development of local chapters. https://www.internetsociety.org/learning/ https://www.internetsociety.org/policy-programs/policymakers-program-to-ietf/	Significant increase in local IG advocacy and participation in global forums (e.g., IGF, IETF). About 3000 trained in IG related courses
AfrinIC	African Network Operators Group (AfNOG) & African Internet Protocol Resource (AfrinIC) Training: Focuses on foundational technical skills like BGP, IPv6 deployment, and RPKI, often collaborating with AfNOG and AFPIF.	AFRINIC Academy (Online Learning) Trained over 1,500+ engineers annually via webinars and on-site sessions. Target: 100% IPv6 awareness across African RIR members by 2025.
African Union Development Agency - NEPAD (AUDA-NEPAD)	Digital Transformation Initiatives: Focuses on high-level policy harmonisation, infrastructure development, and digital skills for economic development across member states.	Increased policy coherence among AU member states, providing a supportive regulatory environment for technical growth.

Smart Africa	Smart Africa Alliance Initiatives: Drives a single digital market and promotes digital skills and innovation across member countries, often focusing on policy alignment and digital infrastructure.	Smart Africa (SADA – Smart Africa Digital Academy): National Data Strategy training, AI for Policymakers, and Digital Literacy for MSMEs. Trained over 5,000 policymakers, regulators, and entrepreneurs in digital competencies as of early 2025.
African School on Internet Governance (AfriSIG)	Annual IG School and Alumni Network: Offers a multi-stakeholder curriculum on IG, policy, and technical issues. The alumni network is a key resource.	Development of a strong cohort of multi-stakeholder IG experts who actively participate in national and global IGFs.
African Top Level Domains Organization (AFTLD)	ccTLD Manager Training: Provides training for African Country Code Top-Level Domain (ccTLD) managers on technical operations, policy, and security (DNSSEC).	Successfully moved several registries from manual to automated EPP systems
African Network Operators Group (AFNOG)	Technical Workshops (co-located with AFRINIC meetings): Hands-on training on network infrastructure, IPv6 deployment, peering, and network security.	Direct development of practical network engineering skills, leading to better-managed and more secure African networks.
African Peering and Interconnection Forum (AfPIF)	Annual Forum & Workshops: Focuses on promoting local and regional peering and the establishment of Internet Exchange Points (IXPs).	Significant increase in the volume of local internet traffic exchanged within Africa, reducing costs and latency.
AfricaCERT	Computer Emergency Response Team (CERT) Training and Coordination: Focuses on cybersecurity capacity building, incident response, and collaboration among national CERTs.	Africa Cyber Drill

To systematically address the technical contribution gap, a structured, three-tiered framework is

recommended, building upon the foundations laid by the existing initiatives:

Tier	Focus Area	Target Audience	Action Items
Tier 1: Basic IG Literacy	Raising Foundational Awareness and Policy Engagement	Government Officials, Civil Society Leaders, Media Professionals, Academia (non-technical)	Curriculum: Core IG concepts, the role of different IG actors (ICANN, IETF, ITU), the importance of local infrastructure (IXPs, ccTLDs), basic cybersecurity principles, and policy impact analysis.
	Goal: Ensure informed policy-making and effective multi-stakeholder engagement.	Leverage: AfriSIG, ISOC Chapter activities, AUDA-NEPAD and Smart Africa policy workshops.	Output: Government/policy papers reflecting global best practices; informed media coverage of IG issues.
Tier 2: Intermediate Technical Skills	Developing Practical Network Engineering and Security Expertise	Network Operators, ISPs, National Regulator Technical Staff, University Technical Students, CERT Teams	Curriculum: In-depth, hands-on training in DNSSEC deployment and validation, BGP security (RPKI) implementation, practical network architecture, modern routing protocols, and advanced Cybersecurity incident handling.
	Goal: Build the technical backbone for a secure and resilient African internet.	Leverage: AFNOG, AfrINIC training, AfricaCERT workshops, AFTLD DNSSEC training.	Output: Networks implementing RPKI; widespread DNSSEC deployment; effective national CERT operations.
Tier 3: Advanced Standards Participation	Fostering Protocol Development and Leadership	Experienced Network Engineers, Technical Alumni from Tier 2, Advanced Researchers, Senior Policy/Standards Advisors	Curriculum: Intensive, hands-on training on the processes, tools, and culture of IETF/W3C/IEEE; structured mentorship for drafting, submitting, and shepherding technical specifications and protocols; technical writing and presentation skills.

	Goal: Achieve parity in African authorship and leadership within global standards bodies.	Action: Formalized IETF/W3C Technical Fellowships (scaled up from existing models), dedicated incubation labs, travel and participation grants.	Output: Increased number of African-authored or co-authored RFCs, W3C Recommendations, and active African leadership roles in working groups.
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Other Critical Considerations

- Mentorship Network of African IG Experts: Establish a formal, cross-tiered mentorship program linking Tier 3 experts with aspiring participants in Tiers 2 and 3. This network should leverage the alumni bases of AfriSIG, AfNOG, the AU Cybersecurity Expert Group, Smart Africa and ISOC training programs to ensure knowledge transfer and sustained engagement.
- National IG Capacity Scorecards: Develop an objective, publicly available scorecard for African nations to measure progress across the three tiers. Metrics could include:
 - *Tier 1*: Number of government staff trained; IGF attendance; IG-related policy reforms.
 - *Tier 2*: RPKI deployment rate; DNSSEC validation rate; number of locally trained network engineers (AfNOG/AfrINIC certified).
 - *Tier 3*: Number of IETF/W3C draft submissions by nationals; number of working group chairs/co-chairs from the country.

This scorecard will drive political will, mobilize resources, and allow for targeted capacity investments.
- Establish a **"Digital Talent Pipeline" Initiative**: Leveraging the high percentage of African NomCom applicants (37% in 2025) for leadership roles in ICANN, a formal program should be created to mentor and support these individuals in their pursuit of high-level roles in ICANN and other organisations. This program can help translate the continent's growing talent pool into meaningful, long-term leadership.

7.8 Recommendations for Strategic Engagement in Global Forums

While African civil society has a strong presence at IGF meetings, it has been observed to be "not particularly active" in leading workshops and driving thematic discussions. This represents a missed opportunity to translate quantitative presence into qualitative influence.

- Empower African Actors to Lead Thematic Discussions: The ATU, the African Union, and regional bodies should provide funding and logistical support for African civil society, academic, and technical organisations to host workshops and lead thematic tracks at the global IGF. This will translate quantitative presence into qualitative influence and agenda-setting power, ensuring that African perspectives

drive key discussions on issues like digital inclusion, emerging technologies, and data governance.

- Foster Cross-Pollination between Forums: African delegations to the ITU should be encouraged to actively participate in and learn from the multi-stakeholder dialogues at the IGF and vice versa. This will ensure that political positions are informed by on-the-ground realities and that grassroots concerns are elevated to the highest levels of governance.

7.9 Recommendations for Proactive Approach to Emerging Technologies

Africa's "necessity-driven" approach to emerging technologies, focused on solving real-world societal problems, offers a unique opportunity to shape global governance frameworks in a human-centric way.

- Adopt a "Necessity-Driven" Governance Model: African countries should develop policy frameworks for emerging technologies based on the continent's unique, practical use cases (e.g., blockchain for financial inclusion), rather than importing frameworks from other regions. This will allow Africa to set a global precedent for equitable technology governance that prioritises human development over purely commercial interests.
- Prioritise a Pan-African DPI Framework: Building on the lessons from the EAC and SADC, a harmonised, multi-stakeholder-led DPI framework for digital identity, payments, and data exchange should be accelerated. This is the foundational layer for all future digital services and will be essential for ensuring African data sovereignty and control in the age of AI and the Metaverse. The framework must address user-centric barriers, such as cost and trust, to ensure equitable access and to unlock the full potential of digital transformation.

7.10 Actionable Pathways

To operationalise these recommendations, the following strategic initiatives should be pursued by key continental actors:

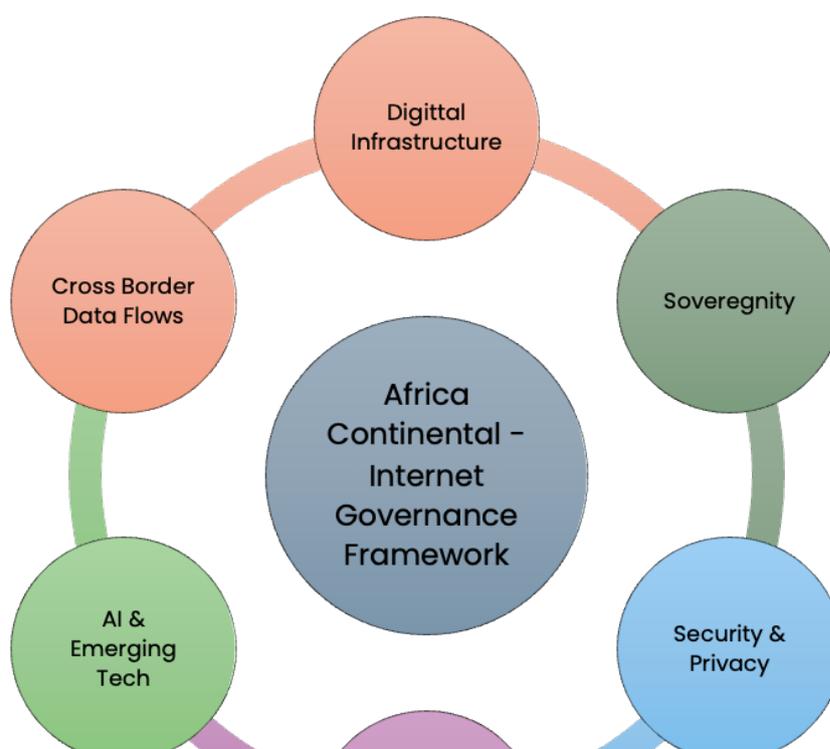
Table 21: coordinated implementation plan of actionable pathways

Challenge	Recommendation	Lead Actors	Timeline
Regulatory Lag	Establish an ATU–AU Centre of Excellence on Digital Regulation with certified training in AI, blockchain, and IoT.	African Telecommunications Union (ATU), AU Commission, AfDB	2025–2027
Fragmentation	Adopt a <i>Continental AI Convention</i> with mutual sandbox recognition and regional risk classification frameworks.	AU Commission, Smart Africa	2026
Sovereignty & Dependence	Launch <i>African Data Trusts</i> for strategic sectors (e.g., health, agriculture) using local languages and open standards.	AUDA-NEPAD, National Research Councils	2026

Cybersecurity	Operationalise a <i>Pan-African Cybersecurity Fund</i> and expand CERT threat intelligence networks across RECs.	AU Peace & Security Dept, AfricaCERT	2026
Digital Inequality	Mandate <i>National Multi-Stakeholder Digital Councils</i> with quotas for marginalised groups and grassroots innovators.	National Governments	2026
Cross-Border Flows	Implement <i>AfCFTA Digital Trade Protocols</i> with REC-level pilot projects (e.g., EAC, ECOWAS) for data flow Harmonisation .	AfCFTA Secretariat, RECs	2027
Innovation Scaling	Launch <i>Regional Regulatory Sandboxes</i> for AI, blockchain, and IoT with support for cross-border testing and validation.	RECs, ATU, national regulators	2025
Global Standardisation	Establish an ATU Standardisation Coordination Unit to develop and table common African positions at ITU, IGF, and IETF.	ATU, AU Commission, Smart Africa	2025–2026

Part Two

Africa Region Internet Governance Framework (AfR-IGF)



Section 1: The Case for a Harmonised Framework

1.1 Anchoring Governance in African Realities

Africa has a unique opportunity to lead by designing a governance framework that is necessity driven, proactively built to address the continent's specific developmental challenges rather than retrofitting regulatory models from other regions. This approach directly counters the persistent issue of regulatory lag, where policy struggles to keep pace with technological innovation.

By starting with the problem, not the technology, governance becomes an enabler of development, not merely a constraint on innovation. A necessity-driven framework ensures that Internet Governance is relevant, responsive, and rooted in Africa's strategic priorities.

Key Policy Priorities:

- **For the AfCFTA:**
 - harmonised rules for cross-border data flows
 - Interoperable digital payment systems, such as the Pan-African Payment and Settlement System (PAPSS)
 - Trusted digital identity frameworks to unlock continental e-commerce
- **For Public Services:**
 - Robust data governance and ethical AI frameworks to support e-health systems reaching remote communities
 - Deployment of IoT for precision agriculture to enhance food security
- **For Economic Development:**
 - Policies that foster local innovation ecosystems
 - Protection of African digital intellectual property
 - Mechanisms to ensure value retention from African data within the continent

Grounding the proposed Internet Governance framework in these real world African use cases ensures immediate relevance, drives public interest outcomes, and positions Africa to shape global digital norms from a place of practical, problem-solving leadership.

1.2 Theoretical Foundation: Adaptive Governance

The proposed Africa Regional Internet Governance Framework (AfR-IGF) is grounded in the principles of Adaptive Governance Theory, a forward-looking approach designed for complex, rapidly evolving systems. Adaptive Governance recognises that in dynamic environments like the digital ecosystem, rigid, top-down models are insufficient. Instead, governance must be flexible, inclusive, and responsive, enabling real-time learning and coordination across diverse actors and scales.

This theoretical foundation aligns seamlessly with Africa's digital realities. It supports a multistakeholder architecture that can evolve with technological change, respond to emerging threats, and remain anchored in public interest outcomes. By embedding adaptive mechanisms, such as iterative policy cycles, decentralised expertise, and feedback loops, the AfR-IGF can avoid the pitfalls of regulatory lag and institutional inertia. It ensures that governance is not only technically sound and politically legitimate, but also contextually relevant and developmentally enabling. In this way, Adaptive Governance provides the conceptual scaffolding for a framework that is necessity-driven, problem-solving, and resilient, positioning Africa to lead in shaping digital norms that reflect its values, priorities, and aspirations.

Section 2: SWOT Analysis of Africa's IG Initiatives

To accurately design a coordinated Internet Governance framework, a thorough assessment of Africa's existing institutional landscape is essential. The continent's Internet Governance ecosystem comprises several key actors each with distinct mandates, strengths, and limitations. The current fragmentation is not due to a lack of effort, but rather the absence of a central coordinating to connect these specialised yet isolated "organs."

The analysis reveals a governance ecosystem where political, entrepreneurial, analytical, and technical functions operate largely in isolation. This structural flaw impedes a cohesive continental response to systemic challenges such as the AFRINIC crisis and undermines Africa's ability to act decisively in the digital domain.

This section presents a **SWOT analysis** of four principal categories of actors:

- AUC – Political authority and continental mandate
- Smart Africa Alliance – membership driven initiatives
- UN Economic Commission for Africa (UNECA) – Analytical and policy research capacity
- *Technical "AF" organisations** – Operational expertise and infrastructure stewardship

While each entity brings valuable assets to the table, no single actor possesses the mandate or capacity to deliver integrated, continent wide governance. The current siloed structure limits strategic alignment, slows policy responsiveness, and weakens Africa's collective digital resilience.

A new framework must be designed to integrate these strengths, mitigate institutional weaknesses, and establish a cohesive governance architecture capable of responding to the continent's evolving digital needs.

organisation	Strengths	Weaknesses	Opportunities	Threats
African Union Commission (AUC)	<ul style="list-style-type: none"> Political Legitimacy & Convening Power: Authority as the representative body of 55 member states, capable of setting continental strategy (e.g., Agenda 2063, DTS). 	<ul style="list-style-type: none"> Slow Implementation & Ratification: Significant gap between policy adoption and national-level implementation, exemplified by the slow ratification of the Malabo Convention. Adopted in 2014, it took nearly a decade to enter into force in June 2023, and even then, only 15 of the 55 AU countries had ratified it. This severely limits its continental credibility and its effectiveness as a harmonised legal framework. This structural deficiency makes the AUC ill-suited for the kind of agile, responsive governance required by the rapidly evolving digital landscape. 	<ul style="list-style-type: none"> Mandate a New IG Body: Can leverage its political authority to provide the legal mandate and political protection for a new, more agile governance framework, shielding it from external pressures. the AUC can play a vital role in ensuring that digital governance is deeply integrated into the implementation of the AfCFTA, particularly its forthcoming protocols on Digital Trade and E-commerce. 	<ul style="list-style-type: none"> Political Inertia & Competing Priorities: Risk of digital governance being deprioritised in favor of other pressing security or economic issues, leading to inaction in a fast-moving environment.
Smart Africa Alliance	<ul style="list-style-type: none"> Agile & Project-Oriented: A dynamic public-private alliance with high-level political backing from Heads of State, effective at launching tangible, results-focused projects (e.g., ANCA). A recent Memorandum of Understanding with ICANN further signals its commitment to building IG capacity on the continent. 	<ul style="list-style-type: none"> Fragmented Impact & Voluntary Model: Its "coalition of the willing" approach leads to uneven policy adoption and a patchwork of progress rather than comprehensive continental Harmonisation . Its project-based approach is excellent for delivering specific outcomes but may not address the deeper, structural issues of regulatory convergence and institutional resilience. 	<ul style="list-style-type: none"> Serve as an Implementation Partner: Can act as a testbed for piloting policies and standards developed by the new framework, mobilising private sector expertise and investment for rapid deployment. 	<ul style="list-style-type: none"> Corporate Capture & Misalignment: Potential for the agenda to be disproportionately influenced by private sector partners; risk of projects becoming disconnected from a unified continental strategy.

organisation	Strengths	Weaknesses	Opportunities	Threats
UN Economic Commission for Africa (UNECA)	<ul style="list-style-type: none"> ● Research & Analytical Depth: A powerful knowledge hub providing data-driven policy research on Africa's digital economy, cybersecurity, and development trends. ● As a UN body, it serves as a neutral convener, a role exemplified by its hosting of the Africa Internet Governance Forum (AfIGF) secretariat. This positions UNECA as a vital bridge, connecting regional dialogues to global processes like the development of the UN Global Digital Compact (GDC) and the WSIS+20 review. 	<ul style="list-style-type: none"> ● No Implementation Mandate: Its role is primarily advisory and analytical; it lacks the authority to enforce its recommendations or implement policies directly. 	<ul style="list-style-type: none"> ● Become the Evidence Base: Can serve as the official research and analysis arm for the new framework, providing the empirical foundation for evidence-based policymaking. 	<ul style="list-style-type: none"> ● Irrelevance without Action: Its valuable research risks remaining purely academic without a formal link to an empowered political body that can translate recommendations into binding policy.

organisation	Strengths	Weaknesses	Opportunities	Threats
<p>"AF*" organisations, a constellation of bodies including AFRINIC, AfricERT, AfNOG, AfPIF, ISOC – Africa, ICANN – Africa, AFREN, AfTLD and recently Smart Africa,</p>	<ul style="list-style-type: none"> • Deep Technical Expertise: operational knowledge and control over the Internet's foundational resources, including IP addresses and domain names. • represent the technical bedrock of Africa's Internet ecosystem. Their strength is their deep, specialised operational expertise and their management of the Internet's foundational resources. They operate through bottom-up, community-driven policy development processes that are deeply integrated with the global technical community, ensuring that African network operators have a voice in technical standard-setting. 	<ul style="list-style-type: none"> • Governance Fragility & Political Isolation: Highly vulnerable to legal and political capture, as demonstrated by the AFRINIC crisis; operate in technical silos with limited diplomatic or political influence. 	<ul style="list-style-type: none"> • Form the Technical Core: Can provide the expert-led working groups for the new framework, developing and implementing technical standards under the protection and guidance of a unified political body. 	<ul style="list-style-type: none"> • Institutional Collapse & Loss of Sovereignty: The ongoing instability of AFRINIC poses a systemic risk of losing control over critical African Internet resources to external or foreign-influenced entities.

Section 3: Blueprints for Harmonisation: Lessons from Continental Integration

To create a strong and effective Internet Governance framework for Africa, we don't need to start from scratch. The continent has already undertaken significant and complex harmonisation efforts in other crucial areas, providing valuable models and lessons in institutional design, phased implementation, and multi-stakeholder coordination. By examining these existing frameworks, we can identify successful mechanisms that are suitable for Africa's unique political and economic landscape.

This section will explore two notable initiatives such as AfCFTA and the Africa Centres for Disease Control and Prevention (Africa CDC) to draw transferable lessons for developing a fit-for-purpose Internet Governance framework. The aim is not to simply duplicate these structures, but to integrate their most successful elements into a hybrid model that combines political authority with technical agility.

3.1 The AfCFTA: A Model for State-Led, Phased Integration

The AfCFTA represents the most ambitious economic integration project in Africa's history, aiming to create a single market for goods and services across 54 countries. Its design and implementation process offer critical lessons for any continent-wide governance initiative.

Governance Structure: The AfCFTA's institutional framework is fundamentally state-driven, providing a clear model for establishing political legitimacy and binding authority. Its governance is hierarchical, with the AU Assembly of Heads of State and Government serving as the highest decision-making organ. Below the Assembly, the Council of Ministers responsible for trade is empowered to make decisions that are binding on all State Parties. This is supported by a Committee of Senior Trade Officials and a permanent, autonomous Secretariat based in Accra, which is responsible for coordinating the implementation of the agreement.

- **Transferable Lesson:** A successful continental IG framework requires unambiguous, high-level political authorisation. Adopting an AfCFTA-style Council of Ministers for ICT would ensure that policy decisions are not merely recommendations but have the political weight of member states behind them, creating a clear pathway for national implementation and enforcement. This structure directly addresses the weakness of purely advisory or technical bodies.

Implementation Strategy: Recognising the immense complexity of its mandate, the AfCFTA has adopted a pragmatic, phased approach to negotiations. Phase I focused on protocols for trade in goods and services, while Phase II is tackling more complex issues like investment, intellectual property rights, and competition policy, and a future Phase III will address e-commerce. Crucially, the AfCFTA Agreement establishes the existing

RECs as the "building blocks" of the continental market. This principle preserves the progress made within blocs like EAC and ECOWAS, using them as foundational structures for broader Harmonisation rather than attempting to replace them.

- Transferable Lesson: A continental IG framework can be built incrementally. A phased approach could tackle foundational issues first (e.g., critical infrastructure resilience, cybersecurity norms), followed by more complex areas (e.g., data governance, AI ethics). Furthermore, the "building blocks" principle is directly applicable; the framework should leverage and empower existing regional and national IGFs, treating them as essential components of the continental architecture, thereby ensuring local relevance and buy-in.

Multistakeholder Coordination: While the AfCFTA is state-led, its process acknowledges the need for broader engagement. The agreement's success hinges on its adoption by the private sector, and mechanisms exist for stakeholder consultation at the national level, where trade ministries are expected to engage with businesses and industry associations. However, this engagement has been criticised as inconsistent and in need of strengthening.

- Transferable Lesson: Even in a politically driven framework, mechanisms for non-state stakeholder input are vital for practical success and legitimacy. For an IG framework, where the technical community and private sector are co-creators of the ecosystem, this engagement cannot be an afterthought. The lesson from the AfCFTA is that a multistakeholder process must be formally and robustly embedded into the governance structure from its very inception.

3.2 The Africa CDC: A Model for Agile, Networked Coordination

The Africa CDC, established in 2017 and elevated to an autonomous AU agency in 2022, has rapidly become a globally respected model for continental coordination in public health. Its response to the COVID-19 pandemic and other health emergencies offers a blueprint for agile, expert led, and networked governance.

Governance Structure: The Africa CDC operates with significant operational autonomy while remaining accountable to the AU. Its Governing Board is a prime example of a functional multistakeholder body, comprising ten Ministers of Health (representing the five AU regions), representatives from the AU Commission, and, crucially, representatives from civil society and the private sector. This mixed composition ensures that decisions are informed by both political realities and diverse technical and community perspectives.

- Transferable Lesson: An effective continental body can be granted the operational independence needed for rapid, expert-driven action. An IG framework could adopt a similar model with a multistakeholder Governing Board responsible for strategic oversight, ensuring a balance of power and preventing capture by any single interest group. This structure provides a direct solution to the political isolation of the purely technical AF* organisations.

Implementation Strategy: The Africa CDC's operational genius lies in its decentralised, networked model. Rather than centralising all functions in Addis Ababa, it works through five Regional Collaborating Centres (RCCs). These RCCs serve as regional hubs that coordinate directly with the

National Public Health Institutes (NPHIs) in member states. This structure creates a continent-wide network for real-time disease surveillance, rapid information sharing, and

coordinated emergency response, allowing the Africa CDC to act as a nerve center that supports and empowers national systems rather than supplanting them.

- Transferable Lesson: This decentralised network is a perfect model for IG coordination. The proposed framework could establish Regional IG Hubs, aligned with the RECs, that would work directly with national regulators, CERTs, data protection authorities, and national multistakeholder forums. This would create a resilient, distributed system for policy implementation, capacity building, and incident response, mirroring the highly effective CDC-RCC-NPHI relationship.

Multistakeholder Coordination: The Africa CDC's mandate necessitates deep collaboration. Its success is built on fostering strategic partnerships with a wide array of actors including member state governments, international organisations like the WHO, non-governmental organisations, philanthropic foundations, and private sector entities to mobilise financial resources, technical expertise, and on the ground support. This action-oriented approach to partnership is embedded in its operational DNA.

- Transferable Lesson: Complex, cross-border challenges like cybersecurity, data governance, and platform regulation cannot be solved by any single entity. The IG framework must be designed from the outset not just to allow, but to actively foster and manage, multi-layered partnerships.

Synthesising these lessons leads to a clear conclusion. The optimal design for a pan-African Internet Governance framework is a hybrid model. It must borrow the state driven political legitimacy and binding decision-making authority of the AfCFTA to ensure its policies have teeth and are integrated into national law. This provides a strong institutional foundation. Simultaneously, it must adopt the agile, expert led, and decentralised network structure of the Africa CDC, creating a responsive system that connects continental strategy to regional and national realities. This hybrid approach resolves the core weakness of the current landscape, it bridges the gap between the AU's slow, politically driven processes and the isolated, vulnerable nature of the technical community, creating a single, resilient, and effective body for governing Africa's digital future.

Section 4: Building adaptive coordination for continental resilience

Building upon the strategic imperative for coordination and the institutional lessons from successful continental integration, this section presents the architectural blueprint for a harmonised African Internet Governance Framework. Grounded in Adaptive Governance Theory, the proposed structure is designed to operate effectively within a complex, fast evolving digital environment. Adaptive Governance emphasises flexibility, inclusivity, and responsiveness, making it ideally suited to orchestrate Africa’s diverse digital actors while remaining resilient to emerging challenges.

The framework is to be convened by the ATU, leveraging its established regulatory mandate and technical expertise, and anchored under the political aegis of the AUC to ensure legitimacy and strategic alignment. To give this new framework a clear and forward looking identity, it is proposed to be named the African Regional Internet Governance Forum (AfR-IGF).

Crucially, the AfR-IGF is not designed to replace existing institutions, but to integrate and coordinate them providing the missing layer of strategic coherence, legal authority, and operational agility. By embedding adaptive mechanisms such as iterative policy cycles, multi-level stakeholder engagement, and real-time feedback loops, the AfR-IGF can translate high-level political will into technically sound, contextually relevant, and developmentally enabling policy action across the continent.

4.1 Foundational Principles

The architecture of the **AfR-IGF** is grounded in four foundational principles, each derived from Africa’s current needs and future ambitions and informed by the conceptual lens of **Adaptive Governance Theory**. This theory emphasises flexibility, stakeholder inclusion, and responsiveness to complexity, making it an ideal foundation for a governance model that must evolve alongside technological innovation and continental priorities.

- **Multistakeholderism:** In line with adaptive governance, the AfR-IGF embeds governments, private sector actors, the technical community, civil society, and academia into its core decision making processes. This ensures that policy is not only technically sound and commercially viable, but also protective of public interest and fundamental rights reflecting the diverse perspectives necessary for resilient governance.
- **Interoperable and Coherent:** Adaptive governance requires coordination across scales. The AfR-IGF will harmonise digital policies across Africa, creating a predictable regulatory environment essential for AfCFTA success. It will also ensure Africa’s positions are interoperable with global standards and forums (e.g., ICANN, IETF, ITU), enabling the continent to speak with a unified voice in global digital governance.
- **Necessity-Driven and Use-Case Anchored:** Adaptive systems respond to real-world challenges. The AfR-IGF will prioritise policy development based on Africa’s concrete development needs—such as securing digital trade, enhancing e-health delivery,

expanding financial inclusion, and strengthening cybersecurity. This ensures governance remains relevant, impactful, and aligned with public interest outcomes.

- **Sovereign and Resilient:** Adaptive governance also emphasises institutional resilience. A core function of the AfR-IGF will be to safeguard Africa’s digital sovereignty by providing the political, legal, and diplomatic shield needed to protect critical infrastructure addressing the vulnerabilities exposed during the AFRINIC crisis and ensuring coordinated continental defense mechanisms.

Together, these principles form a governance architecture that is strategically coherent, operationally agile, and developmentally enabling positioning Africa to lead in shaping digital norms that reflect its values and aspirations.

4.2 Proposed Governance Structure: AfR-IGF

The proposed organisational structure of the AfR-IGF is a hybrid model, purposefully designed to reflect the principles of Adaptive Governance Theory. It integrates the top-down political authority of the AfCFTA with the bottom-up, expert-led operational agility of the Africa CDC creating a system that is both resilient and responsive to Africa’s evolving digital landscape.

At the Apex: Political Authority

- **AU Assembly of Heads of State and Government**
Serves as the highest political authority, providing the overarching mandate for the AfR-IGF. This ensures continental legitimacy and alignment with broader AU strategic priorities, mirroring the AfCFTA’s governance model.

Highest Decision-Making Body: Policy Adoption

- **AfR-IGF Council of Ministers (STC - CICT)**
Composed of ICT Ministers, this Council formally reviews and adopts binding digital policies. It ensures that national governments are fully committed to implementation, translating political will into enforceable action.

Strategic Oversight Body: Governance & Strategy

- **AfR-IGF Multistakeholder Governing Board**
Reporting to the STC - CICT, this board provides strategic oversight and ensures that the **multistakeholder principle** is embedded throughout. The inclusive governance structure, it includes:
 - Government representatives (via RECs)
 - Private sector leaders (from tech and business councils, NOGs)
 - Technical community experts (nominated by AF* organisations)

- Civil society advocates (from digital rights and consumer groups)
- Academic voices (from leading African research institutions)

This board approves the annual work plan, appoints the Secretary, and ensures that governance remains **inclusive, accountable, and adaptive**.

Convener and Administrative Host

- **ATU**

As the designated convener, the ATU provides the legal and administrative home for the AfR-IGF Secretariat. It leverages its existing infrastructure and relationships with national regulators to facilitate implementation and convene meetings.

Execution & Coordination

- **AfR-IGF Secretariat**

A lean, expert-led body responsible for day-to-day operations. Headed by a Secretary, the ATU Secretariat coordinates Thematic Working Groups (TWGs), commissions policy research (in partnership with UNECA), manages communications, and monitors policy implementation.

Policy Development & Expertise

- **Thematic Working Groups (TWGs)**

These are the core adaptive units where policy innovation occurs. Composed of cross-sectoral experts, TWGs develop technical standards, policy recommendations, and best practices. Initial TWGs include:

- **Critical Infrastructure & Security**
- **Data Governance & Digital Rights**
- **AI & Emerging Technologies**
- **Digital Economy & Trade**

Each TWG is designed to be **iterative and responsive**, enabling real-time adaptation to emerging issues and technologies.

Regional and Consultative Layers: Decentralisation & Inclusivity

- **Regional IG Hubs**

RECs coordinate regional implementation, build capacity, and channel national feedback into continental policy processes.

- **Annual African IG Forum (AfIGF)**

Institutionalised as the AfR-IGF's primary consultative platform, the AfIGF supported by UNECA serves as an open, inclusive space for agenda-setting, stakeholder dialogue, and issue identification. Its outputs directly inform TWG work programs.

This structure embodies Adaptive Governance by balancing political authority with operational agility, central coordination with regional responsiveness, and expertise with inclusivity. It ensures that Africa's Internet Governance is not only strategically coherent but also capable of evolving with the continent's digital future.

4.3 Mandates and Roles

To ensure clarity and prevent the institutional overlap that plagues the current landscape, the mandates and roles within the AfR-IGF structure are precisely defined:

- STC - CICT; mandate is to provide political validation and legal force to policies. It reviews and formally adopts the pan-African digital policies and strategic plans that are finalised and recommended by the Governing Board. This act transforms a multistakeholder consensus into a binding continental commitment.
- Governing Board: Its role is strategic governance. It sets the overall direction of the AfR-IGF, ensures its financial and operational health, safeguards its multistakeholder integrity, and holds the Secretariat accountable for executing the work plan. It does not engage in the day-to-day drafting of policy but rather ensures the process is fair, transparent, and effective.
- ATU (as Convener): Its role is that of a foundational host and facilitator. The ATU provides the institutional platform, administrative support, and crucial linkage to its network of national telecommunications regulators, which are key actors in implementing many IG policies. It convenes the principal meetings of the Council and Board.
- Secretariat: Its role is coordination and management. It is the operational hub that enables the entire structure to function, managing workflows, coordinating between the TWGs and Regional Hubs, commissioning research, and handling all external communications and partnership management.
- Thematic Working Groups: Their role is substantive policy development. They are the expert bodies responsible for the deep-dive analysis, stakeholder deliberation, and drafting of the specific policy recommendations, technical standards, and best-practice guidelines that form the substance of the AfC-IGF's work.

Section 5: Operationalising the Vision: Governance, Processes, and Roadmap

A robust architecture is only as effective as its operational processes and its implementation plan. This final section provides the practical blueprint for bringing the AfR-IGF to life. It outlines the transparent, multistakeholder lifecycle for policy development and presents a concrete, time-bound 36-month roadmap for moving the AfR-IGF from a strategic concept to a fully functional continental governance body. This plan is designed to be shared directly with ATU and AUC principals, providing them with a clear, actionable pathway to establish and operationalise this new framework.

5.1 Process Flow for Policy Coordination and Development

To ensure that the AfR-IGF operates according to its foundational principles, a clear, inclusive, and transparent process for policy development is essential. This lifecycle is designed to systematically bridge the gap between open dialogue (as seen in forums like the AfIGF) and the creation of binding policy, ensuring that stakeholder input is integrated at every stage.

Description of The AfR-IGF Multistakeholder Policy Development Lifecycle

The proposed policy lifecycle follows a structured, multi-stage process, ensuring rigor, inclusivity, and accountability from issue identification to final review.

1. Stage 1: Issue Identification & Agenda Setting:
 - New policy issues are identified from multiple sources: the annual African Internet Governance Forum (AfIGF), formal requests from Member States or RECs, proposals from Thematic Working Groups (TWGs), or strategic directives from the Governing Board. This ensures the agenda is responsive to both top-down priorities and bottom-up, community-identified needs.
2. Stage 2: Scoping, Research & Evidence Gathering:
 - Once an issue is prioritised by the Governing Board, the AfC-IGF Secretariat, in close partnership with UNECA and other relevant research institutions, conducts a comprehensive scoping study. This stage involves gathering data, analysing existing national and regional policies, and producing an evidence-based issue report that outlines the problem, its impact, and potential policy levers.
3. Stage 3: Multistakeholder Deliberation & Drafting (within TWGs):
 - The issue report is assigned to the most relevant Thematic Working Group (e.g., a data protection issue goes to the TWG on Data Governance & Digital Rights). The TWG, composed of experts from all stakeholder groups, undertakes an open and transparent deliberation process. This includes public calls for comment, expert workshops, and drafting sessions to develop a preliminary policy recommendation or framework. This is the core stage where deep, substantive multistakeholder consensus is built.
4. Stage 4: Governing Board Review & Approval:

- The draft policy framework from the TWG is submitted to the Multistakeholder Governing Board. The Board reviews the draft for strategic alignment with the AfC-IGF's mandate, ensures the policy development process is fair and inclusive, and assesses its feasibility for continental implementation. The Board can either approve the draft, send it back to the TWG for revision, or reject it with a formal justification.
5. Stage 5: Council of Ministers Adoption:
 - Upon approval by the Governing Board, the final policy framework is formally transmitted to the AfC-IGF Council of Ministers. The Council reviews the policy from a political and national implementation perspective. Its formal adoption transforms the document from a multistakeholder recommendation into a binding pan-African policy directive, which Member States are committed to domesticating.
 6. Stage 6: Implementation, Capacity Building & Dissemination:
 - Following adoption, the AfC-IGF Secretariat, working through the Regional IG Hubs and in partnership with the ATU, develops implementation toolkits, conducts capacity-building workshops with national regulators and other stakeholders, and disseminates the new policy across the continent.
 7. Stage 7: Monitoring, Evaluation & Review:
 - The Secretariat is responsible for continuously monitoring the implementation and impact of the adopted policy. It collects data on national-level progress and reports back to the Governing Board and Council of Ministers. All policies are subject to a periodic review (e.g., every 3-5 years) to ensure they remain relevant and effective, with the review process feeding back into Stage 1 for potential updates or revisions.

5.2 Implementation Roadmap (36-Months)

The establishment of the AfR-IGF is a significant undertaking that requires a phased, methodical, and well-resourced approach. The following Gantt chart outlines a 36-month roadmap, breaking down the process into three distinct phases: Foundation, Development, and Operationalisation. This provides a clear project plan with defined tasks, lead actors, and measurable milestone

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Annex 1 : List of Countries Engaged and Stakeholder Groups

Country	Sub-Region	Stakeholder Group
Angola	Southern Africa	Government Ministry/Department
Angola	Southern Africa	Private Company
BURKINA FASO	West Africa	Regulatory Authority
Burundi	East Africa	Private Company
Cabo Verde	North Africa	Government Ministry/Department
Cameroun	Central Africa	Government Ministry/Department
Cote d'Ivoire	West Africa	Regulatory Authority
GHANA	West Africa	Regulatory Authority
Kenya	East Africa	Government Ministry/Department
Kenya	North Africa	Regulatory Authority
Kenya	East Africa	Civil Society
Lesotho	Southern Africa	Regulatory Authority
Madagascar	Southern Africa	Regulatory Authority
Morocco	North Africa	Government Ministry/Department
Mauritius	Southern Africa	Technical Community
Mauritius	Southern Africa	Technical Community
Mosambique	Southern Africa	Regulatory Authority
Namibia	Southern Africa	Regulatory Authority
Niger	West Africa	Regulatory Authority
NIGERIA	West Africa	Regulatory Authority
NIGERIA	West Africa	Technical Community
République centrafricaine	Central Africa	Regulatory Authority
République du Congo	Central Africa	Civil Society
Rwanda	East Africa	Regulatory Authority
SENEGAL	West Africa	Regulatory Authority
SENEGAL	West Africa	Government Ministry/Department
Zimbabwe	Southern Africa	Regulatory Authority
Zimbabwe	Southern Africa	Private Company

Zimbabwe	Southern Africa	Civil Society
Somalia	East Africa	Government Ministry/Department
South Africa	Southern Africa	Government Ministry/Department
South Africa	Southern Africa	Internet Service Provider (ISP)
Sudan	East Africa	Regulatory Authority
Tanzania	East Africa	Government Ministry/Department
Tanzania	East Africa	Regulatory Authority
Tanzania	East Africa	Regulatory Authority
Tanzania	East Africa	Government Ministry/Department
TOGO	West Africa	Technical Community

Annex 2: Gauntt Chart – for the Establishment of the (AfR-IGF)

Phase	Task ID	Task Description	Lead Actors	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Phase 1: Foundation & Mandate (Months 1-6)															
	1.1	Secure formal mandate for from the STC - CICT	AUC/ATU	■											
	1.2	Establish High-Level Inter-institutional Steering Committee (ATU/AUC/UNECA/Smart Africa)	ATU/AUC	■											
	1.3	Draft Foundational Statutes, Host Country Agreement, and Rules of Procedure	Steering Committee	■	■										
	1.4	Secure initial seed funding from AU budget and development partners	Steering Committee		■										
	1.5	Launch recruitment process for Interim Executive Secretary of the Secretariat	Steering Committee		■										
Milestone 1		AfR- IGF Mandate Secured & Interim Leadership in Place			✓										
Phase 2: Framework Development & Piloting (Months 7-18)															
	2.1	Appoint permanent Executive Secretary and core Secretariat staff	Governing Board (Interim)			■									
	2.2	Establish Multistakeholder Governing Board via formal nomination/election process	Steering Committee/			■	■								
	2.3	First official meeting of the permanent Governing Board	ATU/Secretariat				■								

	2.4	Launch first two pilot Thematic Working Groups (TWGs): 1. Critical Infrastructure & Security; 2. Data Governance & Digital Rights	Governing Board						■						
	2.5	Formalise partnership with UNECA to host AfIGF as consultative platform	Secretariat/UNECA						■						
	2.6	Pilot TWGs begin drafting two priority policy frameworks based on AfIGF outcomes	TWGs/Secretariat							■	■				
Milestone 2		Governing Board Seated & First Policy Drafts Completed									✓				
Phase 3: Full Operationalisation & Scaling (Months 19-36)															
	3.1	First two policy frameworks presented to and adopted by the Council of Ministers	Council of Ministers									■			
	3.2	Launch remaining TWGs: 3. AI & Emerging Tech; 4. Digital Economy & Trade	Governing Board									■			
	3.3	Establish first two Regional IG Hubs in partnership with lead RECs (e.g., EAC, ECOWAS)	Secretariat/RECs										■	■	
	3.4	Develop and launch continental capacity-building programs for national regulators	ATU/Secretariat											■	
	3.5	Launch public "African IG Dashboard" to track policy implementation across Member States	Secretariat												■
	3.6	Lead the first unified African delegation to the global IGF under the framework	Governing Board/Secretariat												■
	3.7	Conduct Annual Review of the framework effectiveness and present the report to STC CICT	Secretariat/Governing Board												■

