ASSESSING INTERNET DEVELOPMENT IN KENYA: USING UNESCO INTERNET UNIVERSALITY ROAM-X INDICATORS

Draft Report

Ву

The Kenya ICT Action Network (KICTANet)

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Foreword by ADG/CI (as provided by UNESCO HQ)

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Acknowledgements

Glossary

Executive Summary

(4-6 pages, summarizing major findings, challenges and key policy recommendations)

This report provides the findings of UNESCO Internet Universality Indicators pilot assessment in Kenya, undertaken by the Kenya ICT Action Network (KICTANet) and completed in March 2020. The report evaluated the core indicators as set by UNESCO's guidelines on conducting this kind of assessment. It followed a multistakeholder approach and focused on recommendations for pilot evaluations based on UNESCO guidelines for pilot assessments. *Include here how the report will benefit from the MAB and validations meeting.*

This section to be finalized after the validation meeting.

Emerging findings

Rights - Laws and policies provide widely for human rights. However, implementation of key policies and legislation remains a challenge

Openness - Access to information, lack of standards and weak legislation still a challenge.

Accessibility - Cost of internet, devices, access to networks and language barriers still a challenge.

Multistakeholder - weak engagement, weak policy or legislative framework & lack of standards for engagement still a challenge

Cross-cutting Issues - implementation of policies and laws, capacity of relevant institutions is a challenge.

Challenges

Difficulty in accessing required data

Short timelines to complete

Cost of Implementation

Limited government participation

Task is more complicated than was anticipated

Convening multiple groups - MAB, researchers etc

Recommendations (outline specifics for different stakeholders)

Implementation of policies and laws

Enhancing of institutional capacities

Building public awareness

Bridging the digital divide

Extensive and diverse data collection

Chapter 1 Introduction

Background on UNESCO Internet Universality concept and Indicators project; national context of the assessment initiative; methodology; structure of the report).

UNESCO's Internet Universality Indicators are a compilation of 303 indicators aimed at evaluating the state of development of the Internet at national level using the ROAM principles of human rights, transparency, accessibility and multi-stakeholder involvement.

The definition of *Internet Universality* sums up the revised roles of UNESCO in the digital age. This points to the four fundamental principles of R.O.A.M. As such the Internet should be:

- a) Human Rights-based,
- b) Open,
- c) Accessible to all, and,
- d) nurtured by Multi-stakeholder participation.

Responding to this key decision and in support of the R.O.A.M principles, UNESCO undertook a three-year cycle to develop the framework of Internet Universality Indicators through a global, open, inclusive and multi-stakeholder process. And during the 31st Council Meeting of UNESCO's International Programme for the Development of Communication (IPDC) In November 2018, these Indicators were accepted.¹

The IPDC supported the use of the instrument on a voluntary basis by member states terming it a useful resource accessible to Member States and stakeholders. The support is through the assessment of national Internet growth using the Internet Universality Indicators.

UNESCO has been working with various stakeholders in different countries in implementing this decision. This has been through the engagement of stakeholders who conduct national assessments based on the Indicators framework. It is in light of this that KICTANet took the up the role of assessing the ROAM indicators in Kenya

The objectives of the assessment of the UNESCO Internet Universality Indicators include:

- a) Develop a clear and substantive understanding of the national Internet environment and of Internet policies contributing to sustainable development;
- b) Assess the environment and policies in relation to the implementation of UNESCO's R.O.A.M. principles; and,

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¹ https://unesdoc.unesco.org/ark:/48223/pf0000266235

c) Formulate policy recommendations that can help improve Internet development in Kenya.

KICTANet expressed its interest to conduct the Kenyan assessment when UNESCO invited interested actors and research teams to bid.

National Context of the Assessment initiative

Kenya's current Internet penetration stands at 26.2 million Kenyans or 49.9 percent, while mobile penetration is at 47 million, making it 90 per cent of the population. And this pattern is on an upward trend. This has placed Kenya as an ICT progressive Nation in the Eastern Africa Region. The country has been active in national, regional and global Internet discourses.

It is therefore natural that the country was selected to participate in this assessment of Internet Universality Indicators. These indicators were developed to allow countries go into a deeper analysis of the Internet Universality concept at country level using the UNESCO framework of indicators. Accordingly, the exact purpose of this framework of Internet Universality indicators is to facilitate interested governments and other stakeholders that may want to voluntarily evaluate their national Internet environments as a means of formulating evidence-based policy. In addition, these Internet Universality indicators are based on the previous experience of UNESCO with media and communications-related indicator frameworks. The indicator system in this Internet Universality Indicators is further intended to support efforts by the United Nations and other stakeholders to track and assess progress and achievement of the SDGs.

Methodology

KICTANet commenced this survey in (exact dates)....2019 and completed on March 30, 2019.

The assessment methodology entailed several approaches. It commenced with a desktop review of relevant ICT literature including policies, laws, reports and documents. Some indicators required interviews with select experts, and KICTANet was able to conduct the interviews with key select interviewees. Also, there was a request to the Regulator to provide certain information that is not available publicly, and some discussion to seek information was also done via the KICTANet mailing list. The findings in the form of a draft report were shared with the Multistakeholder Advisory Board (MAB) as well as the reviewer.

A consultative meeting was thereafter convened and which brought together industry stakeholders and the MAB. The aim was also to validate this report. The information gathered was thereafter used to make amendments to this report and forms the basis of this Report on the assessment of Kenya's Internet Universality indicators.

Structure of the report

This report is organised around the context of the Internet universality indicators. It addresses the four ROAM Principles, and incorporates gender and children's needs as cross-cutting issues. Others are sustainable development, trust and security, and the Internet's legal and ethical dimensions. Together, these form the framework for ROAM-X Indicators, and accordingly each is articulated in a separate chapter.

Moreover, other contextual indicators are assessed. They include the country's demographic, social and economic characteristics. The aim is to contextualize the results of the report in terms of conditions unique to Kenya.

The report commences with an introduction to the UNESCO Internet Universality Indicators. Contextual indicators follow with such areas as economic, demographic, development, equality, and ICT status highlighted. Then the ROAM-X categories just like in the UNESCO guideline are structured in a similar fashion, and all pay attention to policy, legal and regulatory frameworks. At the end of each indicator, policy recommendations specific to different stakeholders such as government, civil society, academia, media and so forth are offered.

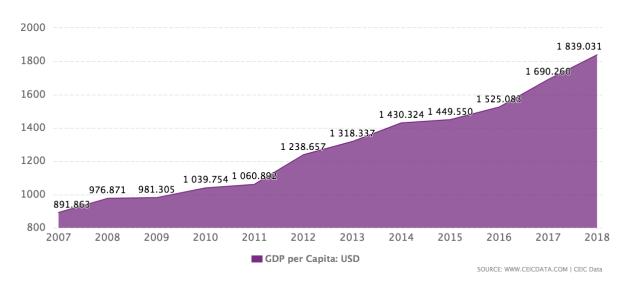
Chapter 2: Contextual Indicators: Findings

Kenya is East Africa's commercial, financial and transport hub with the International financial institutions and donors being key to Kenya's economic growth and development. The country's administration has been successful in courting external investment for development and for instance, Kenya's President Uhuru Kenyatta in the beginning of 2020 secured major investment deals at the UK-Africa Investment Summit.² Kenya has also been successful in raising capital in the global bond market.

1. Economic Indicators

Kenya is ranked as a lower middle income country.³ Its real GDP growth is estimated to be at 5.7 percent with a projection of 5.9 percent growth forecast for 2020.⁴ This saw the country ranked as the 62nd largest economy in the world by the International Monetary Fund (IMF).⁵

Kenya's GDP per Capita from 2006 to 2018 in the chart



The current government's development blueprint espouses what is termed as the Big 4 Agenda. These 4 agendas are food Security; affordable housing; manufacturing; and, affordable healthcare. It is anticipated that the investments to support implementation of the Big 4 Agenda and enhanced business sentiment will contribute to enhanced economic growth.⁶ Further, the agenda is aligned to Kenya's Vision 2030 development

² Nyabega Gisesa. *Uhuru secures Sh170 billion investment deals at UK-Africa summit.* January 20, 2020. https://www.nation.co.ke/news/Uhuru-secures-Sh170bn-investment-deals/1056-5425412-987abh/index.html

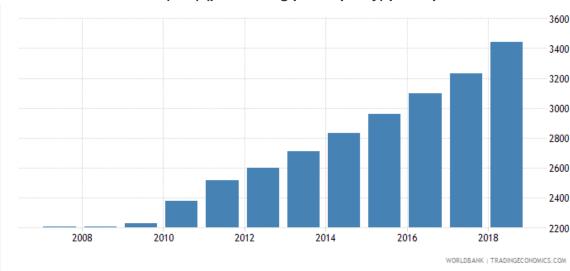
³ <u>CIA World Factbook</u>. *Kenya Economy: an overview*. December 7, 2019. <u>https://www.indexmundi.com/kenya/economy_overview.html</u>

⁴ Capital FM. World Bank revises downwards Kenya's GDP 2019 growth to 5.7pc. April 9, 2019. https://www.capitalfm.co.ke/business/2019/04/world-bank-revises-downwards-kenyas-gdp-2019-growth-to-5-7pc/

⁵ IMF. Report for selected countries and subjects. www.imf.org

⁶ The World Bank in Kenya. September 30, 2019. https://www.worldbank.org/en/country/kenya/overview

blueprint⁷ whose aim is to "transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment".



Gross National Income (GNI) (purchasing power parity) per capita

GNI per capita, PPP (current international \$) in Kenya was reported at 3440 in 2018. Source: the World Bank.

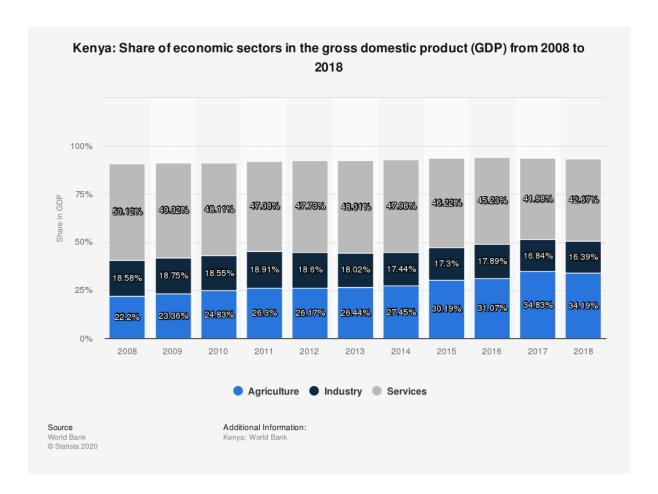
Agriculture continues to be the backbone of the Kenyan economy with a contribution of a third of the country's GDP.8 About 75 percent of Kenya's approximately 47.6 million⁹ population works in the agricultural sector at least part-time. This includes livestock and pastoral activities. Tourism also holds an important place in the economy of Kenya. Others are the telecommunications, transport and construction sectors.

Proportion of GDP attributable to services

⁷ Kenya's Vision 2030. <u>http://vision2030.go.ke/</u>

⁸ Index Mundi. Kenya Economy Profile 2019. https://www.indexmundi.com/kenya/economy_profile.html

⁹ 2019 Kenya Population and Housing Census Results https://www.knbs.or.ke/?p=5621



The country has an increasing entrepreneurial middle class and steady growth. However poor governance and corruption continue to hamper the country's economic and development path. Further, while it is difficult to find accurate numbers, unemployment and underemployment remain high affecting 40 percent of the population. For instance in 2019, over three hundred and eighty eight companies and firms were wound up in a span of six months. Apart from the growing concern about massive job losses in Kenya's private sector, it is also seen as a reflection of the performance of many of the country's major corporations that reported job cuts in 2019.

2. Demographic indicators

Kenya lies on the equator where it is bordered by the Indian Ocean, Uganda, Tanzania, Ethiopia, South Sudan and Somalia. According to its 2020 population census, the

¹⁰ Ibid

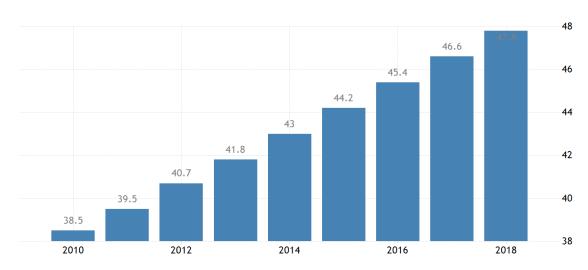
¹¹ Frankline Sunday. Alarm as 388 Kenyan firms dissolved in 6 months. September 21, 2019. https://www.standardmedia.co.ke/business/article/2001342752/alarm-as-388-kenyan-firms-dissolved-in-6-months

¹² World Population Review. *Kenya Population 2020*. http://worldpopulationreview.com/countries/kenya-population/

country has an estimated 47,564,296 million people compared to 38.6 million in 2010, with women at 24 million than men, who stand at 23.6 million.¹³

Kenya's population rose by 2.2 percent annually (approximately a million people yearly) from 2009 to 2019 to stand at 47.6 million, which is a decrease in growth rate from 2.9 percent in the previous 10 year period.¹⁴

The population growth trend



SOURCE: TRADINGECONOMICS.COM | KENYA NATIONAL BUREAU OF STATISTICS

As shown in the figure above, the country's growth rate remains rapid in global terms. It is anticipated that the fertility rate will decrease and will result in the population growth rate decreasing to 1.5% by 2040. At that point it will be the 42nd fastest growing population in the world and the 38th fastest growing population in Africa. In 2017, the country had a projected life expectancy of 67 years, which is still short of the globally expectancy of 72 years. This draws attention to the severity of the burden of disease and healthcare in the country. That being the case, the country has the 31st youngest population in the world. In the country is growth rate remains rapid in global terms. It is anticipated that the fertility rate will decrease and will result in the population in the same and the several population in the world. In the country is growth rate remains rapid in global terms. It is anticipated that the population in the population growth rate remains rapid in global terms. It is anticipated that the population in the several population in the several

Moreover, the country has a diverse ethnic composition and is home to 43 official ethnic groups. However, the number might be as high as 60 if smaller groups are included. Kiswahili and English are the two official languages.¹⁷

¹³ Hellen Githaiga. *Kenya census 2019 data reveal population stands at 47.6m.* November 4, 2019. https://www.theeastafrican.co.ke/news/ea/Kenya-population-soars-to-47-million-2019-census/4552908-5336048-7bv3toz/index.html

¹⁴ Pauline Kairu. *Kenya's growth rate now at 2.2pc - Census*. November 9, 2019. <u>https://www.theeastafrican.co.ke/news/ea/Kenya-growth-rate-now-at-2-2-percent-census/4552908-5343306-1501ok2z/index.html</u>

¹⁵ African Studies Center, East Africa living encyclopedia, https://www.africa.upenn.edu/NEH/kethnic.htm

¹⁶ Institute of Security Studies. *Kenya to 2030 and beyond.* 2018. https://issafrica.s3.amazonaws.com/site/uploads/kenya-report.pdf

¹⁷ African Studies Center, East Africa living encyclopedia, https://www.africa.upenn.edu/NEH/kethnic.htm

Moreover, rapid urbanisation continues to place huge pressure on the country's infrastructure, institutions and land. It is estimated that three-quarters (36.6 million) of Kenya's population live in rural areas. Also, that households in rural areas are twice as likely to have more members than their urban counterparts. Further, it is estimated that Kenya's urban population will increase by 9 million to reach 21.8 million by 2030, while the rural population will rise by nearly 8 million to reach 43.3 million by 2030. ¹⁸

3. Development indicators

Kenya's 2018 Human Development Index (HDI) rating was 0.579, which placed the country in the medium category of human development. The country ranked 147 out of 189 countries and territories. However, the HDI value has risen from 0.467 to 0.579, an increase of 23.9 percent between 1990 and 2018.

As shown in the table below, between 1990 and 2018, the country's life expectancy rose by 8.9 years at birth, while the mean years of schooling increased by 2.8. In addition, the anticipated years of schooling grew by 2.0 years, while Kenya's Gross national Income (GNI) per capita rose by 34.7 percent.²⁰

Kenya's HDI trends

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	57.5	9.1	3.7	2,297	0.468
1995	53.9	8.7	4.5	2,130	0.456
2000	51.8	8.4	5.3	2,112	0.451
2005	55.8	9.4	5.8	2,223	0.490
2010	62.9	10.7	6.1	2,467	0.543
2015	66.7	11.7	6.3	2,806	0.578
2016	67.0	11.9	6.4	2,898	0.585
2017	67.3	12.1	6.5	2,961	0.590

SOURCE: UNDP

¹⁸ Institute of Security Studies. *Kenya to 2030 and beyond*. 2018. https://issafrica.s3.amazonaws.com/site/uploads/kenya-report.pdf

¹⁹ UNDP. *Human Development Report 2019 Inequalities in Human Development in the 21st Century.* http://hdr.undp.org/sites/all/themes/hdr theme/country-notes/KEN.pdf

²⁰ Ibid.

Kenya's HDI for 2018 stood at 0.579. Nonetheless, when the value for inequality is discounted, the HDI decreases to 0.426, which is a loss of 26.3 percent due to disparity in the distribution of the HDI factor indices²¹.

When considering gender inequalities, three dimensions are taken into consideration namely: reproductive health, which is evaluated by maternal mortality and adolescent birth rates; empowerment, assessed by the proportion of parliamentary seats held by women, as well as the attainment by class of secondary and higher education; and, economic activity, gauged by the rate of participation of women and men in the labor market. In Kenya, women hold 23.3 percent of parliamentary seats, and 29.8 percent of adult women have at least completed secondary education, compared to 37.3 percent of their male counterparts.²² Also, 510 women die of pregnancy-related causes for every 100,000 live births; with the teen birth rate being 75.1 births per 1,000 women between the ages 15-19.

The government recognizes the need to have literate citizens puts in effort to improve the adult literacy rates. It also provides basic education and training opportunities to out-of-school youth and adults who either missed their chances in formal education system in their childhood or dropped out of school before acquiring sustainable literacy skills.²³

The rate of access to electricity in Kenya is deemed the highest in East Africa standing at 73.42 percent as at the end of April 2018. This is as a result of diverse national electrification projects embarked on by Kenya Power.²⁴ In addition, there has been rapid investment in the distribution network and increased investment in renewable energy generation. Accordingly, the national access rate has gradually grown over the past five years from a low of 32 percent in 2013.

4. Equality indicators

According to the 2018 Global Gender Gap Report, Kenya ranked 76 globally in tackling gender gap.²⁵ On the other hand, the World Economic Forum's Global Gender Gap Report 2020, ranked Kenya 109 out of the 153 countries that were rated on their progress towards gender parity in 2019.²⁶ Women in the country have over the years, endured systemic marginalization and discrimination. However, in recent years, the country has taken important steps to address the issue, including by institution legal, policy and institutional reforms to promote gender equity. For example, the country's constitution in its bill of rights provides for the right to equality and freedom from discrimination. Further, it also establishes the National Gender and Equality Commission

²¹ Ibid.

²²lbid.

²³ Kenya's Ministry of Education. *Basic Education Programme Rationale and Approach 2013 - 2018.* www.education.go.ke

²⁴ Margaret Njugunah. *Kenya has the highest access to electricity in East Africa: WB Research.* May 8, 2018. https://www.capitalfm.co.ke/business/2018/05/kenya-has-highest-access-to-electricity-in-east-africa-wb-research/

Adonijah Ochieng. Kenya making only modest progress in closing gender gap. January 27, 2019. https://www.businessdailyafrica.com/datahub/Kenya-making-only-modest-progress-in-closing-gender-gap/3815418-4924942-jwlpeu/index.html

²⁶ Francis Mureithi. Political participation for Kenyan women yet to meet the constitutional provision. January 2, 2020.

https://www.nation.co.ke/gender/Kenya-ranked-109-out-of-153-gender-equality--/5362750-5404928-5odwusz/index.html

(NGEC) as a constitutional commission to promote gender equality and freedom from discrimination in the country.

The constitution also imposes a gender quota requirement that no gender to hold no more than two-thirds of elective and appointive positions in the public service. While in the case of appointing offices this rule is attainable, it continues to be a challenge in an elective process. For instance, in the Nairobi Securities Exchange-listed companies, women account for 26 percent of management positions, ²⁷ while only 21 percent of board members in listed companies are women.

The country has made headway in areas such as maternal mortality, attained gender parity in primary education enrolment and is approaching parity in secondary education.²⁸ However, weak implementation and lack of gender responsive budgeting has impacted the legal and policy frameworks for gender equity. Accordingly, there are still many women who have no access to basic services. They also remain underrepresented in decision making positions and political roles. If women's profiles were improved in all sectors, a reduction in gender disparities would result ultimately benefiting not just women, but men, children, the rich and the poor as well.

Governance

Kenya ranking rose from position 19 from 11 in the 2018 Ibrahim Index of African Governance report. The report produced by Mo Ibrahim Foundation focused at both country and indicator trends by evaluating contemporary progress in governance and in long term performance. There has been remarkable progress noted in the last five years.²⁹

In its economic score which measures the extent to which government facilitates citizens to pursue economic aspirations in order to flourish, Kenya ranked eighth, which again was termed remarkable.³⁰ Likewise, the country ranked eighth on the human development indicator with 79 percent. This measures the ability of a government is able to extend to its citizens services such as poverty mitigation and alleviation, educational advancement, healthcare and medical and sanitary services. Notably, Kenya was the only country singled out of 10 African countries as having the largest largest gross domestic products in 2017, which the report notes to have enhanced the business environment.³¹

Other areas which were assessed included judiciary's independence scoring 76 percent, property rights attaining 61 percent, a well organized power transfer mechanism scored 66.7 percent, the freedom of expression indicator scored 66.7 percent, and fostering gender equality scored 71.7 percent.

²⁷ Adonijah Ochieng. Kenya making only modest progress in closing gender gap. January 27, 2019. https://www.businessdailyafrica.com/datahub/Kenya-making-only-modest-progress-in-closing-gender-gap/3815418-4924942-jwlpeu/index.html

²⁸ Data Hub. Gender Equality Context in Kenya. https://data.em2030.org/countries/kenya/

²⁹ Justus Ochieng. *Kenya ranked 11 in Africa governance score.* October 29, 2018. https://www.nation.co.ke/news/Kenya-ranked-11-in-Africa-governance-score/1056-4826624-hcian9/index.html

³⁰ Ibid.

³¹Ibid.

However, the country scored dismally in safety and rule of law which were ranked at position 23, despite being placed in the 11th position on overall governance. In addition, the dismall performance on participation and human rights categories resulted in the country being flagged as "warning signs." This indicator measures civil and political rights and freedoms through evaluating citizen participation in the political and electoral actions, recognition of fundamental rights, and gender recognition.

6. ICT Development Indicators

The country's ICT sector has remained robust. In its Global Innovation Index (GII) 2019 survey, Kenya was ranked the second-leading innovation center in sub-Saharan Africa by the World Intellectual Property Organization.³² Further, the country has a track record of high levels of innovation, outperforming innovation levels with respect to GDP for the ninth consecutive year.

Mobile Connectivity Index

The number of mobile subscriptions (SIM1 Cards) in the country stood at 53.2 million as at 30th September 2019³³ which is a translation level of 112.0 percent to mobile (SIM) penetration. This upward trajectory of mobile penetration can be attributed to the availability of mobile signals, and diverse traditional mobile services. The population covered by 2G and 3G is 96 percent and 93 percent respectively.³⁴

Initiatives that aim to close access gaps in voice infrastructure and school broadband connectivity projects have been carried out under the Universal Service Fund (USF). Others include the enforcement of operator's license obligations and licensing of supplementary frequencies that support mobile services. All these are spearheaded by the sector regulator, the Communications Authority.

Over the past few years, the internet market in the country has continued to show positive growth. The number of data and internet subscriptions has grown to 52 million, with 48.5 percent (25.2 million subscriptions) are broadband. Several factors are attributed to this growth. They include the expansion of 3G and 4G coverage, availability of low cost smartphones and cheap data plans, the rise in utilization of e-commerce, e-government, social media and online content.³⁵

E-Commerce

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³² KENINVEST. *Kenya ranked top tech hub in Subsahara Africa*. August 15, 2019. http://www.invest.go.ke/kenya-ranked-top-tech-hub-sub-saharan-africa/

³³ Communications Authority of Kenya. FIRST QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2019/2020 (JULY - SEPTEMBER 2019). https://ca.go.ke/wp-content/uploads/2019/12/Sector-Statistics-Report-Q1-2019-2020.pdf

³⁴ Communications Authority of Kenya. FIRST QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2019/2020 (JULY - SEPTEMBER 2019). https://ca.go.ke/wp-content/uploads/2019/12/Sector-Statistics-Report-Q1-2019-2020.pdf

³⁵ Communications Authority of Kenya. FIRST QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2019/2020 (JULY - SEPTEMBER 2019). https://ca.go.ke/wp-content/uploads/2019/12/Sector-Statistics-Report-Q1-2019-2020.pd

Kenya has a digital economy blueprint which aims to provide a conceptual framework to guide the realisation of a sustainable digital economy.³⁶ It also highlights the importance of investing in a digital economy.

The country is one of the world's leading proponents of financial inclusion that has seen the proliferation of digital finance and payment platforms such as mPESA, Mula, PesaLink and Pesapal gain wide usage in the country.³⁷ The increased adoption of these technologies continues to facilitate transactions and therefore enhance trade for individuals and small and medium-sized enterprises (SMEs).

In addition, the country has a high number of active mobile money subscribers, and agents who by the end of 2019 stood at 31.2 million, and 235.168 respectively.³⁸ Towards the end of 2019, 425.3 million mobile trading transactions valued at Kenya shillings 1.6 trillion were spent on online purchases of goods and services. ³⁹ The 2016 Networked Readiness Index 2016 ranked Kenya at position 86, with a value of 3.8.⁴⁰ Further, Kenya was ranked 89 in the UNCTAD B2C E-commerce Index, 2018. However, it was among the top ten African countries in the index, ranking seventh Mauritius, Nigeria, South Africa, Tunisia, Morocco and Ghana.⁴¹

Benchmarking data collected by IDC shows that Kenya has a mix of indicators in its favor vis a vis some of the seven countries it was benchmarked against, mostly African countries. Some positive benchmark items included: higher household internet penetration, higher overall internet penetration, lower broadband tariffs and comparable business internet usage. Indeed the business survey conducted as part of this study shows that 90% of respondent companies have websites while 99% use email.

However, as stated above, producing and retaining higher level ICT skills needs a measured approach to complete the picture in the business end user environment. With regard to market demand, in both the business and residential segments, there is relatively good uptake of various ICT services though costs (of devices and some services), quality and access (last mile and backhaul) still hold back citizens and businesses from more wholesome consumption of ICT.

Overall, given the considerable actions taken by the government in the ICT sector over the last four to five years, which are starting to bear fruit, there is still great opportunity to address some issues including ICT skills, access (to devices and services), costs (of devices and services) and generally nurture increased usage among both businesses and residents. In some instances, the interventions recommended by IDC include easy to execute awareness campaigns while others touch on existing plans by the sector regulator (Universal Access Fund and subsidies) and multistakeholder intervention

http://www3.weforum.org/docs/GITR2016/WEF_GITR_Chapter1.1_2016.pdf

https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d12_en.pdf

³⁶ Digital Economy BluePrint: Powering Kenya's Transformation. . https://www.ict.go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf

³⁷ Digital Economy BluePrint: Powering Kenya's Transformation. . https://www.ict.go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf

³⁸ Communications Authority of Kenya. FIRST QUARTER SECTOR STATISTICS REPORT FOR THE FINANCIAL YEAR 2019/2020 (JULY - SEPTEMBER 2019).

³⁹ Ihid.

⁴⁰ 2016 Networked Readiness Index

⁴¹ UNCTAD B2C E-commerce Index 2018

(academia, government and business in revising ICT curricular, collaborating through various PPPs, etc).

On ICT skills, the growth of ICT professionals and the levels of skills in Kenya hinges largely on: the size and number of both local and international large organizations; the level of maturity and sophistication in their ICT setups; and the growth of the SME segment as a key consumer. Inherent are concerns on how to retain staff that have acquired extensive experience (after a major project), who may need to grow further or use that experience in another organization and cannot do so in the local market and therefore elect to seek opportunities outside Kenya.

On the other hand, in the supply side, some market players that secure windfall opportunities that are not likely to recur any time soon, temporarily import skills to implement and manage large projects and do so outside any framework that ensures transfer of skills to local professionals. Thus the issue of skills when viewed broadly and at higher cadres, presents a double edged sword that requires a measured approach factoring in the needs of the market, growth of the market, and the resulting demand for such skills.

The changing ecosystem indicates that the various developments in the sector, including a unified telecommunications licensing regime, infrastructure developments and technological advances, have caused the local ICT Ecosystem to undergo some metamorphosis that has gradually seen the lines blurred between traditional telecom companies and ICT service providers. With voice services nearing saturation, coupled with lower tariffs, telcos have been compelled to re-think their strategies away from both voice services and the mass market towards data.

Kenya's focus should be on infrastructure construction as a starter in the early stages of ICT growth. The country's growth prospects will also rely on digital innovation and digital governance if fast, sustained growth is to be achieved.⁴²

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⁴² Global Connectivity Index. *Kenya GCl 2019*. https://www.huawei.com/minisite/gci/en/country-profile-ke.html####

Chapter 3: Category R - Rights

Theme A – Policy, Legal and Regulatory Framework

A.1 Is there a legal framework for the enjoyment and enforcement of human rights which is consistent with international and regional rights agreements, laws and standards, and with the rule of law?

Indicator:

Existence of a constitutional or legal framework, including oversight arrangements, which is consistent with international and regional rights agreements, laws and standards, and evidence that it is respected and enforced by government and other competent authorities

The Constitution of Kenya, 2010 provides a comprehensive Bill of Rights in its Chapter 4 which is consistent with international human rights law.⁴³ Further, under Article 2(5) it provides that the rules of international law form part of the law of Kenya. Further, under Article 2(6), it states that any treaty or convention ratified by Kenya forms part of the law of Kenya.

Kenya has signed or ratified several instruments.⁴⁴ The country is a State Party to: the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Social and Economic Rights (ICESR), the Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment (CAT), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), theInternational Convention on the Elimination of All Forms of Racial Discrimination (ICERD), the Convention on the Rights of the Child (CRC), Convention on the Rights of Persons with Disabilities (CRPD), and the Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict.

Likewise, the country is a signatory to: International Convention for the Protection of all Persons from Enforced Disappearance (CED), and the Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography.

However, the country is yet to take action on the: International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families; the Optional Protocol to the International Covenant on Civil and Political Rights; the Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the abolition of the death penalty; the Optional Protocol to the International Covenant on Economic, Social and Cultural Rights; the Optional Protocol to the Convention on the

⁴³ Constitution of Kenya https://www.wipo.int/edocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexdocs/lexd

⁴⁴ United Nations High Commissioner for Human Rights, 'United Nations Treaty Database'. Available at: https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=90&Lang=EN; Status of Ratification: Interactive Dashboard https://indicators.ohchr.org/

Elimination of All Forms of Discrimination against Women; the Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; the Optional Protocol to the Convention on the Rights of the Child on a communications procedure; and, the Optional Protocol to the Convention on the Rights of Persons with Disabilities.

At the regional level, Kenya is a member of the African Union. It is also a State Party to the African Charter on Human and Peoples' Rights;45 the Protocol Establishing the Africa Court;⁴⁶ the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa;⁴⁷ and, the African Charter on the Rights and Welfare of the Child.⁴⁸ Further, Kenya is a member of the East African Community, whose Treaty requires adherence to the observance of human rights.⁴⁹

With regards to oversight, Kenya's constitution in its Chapter 10, establishes an independent Judiciary. Further, under Articles 23 and 165, it grants the High Court jurisdiction to hear and determine petitions on the denial, violation or infringement of, or threat to, a right or fundamental freedom in the Bill of Rights. In addition, under Article 59, it establishes the Kenya National Human Rights Commission (KNCHR)⁵⁰ and the National Gender and Equality Commission (NGEC)51 to promote respect for and compliance with human rights obligations and to monitor and investigate complaints relating thereto.

Kenya has submitted two Periodic State Reports under the African Charter, with the most recent being in November 2015.52 Further, Kenya has submitted three reports under the Universal Periodic Review process in May 2010, January 2015 and more recently in January 2020.53

A.2 Is there a legal framework which recognises that the same rights that people have offline must also be protected online?

Indicator:

⁴⁵ Ratification Table:- African Charter on Human and Peoples' Rights https://www.achpr.org/ratificationtable?id=49

⁴⁶ African Union, List of Countries which have Signed, Acceded or Ratified the Protocol to the African Charter on Human and Peoples' Rights on the Establishment of an African Court on Human and Peoples' Rights. Available at: https://au.int/sites/default/files/treaties/36393-slprotocol_to_the_african_charter_on_human_and_peoplesrights_on_the_estab.pdf

⁴⁷ List of Countries which have Signed, Ratified/Acceded to the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, available at:https://au.int/sites/default/files/treaties/37077-sl-

PROTOCOL%20TO%20THE%20AFRICAN%20CHARTER%20ON%20HUMAN%20AND%20PEOPLE%27 S%20RIGHTS%20ON%20THE%20RIGHTS%20OF%20WOMEN%20IN%20AFRICA.pdf

⁴⁸ List of Countries which have Signed, Ratified/Acceded to the African Charter on the Rights and Welfare of the Child, available at: https://au.int/sites/default/files/treaties/36804-sl-AFRICAN%20CHARTER%20ON%20THE%20RIGHTS%20AND%20WELFARE%20OF%20THE%20CHILD

Treaty for the Establishment of the East African Community https://eacj.org/?page_id=33

⁵⁰ Kenya National Commission on Human Rights https://www.knchr.org/

⁵¹ National Gender and Equality Commission https://www.ngeckenya.org/

⁵² Kenya https://www.achpr.org/states/detail?id=25

⁵³ Universal Periodic Review - Kenya https://www.ohchr.org/EN/HRBodies/UPR/Pages/KEindex.aspx

Evidence that the principle of online/offline equivalence is accepted and implemented in law and practice

While not explicit on the medium, Article 33 of the constitution provides generally for the right to freedom of expression; Article 34 guarantees the freedom of electronic, print and all other types of media; Article 35 provides for the right of access to information; and Article 36 provides for the right to freedom of association. The provisions do not limit their application to the online sphere, in which case, they can be interpreted as having both offline and online equivalence and application. Further, Kenya is a member of the Freedom Online Coalition⁵⁴ which is a group of governments committed to working together to support and promote internet freedom and protect fundamental human rights such as free expression, association, assembly and privacy online.

Theme B – Freedom of Expression

B.2 Are any restrictions on freedom of expression narrowly defined, transparent and implemented in accordance with international rights agreements, laws and standards?

Indicator:

Legal restrictions on freedom of expression that are consistent with international and regional rights agreements, laws and standards, and evidence that these are respected by government and other competent authorities.

The legal threshold for the restriction of freedom of expression is contained in both the constitution and in select statutes. Article 24 of the constitution lays down the parameters for the lawful limitation of fundamental rights and freedoms provided for in the Bill of Rights. Under this provision, a right can only be limited pursuant to a prescribed law, and only to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors.

Further, a more specific limitation of the right to freedom of expression is found under Article 33(2), which provides that the right does not extend to: propaganda for war, incitement to violence, and hate speech or advocacy for hatred on ethnic grounds or any ground of discrimination specified in Article 27(4) of the Constitution.

At teh statute level, section 35(3)(c) of the Prevention of Terrorism Act, 2012 limits the rights to freedom of expression, media, conscience, religion, belief and opinion to the extent of preventing the commission of an offence under the Act.⁵⁵ Likewise, Section 33(1) of the National Intelligence Service Act, 2012 limits freedom of expression to the extent that it is done: in the interest of national security, public safety, public order, public morality or public health; for the purpose of protecting the integrity of Service operations; to protect the reputation, rights and freedoms of the members or private persons concerned in legal proceedings; to prevent the disclosure of information received in

http://www.vertic.org/media/National%20Legislation/Kenya/KE_Prevention_Terrorism_Act.pdf

⁵⁴ Freedom Online Coalition <u>https://freedomonlinecoalition.com/about-us/members/</u>

⁵⁵ Prevention of Terrorism Act

confidence; to regulate the technical administration or the technical operation of telecommunication, wireless broadcasting, communication, internet, satellite communication or television; or for the security and protection of information within the Service.

In *Geoffrey Andare v Attorney General & 2 others*,⁵⁶ the High Court of Kenya held that section 29 of the Kenya Information Communication Act was unconstitutional for violating Article 33 of the Constitution. The section provided that:

a person who by means of a licensed telecommunication system: sends a message or other matter that is grossly offensive or of an indecent, obscene or menacing character; or sends a message that he knows to be false for the purpose of causing annoyance, inconvenience or needless anxiety to another person, commits an offence and shall be liable on conviction to a fine not exceeding fifty thousand shillings, or to imprisonment for a term not exceeding three months, or to both.

In *Jacqueline Okuta & Another v Attorney General & 2 others*,⁵⁷ the petitioners successfully challenged the constitutionality of the offence of criminal defamation established under section 194 of the Penal Code. The court found the provision to be a violation of freedom of expression under Article 33 of the Constitution as well as regional and international standards of freedom of expression such as the United Nations Human Rights Committee General Comment No. 47 and Resolution 160 of the African Commission on Human and Peoples' Rights adopted on 24 November 2010.

Freedom of expression with respect to political opinions has been difficult to realise given the enhanced counter-terrorism measures; threats from ethnically affiliated gangs; and, state surveillance through government investment in devices that monitor mobile communication;⁵⁸and, with internet communications as well.⁵⁹

In 2019, the National Cohesion and Integration Commission condemned publication of photos by blogger Robert Alai of Administration Police Officers who were killed in Wajir following a terror attack.⁶⁰ The National Police Service stated that the act was unpatriotic, uncouth and disrespectful to the family of the departed officers. Alai bowed to pressure and took down the photos.

B.4 Under what conditions does the law hold platforms and other online service providers liable for content published or shared by users on them?

Indicator:

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⁵⁶ Geoffrey Andare v Attorney General & 2 others, Petition No.149 of 2015 [2016] eKLR, available at: http://kenyalaw.org/caselaw/cases/view/121033/

⁵⁷ Jacqueline OKuta & Another v Attorney General and 2 Others, Petition Number 397 of 2016 [2017] eKLR, available at: http://kenyalaw.org/caselaw/cases/view/130781/

⁵⁸ Freedom House report 2018 Available at: https://freedomhouse.org/report/freedom-world/2018/kenya

⁵⁹ Freedom House Report 2019 Available at: https://freedomhouse.org/report/freedom-world/2019/kenya

⁶⁰ Mireri Junior, 'NCIC condemns circulation of gruesome photos of Wajir attack victims', (17 June 2019, Standard Digital) available at:

https://www.standardmedia.co.ke/article/2001330283/ncic-condemns-circulation-of-gruesome-photos-of-wajir-attack-victims

Legal framework for intermediary liability and content regulation is consistent with international and regional rights agreements, laws and standards, and evidence concerning proportionality of implementation

Kenya does not have a specific legal and policy regime to regulate intermediary liability. However, several legislation such as: Kenya Information and Communication Act, ⁶¹ Sexual Offences Act, ⁶² National Cohesion and Integration Act 2008, ⁶³ Prevention of Terrorism Act 2012⁶⁴ provide for circumstances where intermediaries may be found liable for content on their platforms.

Theme C – Right of Access to Information

C.2 Does the government block or filter access to the Internet as a whole or to specific online services, applications or websites, and on what grounds and with what degree of transparency is this exercised?

Indicators:

Legal framework for blocking or filtering Internet access, including transparency and oversight arrangements

There is no legislation that provides for the blocking or filtering of the internet or specific online services, applications or websites. Kenya's constitution provides several safeguards to ensure the realisation of human rights. Under Article 2(5) and (6) adopts the general principles of international law and international treaties or conventions that Kenya has signed respectively as part of Kenyan law under the Constitution. Further, Article 10 sets out national values and principles of governance which include among others: human rights, integrity, transparency, and the rule of law.

Freedom to access information is guaranteed under Article 35 of the constitution. Every citizen has the right of access to information held by the state and information held by another person and required for the exercise or protection of any right or fundamental freedom. The state is also obligated to publish information of public importance.

The right is further realised under the Access to Information Act, 2016⁶⁵ which provides a framework for public and private entities to access and disclose information on request subject to constitutional principles. However, certain types of information cannot be disclosed namely: information that may undermine national security, impede due

http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/AccesstoInformationActNo31of2016.pdf

⁶¹ s.29-improper use of a computer system to send obscene or false information meant to cause annoyance, s.30 -intentional modification or interference of the contents of a message, s.31- disclosure and interception of messages outside the cause of ordinary business.

⁶² s.12 distribution or display of any article that promotes sexual offence with a child, s.14-prints or publishes any information intended to facilitate child sex tourism and s.16 distribution of child pornography.

⁶³ s.62(2) racial or ethnic contempt by newspaper, radio station or media enterprise that publishes utterances that incite violence, hatred or discrimination against any person.

⁶⁴ s.27-publication, distribution of information intending to incite person(s) to carry out a terrorist act.

⁶⁵ Access to Information Act No.36 of 2016, available at:

process of the law, endanger the safety and health of any person, involve unwarranted invasion of personal privacy, undermine judicious consideration of a matter, infringe professional confidentiality, damage an entity's position in actual or contemplated legal proceedings or cause difficulty to the government in managing Kenya's economy. ⁶⁶ The Act provides for an appeal mechanism, within thirty days of a public entity's decision. ⁶⁷

Article 58 as read together with article 132(4)(d) of the constitution provide that a state of emergency can be declared by the National Assembly when the State is threatened by war, invasion, general insurrection, disorder, natural disaster or other public emergency for a maximum of 14 days. Additionally, a limitation of any right or fundamental freedom during such a period must be specified in the declaration and be strictly required for the emergency.

Article 238 provides the national principles for national security which include compliance with human rights and the rule of law, respect for diversity and the culture of people and subject to the authority of Parliament and the Constitution.

At the statute level, the Prevention of Terrorism Act 2012 under section 35, provides for the limitation of the right to privacy, freedom of expression, the media and of conscience, religion, belief and opinion to the extent of preventing the commission of an offence under the Act. This is done for the purpose of carrying out an investigation of a terrorist act; the detection and prevention of a terrorist act; or that the enjoyment of the rights and fundamental freedoms by an individual does not prejudice the rights and fundamental freedom of others.

The National Intelligence Service Act under section 33(1) limits the freedom of expression of a member of the service for among others, the security and protection of information within the Service

Under clause 7 of the Electoral Code of Conduct, under the Second Schedule of the Elections Act No.14, the Independent Electoral and Boundaries Commission may prohibit a candidate or political party from "publishing or distributing campaign literature and electoral advertising".

Section 4 of the Preservation of Public Security Act empowers the President to make regulations censoring, controlling or prohibiting the communication of any information, or of any means of communicating or of recording ideas or information, including any publication or document, and the prevention of the dissemination of false reports in order to preserve public security. Section 47 of the National Police Service Act limits the right to freedom of expression for police officers in the extent of protecting classified information.

Evidence in government and court decisions, and from other credible and authoritative sources, concerning blocking or filtering of access

There have been incidences where national regulators have intervened in a bit to

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⁶⁶ ibid section 6.

⁶⁷ ibid section 14.

regulate the sharing of information. In September 2012, the Communications Commission of Kenya issued guidelines to mobile network operators and other communications licensees in order to prevent dissemination of political inflammatory messages. Elikeise, in June 2017, the Kenya Films Classifications Board issued a statement that banned select children's television shows from being broadcasted on the web and TV broadcasts for ostensibly promoting homosexuality in violation of "moral values. Elikeise" values.

Incidence, nature and basis for shutdowns or other restrictions on Internet connectivity

In March 2017, the Centre for Intellectual Property and Information Technology Law discovered middle-boxes in Safaricom's network. The report noted that middle-boxes have dual use including legitimate purposes such as network optimization and traffic manipulation as well as surveillance and censorship. However, Safaricom's technical team denied the presence of middle-boxes on their networks, and two days later, a test conducted on the Safaricom networks showed the absence of middle-boxes.

Ahead of the 2017 general election, speculation was rife that the government would resort to blocking the internet to prevent hate speech on social media platforms.⁷¹ Civil society organisations advocated for an open internet even ahead of elections⁷² and Kenya ICT Action Network gave a legal and policy analysis against an internet shutdown during elections in Kenya.⁷³

Numbers and trend of content access restrictions, takedowns of domain names and other interventions during the past three years

There have not been many incidences of content access restrictions, takedown of domain names during the past three years. However, some are worth noting. In May 2011, a website safaricon.co.ke created by a disgruntled Safaricom customer to

⁶⁸ Communications Commission of Kenya, "Guidelines for the Prevention of Transmission of Undesirable Bulk Political Content/Message via Electronic Communications Networks", September 2012, available at: https://ca.go.ke/wp-content/uploads/2018/02/Guidelines-on-the-Prevention-of-undesirable-bulk-political-content-via-sms.pdf

⁶⁹ https://freedomhouse.org/report/freedom-net/2017/kenya; Kenya Films Classification Board, Statement on Children Television Programs Promoting Homosexuality in Kenya, 15 June 2017, available at: http://kfcb.co.ke/wp-content/uploads/2017/06/STATEMENT-ON-CHILDREN-TELEVISION-PROGRAMMES-PROMOTING-HOMOSEXUALITY-IN-KENYA-ISSUED-ON-15TH-JUNE-2017.pdf

⁷⁰ CIPIT Research Brief, Nairobi March 2017. Available at: https://blog.cipit.org/wp-content/uploads/2017/03/Final-March-Brief-pages.pdf

⁷¹ Kenneth Odero, "The Kenyan Government Will Only Shut Down the Internet During Elections 'If Things Get Out Of Hand, (17 January 2017,iAfrikan) available at: https://www.iafrikan.com/2017/01/14/the-kenyan-government-will-only-shut-down-the-internet-during-elections-if-things-get-out-of-hand/

⁷² AccessNow, "Election Watch: If Kenya Orders an Internet Shutdown will Telcos#KeepItOn",26 July 2017, available at: https://www.accessnow.org/election-watch-kenya-orders-internet-shutdown-will-telcos-help-keepiton/;sSee also Bloggers Association of Kenya, 2017 State of the Internet Report, p. 2, available at: https://www.ifree.co.ke/wp-content/uploads/2018/02/State-of-the-Internet-in-Kenya-report-2017.pdf

⁷³ KICTANet, "Building Trust between the State and its Citizens: A Policy Brief on Internet Shutdowns and Elections in Kenya", available at: https://www.kictanet.or.ke/wp-content/uploads/2017/09/Kenya Policy Brief On Internet Shutdowns.pdf

complain about Safaricom network services was taken down amidst claims that the takedown happened without Kenya Network Information Centre (KENIC) following due process.⁷⁴ In December 2015, the website IsUhuruInKenya.co.ke, which informed Kenyans whether President Uhuru Kenyatta was in the country, was taken down.⁷⁵ KENIC confirmed that the domain name was taken down, and remains inactive to date.⁷⁶

C.4 Are individuals, journalists or other online/media actors subject to arbitrary detention, prosecution or intimidation for accessing information online?

Indicators:

Scope and nature of legal provisions and practice

So far, there have been isolated incidents of arrests, prosecution or intimidation for accessing information. However, in November 2015, police arrested a journalist who wrote about corruption at the Interior Ministry, drawing accusations from media groups that the government was trying to trample free speech.⁷⁷

The Computer Misuse and Cybercrimes Act, 2018 penalizes the unauthorised access. RAdditionally, unauthorised access in order to intercept data being held by the government and which is exempt in accordance with the law on access to information is an offence carrying a maximum imprisonment of 10 years or a maximum fine of five million kenya shillings or both. The law has been suspended following a constitutional challenge case will be heard on 30th January 2018.

Numbers of arbitrary detentions and prosecutions for access to content that is not illegitimate in terms of international agreements as to the circumstances and criteria for permissible restrictions.

So far, there are no reported cases of arbitrary detentions and prosections for access to illegitimate content.

AFRICAN%20CHARTER%20ON%20THE%20RIGHTS%20AND%20WELFARE%20OF%20THE%20CHILD .pdf

⁷⁴ Safaricon.co.ke: Safaricom "Bullies" Registrar, Domainer into taking down domain name http://domainsafrica.blogspot.com/2011/09/safariconcoke-safaricom-bullies.html

⁷⁵ IsUhuruInKenya.co.ke is back https://techcabal.com/2015/12/08/isuhuruinkenya-co-ke-is-back/

⁷⁶ KENIC Confirms Takedown of isUhuruInKenya.co.ke Domain https://techweez.com/2015/12/07/isuhuruinkenya-taken-down/

⁷⁷ Kenyan journalist detained over writing about corruption https://www.reuters.com/article/us-kenya-corruption/kenyan-journalist-detained-over-writing-about-corruption-idUSKCN0SZ2GK20151111

⁷⁸ section 15(1), Computer Misuse and Cybercrimes Act, 2018, available at: https://au.int/sites/default/files/treaties/36804-sl-

⁷⁹ https://techweez.com/2019/10/24/judgement-on-the-computer-misuse-and-cybercrimes-law-to-be-passed-next-year/

Theme D - Freedom of Association and the Right to take part in the conduct of Public Affairs

D.2 Can non-governmental organisations organise freely online?

Indicator:

Evidence of online organisation, and absence of undue interference with such organisation

Freedom of association is guaranteed under Article 36 of the constitution. Section 46 of the Prevention of Terrorism Act, 2012 permits the Cabinet Secretary, where he has reasonable grounds to believe that a registered company or association or an applicant for registration as a company or association has made or is likely to make available, directly or indirectly, any resources in support of a terrorist group, issue an order which if allowed by the High Court can result in the dereigstration or non-registration of the association.

D.3 Are there government policies for e-government and/or e-participation that encourage participation in government and public processes?

Indicators:

Existence of government policies for e-government and e-participation, including use of the Internet for public consultation

Kenya's E-Government Strategy was enacted in 2004⁸⁰ and it aims to use Information Communication Technologies for better public service delivery. According to the United Nations e-Government Development Index and E-Participation Index, Kenya is ranked 122⁸¹ and 110⁸² respectively.

In this regard, the government has implemented several e-government programmes. The Integrated Financial Management Information System (IFMIS) is an automated system used for public financial management.⁸³ The system was first introduced in 2003⁸⁴ and is now linked to an e-Procurement system to streamline procurement processes throughout the 47 county governments.⁸⁵ The system seeks to enhance

⁸⁰Republic of Kenya, 'E-Government Strategy: The Strategic Framework, Administrative Structure, Training Requirements and Standardization Framework', March 2004. Available at: http://www.ict.go.ke/wp-content/uploads/2019/05/KENYA-E-GOVERNMENT-STRATEGY-2004.pdf

⁸¹ https://publicadministration.un.org/egovkb/Data-Center

⁸² https://publicadministration.un.org/egovkb/Data-Center

⁸³ Ministry of Finance, "What is IFMIS?"

⁸⁴ICPAK, "The Benefits, Challenges and Way Forward of IFMIS in Kenya", 27–28 June 2017 p.9, available at: https://www.icpak.com/wp-content/uploads/2017/07/The-benefits-Challenges-and-way-forward-of-IFMIS-in-Kenya.pdf

⁸⁵ IFMIS e-Procurement Rolled out throughout the Country to Enhance Service Delivery to the public, available at: http://www.treasury.go.ke/media-centre/news-updates/224-ifmis-e-procurement-rolled-out-throughout-the-country-to-enhance-service-

transparency and accountability in the procurement process from procurement planning, requisition, sourcing, and to payment.⁸⁶

The Integrated Payroll and Personnel Database (IPPD) is used to manage the national government payroll and personnel database since its adoption in 1997.⁸⁷ The Kenya Revenue Authority utilises an online platform, iTax, to facilitate the filing and paying of taxes.⁸⁸ In 2018, the platform had enlisted 5.73 million taxpayers up from 4.2 million the previous year.⁸⁹ The World Bank Ease of Doing Business recognised Kenya for simplifying its tax and other regulatory procedures and thereby making it easier to start a business.⁹⁰

The National Land Information Management System aims to develop a transparent, decentralized, affordable, effective and efficient GIS based Land Information Management System. 91 In April 2018, the Ministry of Lands and Physical Planning formally rolled out the system which is capable of performing several types of transactions relating to land. 92

The National Education Management Information System (NEMIS) is a web-based data management solution which facilitates the collection of data and information from education institutions; processes and reports the status of designed indicators. Additionally, the online platform captures school and learner information, facilitates data sharing between all education agencies, tracks costing parameters of education and training, geographical analysis of education indicators with integration of GIS components and business intelligence by providing statistics for reporting national and international indicators in education and training sub-sectors.⁹³

The Health Information System (HIS) is a proposed system under the Kenya Health Information Policy for collection, presentation and analysis of health and health-related data and its conveyance to higher levels in the healthcare system.⁹⁴ Additionally, HIS is expected to facilitate evidence based decision making, especially at the point of collection.

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 $\underline{\text{https://www.cio.co.ke/kra-accelerate-policy-reforms-kenya-named-technology-driven-revenue-administration/}$

⁹⁰World Bank, Doing Business 2018: Reforming to Create Jobs, p.35 available at: http://documents.worldbank.org/curated/en/803361509607947633/pdf/120811-REVISED-PUBLIC.pdf

⁹¹ Vision 2030, Second Medium Plan Term 2013-2017 Plan p.29, available at: http://vision2030.go.ke/inc/uploads/2018/06/Second-Medium-Term-Plan-2013-2017.pdf

⁸⁶ ibid.

⁸⁷ Ministry of State for Public Service, Integrated Payroll And Personnel Database (Ippd) Initiative, available at: http://unpan1.un.org/intradoc/groups/public/documents/AAPAM/UNPAN032705.pdf

⁸⁸ 'KRA to Accelerate Policy Reforms as Kenya Named Technology-Driven Revenue Administration' (CIO East Africa, November 15 2017), available at:

⁸⁹ ibid.

⁹² Lands Ministry to roll out a new Land Information Management System (LIMS), https://lands.go.ke/lands-ministry-to-roll-out-a-new-land-information-management-system-lims/

⁹³Ministry of Education, National Education Management Information System, available at: http://nemis.education.go.ke/Login.aspx

⁹⁴ Republic of Kenya, Health Information System Policy, available at: http://www.nationalplanningcycles.org/sites/default/files/country_docs/Kenya/health_information_system_policy.pdf

✓ Values/rankings in UNDESA's e-participation index

According to the United Nations E-Government Survey of 2018, Kenya scored a middle E-Government Development Index of 0.4541.95

Theme E – The Right to Privacy

E.2 Is the protection of personal data guaranteed in law and enforced in practice, with respect to governments, businesses and other organisations, including rights of access to information held and to redress?

Indicators:

/ Legal framework for data protection, including monitoring mechanisms and means of redress, and evidence that it is respected and enforced by government and other competent authorities

The right to privacy is protected under Article 31 of the constitution which guarantees every person the right not to have their person, home or property searched; their possessions seized; information relating to their family or private affairs unnecessarily required or revealed; or the privacy of their communications infringed. The Data Protection Act 2019, operationalizes the provision and aims to protect the right to privacy and establishes legal and institutional mechanisms to protect personal data.

Other relevant legislation that protect personal data include the: Banking Act; Credit Reference Bureau Regulations; Capital Markets Act; Access to Information Act; Private Security Regulation Act; and the Officials Secrets Act

Others include Kenya Information and Communications (Consumer Protection) Regulations, 2010 which protects consumers' rights to personal privacy and protection against unauthorized use of personal information.96 ICT Regulations under the Elections Act requires the Electoral Commission to conduct audits to ensure data integrity.97

Evidence that it is protected

In a judgement delivered on 19 April 2017, the High Court of Kenya held that the decision of Communications Authority of Kenya to install a Device Management System software, which had surveillance capabilities, in mobile phones was unconstitutional and if used would amount to a breach of the right to privacy to mobile service subscribers.98

⁹⁵ United Nations E-Government Survey of 2018: Gearing E-Government to Support Transformation towards Sustainable and Resilient Societies, p.230. Available at: https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2018-Survey/E-Government%20Survey%202018 FINAL%20for%20web.pdf

⁹⁶ Kenya Information and Communications (Consumer Protection) Regulations, 2010, Regulation 3(d). Available at: http://kenyalaw.org/LegalNotices/pop_ln.php?file=392

⁹⁷ Regulation 11

⁹⁸ Okiva Omtatah Okoiti v Communication Authority of Kenya & 8 others, Constitutional Petition No.53 of 2017, [2018] eKLR, available at: http://kenyalaw.org/caselaw/cases/view/151117/

Legal framework concerning the commercial use of personal data and international data transfer/security, including monitoring mechanisms and means of redress

Section 37 (1) of the Data Protection Act, 2019⁹⁹ prohibits the use of personal data for commercial purposes, unless the express consent of the data subject has been sought and obtained, or the use is authorised under the law and the data subject has been informed of such use when collecting the data from them. Further, data controllers or data processors that use personal data for commercial purposes are required to where possible, anonymise the data in such a manner as to ensure that the data subject is no longer identifiable. The new law also requires the Cabinet Secretary, in consultation with the Data Commissioner, to prescribe practice guidelines for the commercial use of personal data in accordance with the Act. Any person aggrieved by the actions of a data processor or controller may make a complaint to the Data Protection Commissioner for redress.

Existence and powers of an independent data protection authority or similar entity

The Data Protection Act 2019 establishes the Office of the Data Protection Commissioner as an independent body in the exercise of its powers and the carrying out of its functions. 100 Its functions include maintaining a register of data controllers and processes, overseeing the implementation of the Act, receiving and investigating complaints among other functions. The Office of the Data Protection Commissioner is empowered to conduct dispute resolution proceedings, summon witnesses and seek professional assistance to perform its functions. 101

E.3 Are the powers of law enforcement and other agencies for the lawful interception of user data necessary, proportionate and limited to circumstances which are consistent with international and regional rights agreements, laws and standards?

The right to privacy is limited under Sections 36 and 42 of the National Intelligence Service Act with respect to a person suspected to have committed an offence; their communications may be investigated, monitored or otherwise interfered with pursuant to a court warrant issued by the High Court of Kenya.¹⁰²

Indicator:

Legal framework for the lawful interception of data, including independent oversight and transparency, and evidence concerning implementation by government and other competent authorities

Section 36 of the National Intelligence Service Act empowers the Service, pursuant to a court warrant, to interfere with the right to privacy of a person under investigations.

 $\frac{\text{https://www.nis.go.ke/downloads/THE\%20NATIONAL\%20INTELLIGENCE\%20SERVICE\%20ACT,\%202012}{.pdf}$

⁹⁹ Data Protection Act 2019

http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/TheDataProtectionAct No24of2019.pdf

¹⁰⁰ Data Protection Act, s.8.

¹⁰¹ Ibid at s.9.

¹⁰² National Intelligence Service Act, 2012. Available at:

Further, section 42 of the Act allows the Service to conduct covert operations and monitor communications under the authorization of the Director General. In addition, Article 22 of the Constitution allows any persons whose rights have been infringed or are threatened to file a constitutional petition in the High Court on violation of human rights.

Theme F - Social, Economic and Cultural Rights

F.1 Do government policies incorporate the Internet in strategies concerned with employment, health and education,³ with particular reference to ICESCR rights?

Indicators:

Evidence of inclusion of a) the Internet, and b) respect for ICESCR rights, in sector strategies for employment, health and education.

a. Health

Article 43(1)(a) provides for the right of every person to the highest attainable standard of health, which includes the right to health care services, including reproductive health care. The Ministry of Health has tested various online initiatives, for example, telemedicine and is currently in the process of coordinating and integrating all its medical activities with the plan of the national healthcare policy. The e-Health policy will guarantee consistency with the National IT/ICT and National e-government policy infrastructure. Moreover, section 103 of the Health Act, 2017 recognises e-health as a mode of health service. The service of the policy infrastructure is required to provide for among others, health service delivery through M-health, E-learning and telemedicine.

b. Education

The right to education is provided for under Article 43(1)(f) of the constitution. The government has continued to integrate ICT in education programmes¹⁰⁴ such as the Digital Literacy Program which seeks to provide schools with digital resources for effective curriculum delivery. Internet connectivity has been identified as vital in teaching and learning since it ensures access to content, collaboration and communication.¹⁰⁵ ICT has also been used in the administrative aspects of education, the National Education Management Information System has effectively streamlined the administration of educational institutions.¹⁰⁶ It is worth noting that the Communications Authority of Kenya, under its Universal Access Program, has connected 887 secondary schools across 47

¹⁰³ Health Act 2017 http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/HealthActNo.21of2017.pdf

¹⁰⁴ Ministry of Education, National Education Strategic Plan (2018-2022),p.43, available at: http://www.education.go.ke/images/NESSP/MOE-NESSP.pdf

¹⁰⁵ p.49, available at: http://www.education.go.ke/images/NESSP/MOE-NESSP.pdf

¹⁰⁶ Ministry of Education, National Education Management Information System, available at: http://nemis.education.go.ke/Login.aspx

counties to high speed broadband connectivity of 5 mbps. 107

c. Economic Rights

The National Employment Authority has integrated the use of the internet by advertising job vacancies on its website 108 as well as launching a special website for Kenyans working abroad. The migrant workers website provides important information for Kenyans planning to go to work in the Gulf states such as the contacts for the respective embassies and how to return back home. 109

Another government employment initiative is the Ajira Digital Program under the Ministry of Information, Communication and Technology. This program seeks to market Kenya as a labour market destination for multinational companies as well as encourage local companies and public sectors to create digital work.¹¹⁰

Evidence of analysis by government of the impact of Internet on employment, health and education

F.2 Are all citizens and other individuals equally able to take advantage of the Internet to participate in cultural activity?

Indicators:

Extent and nature of differences in Internet access and use between different communities/ethnicities

The 2007 Communication Commission of Kenya, Internet Market Analysis Report found that internet access is disproportionately distributed in Kenya. Nairobi had 80% internet penetration followed by Coast Province with 9%. Eastern, Western and North Eastern had the least number of internet customers respectively. The latest statistics from the Communications Authority of Kenya estimates that internet penetration in the country stands at 45.7% which translates to 45,705,440 internet subscriptions. However these statistics do not indicate the distribution of internet users in different demographics or geographic areas. While internet penetration rate is impressive, the digital divide in Kenya between rural and urban areas is attributed to lack of internet infrastructure and electricity as well as affordability of internet services.

¹⁰⁷ Communications Authority of Kenya, Education Broadband Connectivity Project, available at: https://ca.go.ke/education-broadband-connectivity-project/

¹⁰⁸ National Employment Authority http://nea.go.ke/web/

¹⁰⁹ Kenya Migrant Worker https://kenyamigrantworker.org/

¹¹⁰ Ajira Digital https://ajiradigital.go.ke/about_ajira

¹¹¹ https://ca.go.ke/wp-content/uploads/2018/03/Final-Internet-market-analysis-report.pdf

¹¹² Ibid at p.8

¹¹³ ibid.

¹¹⁴ Second Quarter Sector Statistics Report for the Financial Year 2018/19 (October-December 2018) available at: https://ca.go.ke/wp-content/uploads/2019/03/Sector-Statistics-Report-Q2-2018-19.pdf

¹¹⁵ https://www.dw.com/en/mobile-solutions-a-catalyst-for-internet-penetration-in-kenya/a-47078206

/ Existence of government policy concerning cultural heritage online

Article 11 of the Constitution recognises culture as the foundation of the nation. It obligates the state to promote all forms of national and cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage. The state is also required to recognise the role of science and indigenous technologies in the development of the nation and promote the intellectual property rights of the people of Kenya.

The Communications Authority of Kenya issued broadcasting guidelines that required its licences to air 40% of local content which is wholly or partially produced in Kenya and either in Kenya's indigenous languages or the official languages. 116 There are no specific policies requiring cultural heritage to be promoted online.

Constitutional or legal guarantee of freedom of artistic expression.

Freedom of artistic expression is recognised under Articles 11 and 33 of the Constitution. Courts have also recognised the importance of artistic creativity in Kenya's political and social history. 117 Artistic expression has been protected even on sensitive themes such as homosexuality, such a a recent court decision which lifted a ban on the viewing of "Rafiki", which had a gay theme. 118

Nonetheless, the freedom of artistic expression is limited under sections 3 to 10 of the Films and Stage Plays Act. These provisions set out licensing requirements for making films except where the film is exempted under section 10 by the licensing Officer. A filmmaker must make an application to the Licensing Officer with a full description of the scenes and the full text of the spoken parts of the entire film to be made. The licensing officer may refuse or grant a license with or without conditions at his discretion.

Policy Recommendations for Various Stakeholders

Governments, Private Sector, Civil Society, Technical Community, (including Academia, Individual users, Media and journalists, etc.)

Government

- 1. Government agencies such as the Communications Authority of Kenya should invest in research to provide accurate and diverse statistics on internet use in the
- 2. The government should have a clear cultural heritage policy to fulfill article 11 of the Constitution of Kenya.
- 3. The Films and Stage Plays Act should be reviewed in order to provide oversight of the licensing procedures.

¹¹⁶ Communications Authority of Kenya, "The Programming Code for Free-to-Air Radio/Television Services in Kenya", 2nd Edition March 2016,p.29 available at: https://ca.go.ke/wpcontent/uploads/2018/02/PROGRAMMING-CODE-FOR-FREE-TO-AIR-BROADCASTING-MARCH-2016.pdf

¹¹⁷ Okiya Omtatah Okoiti V Attorney General & 2 others [2013] eKLR, available at:http://kenyalaw.org/caselaw/cases/view/87957

¹¹⁸Wanuri Kahiu & another v CEO, Kenya Film Classification Board - Ezekiel Mutua & 4 others [2018] eKLR, available at: http://kenyalaw.org/caselaw/cases/view/158712/

4. The office of the Data Protection Commissioner should be established to ensure the protection of personal data.

Private Sector

- 1. The private sector should embrace and commit to the United Nations Business and Human Rights Principles.
- 2. They should develop policies and review their practices to ensure they are rights respecting by design.
- 3. They should collaborate with other stakeholders including civil society to advance human rights within their operations.
- 4. They should invest in research and data collection of statistics on the use of technology, which can be useful for decision-making.

Civil Society

- 1. They should endeavour to monitor and report on the state of digital rights in Kenya.
- 2. They should continue to hold government and the private sector accountable for the state of human rights in the country, especially in the digital era.
- 3. They should collaborate with other stakeholders to promote the realisation of human rights online.
- 4. They should work towards raising awareness of the public on their rights online.

Academia

- 1. They should conduct more evidence-based research on the use and impact of technology on human rights in Kenya.
- 2. They should share the findings of critical research more widely.

Individual Users

- 1. They should be more conscious of their rights in the online context.
- 2. They should monitor the practices of other stakeholders and resist abuse of their rights online and seek redress from the appropriate agencies whenever there is a violation.

Media and Journalists

- 1. They should use their platforms to create awareness of the public on their rights online.
- 2. They should monitor and report on the violations or abuses of human rights in the online context.
- 3. They should build their capacity and understanding of human rights, especially in an online context.

Chapter 4: Category O – Openness

Theme A – Policy, Legal and Regulatory Framework

A2: Conduciveness of the business environment

Kenya adopted a commercial model in the provision of ICT services. A unified licensing framework (ULF) has been adopted under the primary ICT law, the Kenya Information and Communications Act (KICA).¹¹⁹ The market structure under the unified licensing framework that came into effect from January 2016 created various licences ranging from KES 1,000 (USD 100) for licensing of telecommunication personnel, to KES 15 million (USD 15,000). Operators are charged annual operating fees KES 4 million (USD 40,000) or 0.4% of annual gross turnover. Fees for broadcasting and internet services are market based.¹²⁰

While the ULF is flexible from a commercial perspective, the high fees charged are prohibitive for non commercial entities that are community based and social entrepreneurs. Broadcasting regulations envisage community radio stations. The licensing procedures provide that one may make an application for a community radio license for consideration by the regulator.¹²¹

Prior to applying for a communications licence, an applicant is required to comply with general business and tax registration procedures. These include the Companies Act, Partnerships Act, Limited Liability Partnership Act and Registration of Business Act. In 2019, Kenya was ranked 61 in the World Bank's Ease of Doing Business Score. The score captures the gap of each economy from the best regulatory performance observed on indicators such as: starting a business; construction permits; getting electricity; registering property; getting credit; protecting minority investors; paying taxes; trading across borders; enforcing contracts; and resolving insolvency.

Emerging regulatory challenges in the ICT sector include cross regulation and regulation of new internet based business models. ICT has been disruptive across many sectors. For example, Kenya's renowned mobile money transfer service, Mpesa, is considered both an ICT service as well as a financial product. It is therefore co-regulated by both the banking and communications regulator. MPesa may also be subject to regulation by the competition regulator, and law enforcement sometimes requires access to MPesa records.

¹¹⁹ Communications Authority of Kenya, *Unified Licensing Framework* available from https://ca.go.ke/industry/telecommunication/market-structure/

Communications Authority of Kenya 2016, *Market Structure under the Unified Licensing Framework* https://ca.go.ke/wp-content/uploads/2018/03/New-Market-Structure-Under-The-Unified-Licensing-Framework-January-2016-1.pdf

¹²¹ Communications Authority of Kenya, *Procedure for Broadcasting Service Providers Licence* available from https://ca.go.ke/wp-content/uploads/2018/04/Procedure-For-Licensing-of-Broadcasting-Service-Providers.pdf

World Bank 2019, *Doing Business in Kenya* available from http://documents.worldbank.org/curated/en/729481541143479565/pdf/WP-DB2019-PUBLIC-Kenya.pdf

MPesa has developed into a platform upon which products such as payments, digital loans and betting are delivered. These products are regulated by existing laws on banking, microfinance and gambling respectively. However, the government is keen to raise revenue from the services, and targeted them for taxation in 2018 and 2019. This has resulted in the exit of some betting companies from the country following the government's decision to impose a 10 percent Excise Duty on stakes in addition to the betting tax of 15 percent.

Examples of other internet related businesses that face uncertainty due to lack of clear regulations include cryptocurrencies, global social media networking sites, blogging and vlogging. The Central Bank of Kenya, for example, cautioned against cryptocurrencies in December 2015.¹²⁵

Theme B – Open Standards

B3: Free and Open Software and other licensing options

In the formative years of the ICT industry, free and open source software (FOSS) advocates ¹²⁶ called for the government to adopt FOSS as a standard across government departments. While some departments incorporated FOSS, it is not a standard requirement.

The technical layers in digitalisation projects such as digital ID, are numerous. For example, enrolment is done through biometric readers, the data is stored in databases on the cloud, then subsequently analysed using algorithms. Individuals are issued with smart cards that are printed according to the technology adopted. These cards are later used to access services at service points such as the web or service kiosks, and technology is also employed. In all these processes, the safety of data is guaranteed through technologies such as encryption. In the discourse on digital ID, the country has been encouraged to adopt technology that is neutral to enhance interoperability and prevent vendor lock-in.¹²⁷

B4: Government policy and practice towards ensuring access for persons with disability

¹²³ Safaricom *MPesa API* available from https://www.safaricom.co.ke/business/corporate/m-pesa-payment-services/m-pesa-api

Juma V 2019 'SportPesa owners take hit as firm closes Kenya office' Business Daily 4 October. Available from: https://www.businessdailyafrica.com/news/SportPesa-owners-take-hit-as-firm-closes/539546-5298170-jmdw4a/index.html

¹²⁵ Central Bank of Kenya 2015, *Public Notice on Virtual Currencies* available from https://www.centralbank.go.ke/images/docs/media/Public Notice on virtual currencies such as Bitcoin.pdf

¹²⁶ KICTANet 2016, *Ten Years of ICT Policy Making in Kenya*. Available from https://www.kictanet.or.ke/?page_id=40115#

World Bank 2019 *Principles on Identification for Sustainable Development*. Available from http://documents.worldbank.org/curated/en/213581486378184357/Principles-on-identification-for-sustainable-development-toward-the-digital-age

Kenya has multiple languages spoken in its various regions. The constitution recognises three national languages: English, Swahili and Kenyan Sign Language. ¹²⁸ Under section 15 of the the Programming Code, broadcasters are required to "provide sign language insert and subtitles in all newscasts and in all programmes covering emergencies and events of national significance to facilitate enjoyment of the programming by Persons with Disabilities". ¹²⁹ A review of broadcasts and public announcements shows that newscasts on national free to air television stations and on their online channels on YouTube have sign language interpreters. Subtitles are yet to be implemented.

The Constitution also recognises the rights of persons with disability (PWD)¹³⁰ and prohibits their discrimination.¹³¹ This is complemented by the Persons with Disabilities Act¹³² that among other things, provides tax incentives for employers of persons with disabilities in its section 16. However, the Act envisages employment in the traditional sense of working in a physical office¹³³ space and requires review to update it with realities of online work for PWDs. Section 24 of the Act also empowers the Council established under the Act to issue adjustment orders to public physical spaces that are not conducive for PWDs. Public online spaces such as websites and e-government portals are not provided for.

Kenya's ICT Policy 2006 in clause 13 outlines measures for creating an accessible environment for PWDs through leveraging on ICTs.¹³⁴ To promote the rights of PWDs, the Universal Service Fund has been used to provide JAWS software for institutions for PWDs.¹³⁵

In practice, much more needs to be done to enhance accessibility. For example, there is a substantial number of government services now being offered online, with some being offered exclusively online. The government websites offering these services do not all contain features to support PWDs or those with low digital literacy. PWDs are therefore forced to seek the services of intermediaries in order to access these services.

Theme C – Open Markets

C1: Existence of independent authorities

¹²⁸ Constitution of Kenya 2010, art.7 http://www.klrc.go.ke/index.php/constitution-of-kenya/108-chapter-two-the-republic/173-7-national-official-and-other-languages

132 Persons with Disabilities Act https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/69444/115499/F923058%20154/KEN69444%202012.pdf

https://cipesa.org/2019/09/placing-ict-access-for-persons-with-disabilities-at-the-centre-of-internet-rights-debate-in-kenya/

¹²⁹ Programming Code for Free-to-Air Radio and Television Services in Kenya 2015 https://kfcb.co.ke/wp-content/uploads/2016/07/Programe_code.pdf

¹³⁰ Constitution of Kenya 2010, art.54 http://www.klrc.go.ke/index.php/constitution-of-kenya/113-chapter-four-the-bill-of-rights/part-3-specific-application-of-rights/220-54-persons-with-disabilities

¹³¹ Constitution of Kenya 2010, art.27 http://www.klrc.go.ke/index.php/constitution-of-kenya/112-chapter-four-the-bill-of-rights/part-2-rights-and-fundamental-freedoms/193-27-equality-and-freedom-from-discrimination

¹³³Section 16(2) for example provides for tax rebates for accessibility improvements of physical buildings only. Improvements such as purchase of accessibility software and hardware are not explicitly provided for. ¹³⁴ Kenya ICT Policy 2006. Available from http://icta.go.ke/national-ict-policy/

¹³⁵ CIPESA 2019, Placing ICT Access for Persons with Disabilities at the Centre of Internet Rights Debate in Kenva available from

There are several government authorities in the ICT sector. The Media Council of Kenya established under the Media Council Act oversees compliance with media standards. The Council is meant to give effect to the constitutional guarantee on freedom of the media. The Competition Authority is mandated with ensuring competition and protection of consumers, including in the ICT sector.

The laws establishing the authorities state that the authorities shall be independent. To a large extent, the Communications Authority is independent in functions as well as finances. However, the government has been sued¹³⁶ severally for interfering with the recruitment process for the board of the authority.

The Media Council is established under the Media Council of Kenya Act. Its functions include promotion and protection of the freedom of the media as well as regulation of journalists, media practitioners and media enterprises. Its board is comprised of representatives of bodies in the media industry, including editors and journalists associations. The Council's independence has been questioned given some of the decisions it has taken for example with guidelines developed for election coverage that were viewed to favour the ruling administration.

The ICT industry is also regulated by other sector specific regulators. The Central Bank of Kenya for example, regulates both mobile and online payment systems under the National Payment Systems Act.¹⁴¹

Evidence concerning regulatory performance, including perceptions of the quality of regulation by communications businesses, consumer associations and other organisations

The Kenya Information and Communications Act envisages consumer protection. The Consumer Protection Regulations, 2010 under the Act require each licensed service provider to have a consumer complaints mechanisms as well as customer service desks.

Authorities are also empowered to handle consumer complaints. The Competition Authority of Kenya keeps a public record of the cases it handles.¹⁴² The Communication Authority of Kenya receives complaints lodged to it by any person regarding any

¹³⁶ See for example: Sunday F, 2016 'Communications Authority directors sue government, vow to stay put' *The Standard* 14 February. Available from

https://www.standardmedia.co.ke/article/2000191600/communications-authority-directors-sue-government-vow-to-stay-put and

Wambulwa A 2019 'Court stops Mucheru from appointing new CAK board' *The Star* 1May. Available from https://www.the-star.co.ke/news/2019-05-01-court-stops-mucheru-from-appointing-new-cak-board/

¹³⁷ Media Council of Kenya Act, s.6

¹³⁸ Media Council of Kenya Act, s.7

¹³⁹ Media Council of Kenya 2017 *Guidelines for Election Coverage*. Available from https://www.mediacouncil.or.ke/en/mck/images/AccreditationGuidelines/MCK-Election-Guidelines-2017.pdf

¹⁴⁰ ELOG 2018 *One Country, Two Elections, Many Voices*. Available from https://elog.or.ke index.php > resource-centre > item > download

¹⁴¹ National Payment System Act, available from

 $[\]frac{\text{https://www.centralbank.go.ke/images/docs/legislation/NATIONAL\%20PAYMENT\%20SYSTEM\%20ACT\%2}{0(No\%2039\%20of\%202011)\%20(2).pdf}$

¹⁴² Competition Authority of Kenya, *determinations* available from https://www.cak.go.ke/information-center/CAK-latest-determinations

licensed broadcaster including those licensed to provide internet broadband services. 143 The Authority also carries out consumer education programmes known as *Kikao Kikuu* 144 Swahili for high forum, where the Authority travels to different counties to engage with ICT consumers.

The Communications Authority has enforced consumer protection on several occasions. In 2018, telcos were fined over KES 300 million (USD 3 million) for poor quality of service. The Authority announced that it had also acquired a system to monitor the quality of service. In 2017, the Authority issued guidelines on political messaging, to protect consumers from unsolicited messages. The Guidelines were however criticised as being substantive legislation affecting entities that were not licensed by the Authority, and therefore not legally under their mandate.

The Kenya Information and Communications Act also establishes the Communication and Multimedia Appeals Tribunal, which can hear complaints against any publication or the conduct of a journalist or media enterprise; to hear appeals against the decisions of the industry regulators, the Communications Authority of Kenya and the Media Council of Kenya.¹⁴⁹

The Constitution of Kenya has entrenched public participation in the national values and principles of governance under its Article 10.¹⁵⁰ Any person or group can approach any public office to petition on a matter that affects them.¹⁵¹ In addition, public policy decisions, including policy and law making process must seek and take into consideration the input of those who may be affected by the policy or law.¹⁵²

Although the understanding and the implementation of the public participation concept is still poor, the requirement provides an opportunity for industry associations, consumer organisations and civil society actors to engage with ICT policy makers. Some

¹⁴³ Communications Authority of Kenya, *Complaints* available from https://ca.go.ke/consumers/ca-you/complaints

¹⁴⁴ Competition Authority of Kenya, Kikao Kikuu available from https://ca.go.ke/kikao-kikuu/

¹⁴⁵ Communications Authority 2018 *Authority Fines Telcos Over Ksh. 300m for Poor Quality Services.* Available from: https://ca.go.ke/authority-fines-telcos-over-ksh-300m-for-poor-quality-services/

CIO 2018 'CA unveils new framework for assessment of telecom quality of service'. Available at https://www.cio.co.ke/ca-unveils-new-framework-for-assessment-of-telecom-quality-of-service/
https://ca.go.ke/wp-content/uploads/2018/02/Consumer-Protection-Regulations-2010-1.pdf

¹⁴⁷ Guidelines on Prevention of Dissemination of Undesirable Bulkand Premium Rate Political Messages and Political Social Media Content Via Electronic Communications Networks July 2017. Available from: <a href="https://ca.go.ke/wp-content/uploads/2018/02/Guidelines-on-Prevention-of-Dissemination-of-Undesirable-Bulk-and-Premium-Rate-Political-Messages-and-Political-Social-Media-Content-Via-Electronic-Networks-1.pdf

¹⁴⁸ iFreeKe 2017 Statement by BAKE on CA's 'Guidelines for Prevention of Dissemination of Undesirable Political Messages'. Available from:

 $[\]frac{\text{https://www.ifree.co.ke/2017/07/statement-by-bake-on-cas-guidelines-for-prevention-of-dissemination-of-undesirable-bulk-political-sms-and-social-media-content-via-electronic-communications-networks/}{}$

¹⁴⁹ Judiciary Communications and Media Appeals Tribunal available from

https://www.judiciary.go.ke/communication-and-multimedia-appeals-tribunal/#1535538098679-775d91e4-a0a6

¹⁵⁰ Constitution of Kenya, Art. 10

¹⁵¹ Constitution of Kenya, Art. 37

¹⁵² Constitution of Kenva, Art. 118

organisations that have engaged ICT policy makers include the Kenya Private Sector Alliance (KEPSA), ¹⁵³ Consumers Federation of Kenya (COFEK), ¹⁵⁴ and KICTANet. ¹⁵⁵

The courts have become an important avenue for the resolution of disputes pertaining to laws. The Bloggers Association of Kenya in 2018 filed a petition challenging among others criminalisation of fake news through the Computer Misuse and Cybercrimes Act 2018. Prior to that, human rights defender Okiya Omtatah filed a petition objecting to the implementation of a Device Management System (DMS) that had been purchased by the Communications Authority. The Authority sought to install the DMS in mobile network operator premises ostensibly to whitelist all communication devices in the country. 157

C4: Number of fixed and mobile broadband providers

There are more than 10 fixed and mobile broadband providers in the country. As of June 2019, there were 49.9 million internet subscriptions of which 99.9 percent were through mobile data. At the time, Safaricom PLC had 65.3% of the mobile internet market share, followed by Airtel Networks Limited (26.9%), Telkom Kenya Limited 7.2% Finserve Africa Limited (0.4%) and Mobile PayLimited at 0.2%.

Fixed internet data providers and their respective subscriber bases as at June 2019 were as follows: Wananchi Companies Ltd (34.8%); Safaricom PLC (32.7%); Jamii Telecommunications Ltd (14.6%); Poa Internet Kenya Ltd (7.8%); Internet Solutions Kenya Ltd (3.7%); Mawingu Networks Ltd (2.4%); Liquid Telecommunications Kenya Limited (2.1%); Telkom Kenya Ltd (1.2%); Mobile Telephone Networks Business Kenya Ltd (0.1%); Frontier Optical Networks Ltd (0.1%); and other fixed service providers (0.3%). The data shows that the top two service providers command over 60% of the market, indicating that consumers have limited choice.

Some of the respondents interviewed noted that fixed and mobile broadband services are largely concentrated in cities and large towns. They also explained that they were unable to access the same quality of service when they travelled outside urban areas. This is corroborated by the 2017 Access Gaps Study commissioned by the Communications Authority.¹⁵⁹ The study found that some 164 administrative areas had no access to 2G networks at all, while in a further 418 areas, only less than 50% of the population had access to the networks. The study also established that 3G network

¹⁵³ See for example:Ministry of ICT 2019 *KEPSA to collaborate on Ajira* http://www.ict.go.ke/kepsa-working-collaboratively-with-ict-ministry-on-ajira/

¹⁵⁴ Onyango P, 2019 'Cofek opposes ICT ministry purchasing ICT for State departments' *The Standard* 14 January . Available from: https://www.standardmedia.co.ke/article/2001309438/cofek-opposes-ict-ministry-purchasing-ict-for-state-departments

¹⁵⁵ KICTANet 2018 *Talk to the senate: Priorities 2017-2022* . Available from: https://www.kictanet.or.ke/?wpdmpro=talk-to-the-senate-priorities-2017-2022

¹⁵⁶ Bloggers Association of Kenya (Bake) v Attorney General & 5 others [2018] eKLR

¹⁵⁷ Okiya Omtatah Okoiti v Communication Authority of Kenya & 8 others [2018] eKLR

¹⁵⁸ Communications Authority 2019, Sector Statistics Quarter 4 2018/19 available from https://ca.go.ke/wp-content/uploads/2019/09/Sector-Statistics-Report-Q4-2018-19.pdf

¹⁵⁹ Communications Authority 2017, *Access Gaps Study Report* available from https://ca.go.ke/wp-content/uploads/2018/02/ICT Access Gap Study.pdf

coverage was completely unavailable in 1244 out of 7,149 administrative sub-locations. Also, that in some 977 locations, 3G was available to less than 50% of the population.

Theme D – Open Content

D4: Educational policy framework concerning OER

Kenya is a signatory to UNESCO's 2012 Paris Declaration on Open Education Resources licensed under Creative Commons open licenses. Several OER initiatives in the country exist. They include Teacher Education in Sub-Saharan Africa (TESSA), a network of educators who offer OER with the object of improving teacher education. Others are OER Africa and Africa Virtual University (AVU) headquartered in Nairobi.

The 2015 National Education Sector Plan by the Ministry of Education acknowledges the lack of open educational resources for secondary level education. Among the challenges to OER adoption include lack of local content; incompatibility of available OER with the Kenyan syllabus; negative attitudes among teachers and school leaders; and resistance from the publishing industry. The Kenya Education Network (KENET) is among non state institutions advocating for OER as Kenya ventures into digital learning.

Universities are increasingly creating repositories where research is shared. 165 Private universities such as USIU-Africa 166 and Strathmore, 167 have arrangements for access to world class journals and other academic and scientific resources. Public institutions struggle to keep up with subscriptions. The University of Nairobi has made arrangements for access to a few academic journals. Many public and private universities publish dissertations online, increasing local knowledge. However, access to knowledge outside universities is still a challenge.

D5: Regulatory arrangements and practice concerning net neutrality and competition for online and network services

Kenya is yet to adopt net neutrality laws. Organizations such as KICTANet have debated the issue of net neutrality, with many supporting the idea of non discrimination in online and network services. However some state that it should be possible to subsidise and prioritise e-government services. This is based on the understanding that government services are increasingly being offered exclusively online yet not everyone has access to

¹⁶⁰ The Declaration https://en.unesco.org/oer/paris-declaration

¹⁶¹ Ministry of Education 2015 *National Education Sector Plan.* Available at www.education.go.ke downloads > category > 17-policy-documents

¹⁶² Orwenjo D and Erastus F 2018 'Challenges of Adopting Open Educational Resources (OER) in Kenyan Secondary Schools: The Case of Open Resources for English Language Teaching (ORELT)' *Journal of Learning for Development* Available at https://jl4d.org/index.php/ejl4d/article/view/282/316

¹⁶³ KEBT 2018 *Why we should embrace Open Educational Resources (OER).* Available from: https://www.kenet.or.ke/content/kenya-education-network-0

¹⁶⁴ ICTA Digital Learning Curriculum. Available at http://icta.go.ke/digischool/digital-content/

¹⁶⁵See for example, <u>https://www.uonbi.ac.ke/index.php?q=node/146</u>

¹⁶⁶ USIU-Africa *e-journals*. Available at https://www.usiu.ac.ke/806/e-journals/

¹⁶⁷ Strathmore University *Library Services*. Available from https://www.library.strathmore.edu/

the internet.¹⁶⁸ In 2018, the Communications Authority called for expression of interest in a study on OTT services.¹⁶⁹ The study is yet to be completed, but advocacy groups have compiled views on the policy concerns with OTT regulation.¹⁷⁰

The sector has several zero-rated services. Most mobile network credit bundles come with free WhatsApp, or free YouTube.¹⁷¹ Social networking sites are also supporting the development of "lite" versions of their apps, for example Facebook Lite and Facebook Kadogo that consume less data bundles.¹⁷² Free basics has been criticised for not being people centric but rather centred on getting more people online for purposes of increasing the companies market shares. For example, the free content is not fully relevant and it is not available in local languages.¹⁷³

Safaricom has the largest market share in the mobile data market and in broadband provision. Some argue that bundling of products, particularly the mobile money service MPesa, has given Safaricom an unfair advantage and created a barrier to entry into the market for other players. A 2018 competition study¹⁷⁴ confirmed this dominance and recommended splitting of Safaricom's services. The Competition Authority of Kenya warned against taking action, arguing that although Safaricom was dominant, it had not abused its market position.¹⁷⁵ A March 2019 report by the National Assembly ICT Committee also made recommendations on the principles and guidelines on several issues affecting competition in the ICT sector including: spectrum allocation; market share; broadband services and rates; SMS termination rates; USSD access rates; mobile money service rates; access to telecommunications infrastructure; content services and national roaming.¹⁷⁶

Theme E – Open Data and Open Government

E1: Existence of a legal framework for access to open data which is consistent with international norms and privacy requirements

¹⁶⁸ KICTANet 2016, *Ten Years of ICT Policy Making in Kenya*. Available from https://www.kictanet.or.ke/?page_id=40115#

¹⁶⁹ Communications Authority 2018 *Consultancy Services For The Study On Over-The-Top (OTTs) Technologies Services In Kenya.* Available from: https://ca.go.ke/document/consultancy-services-for-the-study-on-over-the-top-otts-technologies-services-in-kenya/

¹⁷⁰ KICTANet 2019 *Regulating OTTs Policy Brief*. Available from: https://www.kictanet.or.ke/?page_id=40115

¹⁷¹ See for example: Airtel Kenya *Free Basics*. Available from https://www.airtelkenya.com/Internet_org and Telkom Kenya *Free Bundles* available at https://telkom.co.ke/freedom-bundles-1

¹⁷² Safaricom 2019, *Terms and Conditions for Free Facebook* available from https://www.safaricom.co.ke/free-facebook-terms-and-conditions

¹⁷³ Wanjohi N. W 2017 *Free Basics in Kenya.* Available from https://advox.globalvoices.org/wp-content/uploads/2017/07/KENYA.pdf

Analysys Mason 2018 *Presentation to stakeholders and members of the public Telecommunication competition market study in Kenya.* Available at: https://ca.go.ke/wp-content/uploads/2018/02/Presentation-on-Telecommunication-Competition-Study-to-Stakeholders-.pdf

¹⁷⁵ Miriri D 2018, 'Kenya's competition watchdog says no need for action on Safaricom' *Reuters* 7 Aug. Available from: https://www.reuters.com/article/kenya-telecoms/kenyas-competition-watchdog-says-no-need-for-action-on-safaricom-idUSL5N1UY44D

¹⁷⁶ Report on the inquiry in the legislative and regulatory gaps affecting competition in the telecommunications sub-sector. Available from: http://www.parliament.go.ke/sites/default/files/2019-03/ICT%20Report%20on%20Inquiry%20on%20Competition%20in%20Telcom%20subsector.pdf

The right of access to information is entrenched in the Constitution under Article 35. This has been effected through the Access to Information Act, 2016 that is overseen by the office of the Ombudsman. The Act in section 5, provides for proactive disclosure of information that is of interest to the public. The Ombudsman issued guidelines requiring Ministries, Departments and Agencies (MDAs) to publish contacts of their information officers. An online Access to Information Centre (ATI) to provide information on implementation of the mandate.¹⁷⁷ The newly enacted Data Protection Act exempts research data, provided that it has been deidentified.¹⁷⁸ This is envisaged to complement government open data initiatives.

Kenya is a member of the Open Government Partnership, a multilateral partnership in support of open data. ¹⁷⁹ In 2011, the country launched an open data portal that has since been upgraded with tools for open research. ¹⁸⁰ Kenya's 2018 - 2020 National Action Plan on Open Government aspires to enhance transparency in government contracting and leverage on ICTs to enhance information sharing. ¹⁸¹ In June 2018, the President through an Executive Order directed his administration to adopt open contracting. ¹⁸²

To date, all Ministries, Departments and Agencies (MDAs) have developed websites that provide basic information such as their mandate, ongoing activities, open tenders and contact information. Many MDAs also have social media accounts through which they share information with the public.¹⁸³

Evidence concerning the extent to which open data resources are available and used online

In practice, government agencies are not well sensitised to implement the right of access to information, making it difficult for the public to enjoy this right.¹⁸⁴ There have been several cases where courts have had to issue access to information orders to enforce the right. In 2017, in a case filed by opposition leader Raila Odinga,¹⁸⁵ the Supreme Court issued an order granting him access to information on election results held by the

¹⁷⁹ Open Government Partnership, *Members* https://www.opengovpartnership.org/members/kenya/

https://www.businessdailyafrica.com/datahub/Access-to-public-information-an-uphill-struggle-in-Kenya/3815418-5002502-osnfrgz/index.html

¹⁷⁷ Commission for Administrative Justice *Access to Information Centre* available from https://www.ombudsman.go.ke/index.php/access-to-information-centre

¹⁷⁸ Data Protection Act, s.53

¹⁸⁰ ICT Authority of Kenya *Open Data Portal*. Available at http://icta.go.ke/public-data-now-easier-to-find-as-open-data-unveils-a-user-friendly-website/

¹⁸¹ Government of Kenya *Open Government Partnership (OGP) National Action Plan III 2018 –2020.*Available from https://www.opengovpartnership.org/wp-content/uploads/2018/12/KENYA_Action-Plan_2018-2020 0.pdf

¹⁸² Executive Order No. 2 of 2018, available from https://openinstitute.com/wp-content/uploads/2018/07/Executive-Order-No.-2-of-2018-Procurement.pdf

¹⁸³ See for example https://twitter.com/fredmatiangi/

¹⁸⁴ Maureen K 2019, 'Access to public information an uphill struggle in Kenya despite law' *Business Daily* 27 February. Available from:

¹⁸⁵ Raila Odinga and another versus Independent Electoral and Boundaries Commission and others (2019) eKLR available from http://kenyalaw.org/caselaw/cases/view/140420/

Independent Electoral and Boundaries Commision (IEBC).¹⁸⁶ Despite the order, the IEBC refused to provide all the information requested, leading to the annulment of the election. In 2018, lawyer Apollo Mboya sued the monopoly electricity provider, Kenya Power seeking among others, information on inflated power bills.¹⁸⁷ Likewise, in an ongoing case regarding Kenya's digital ID system, known as Huduma Namba, petitioners have complained to the court that they could not access information regarding the technology used in the project.¹⁸⁸

A positive development was noted when the County Government of Makueni unveiled a portal containing information on all ongoing projects. The County Government has also been lauded by civil society organisations for inclusive policy making, where county government officials engage residents in assessing their needs and priorities for government planning. 190

One of the most utilised pieces of information online is the laws of Kenya maintained by the National Council for Law Reporting.¹⁹¹ The *kenyalaw.org* portal contains information on laws, bills, case law, gazette notices as well as court cause lists. Another useful website is that of the Kenya National Bureau of Statistics which contains statistical information, including census data among other statistical reports of surveys conducted by the institution.¹⁹² In addition, the African Open Data Centre has several visualisations built on census data.¹⁹³ It also includes data for open access, for example data on air quality in Machakos County.¹⁹⁴

The IEBC publishes information on the voter register, election results and other election information online.¹⁹⁵ All this information is used by political parties and members of the public. However, in the 2017 election, some of the electoral information was misused to profile voters and send them targeted messages.¹⁹⁶

Parliament also publishes information on its proceedings, status of Bills, committee reports as well as decisions.¹⁹⁷ Parliamentary proceedings are also broadcast live and streamed online by the state broadcaster, Kenya Broadcasting Communication (KBC).

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¹⁸⁶Raila Odinga and another versus Independent Electoral and Boundaries Commission and others (2019) eKLR available from http://kenyalaw.org/caselaw/cases/view/140420/

¹⁸⁷ Maina C 2018, 'Apollo Mboya sues KPLC, ERC over new 'discriminatory' charges' *The Star* 2 August. Available from: https://www.the-star.co.ke/news/2018-08-02-apollo-mboya-sues-kplc-erc-over-new-discriminatory-charges/

¹⁸⁸ Chumba, B 2019, 'PS Kibicho Defends Huduma Namba in Court', *KBC*, 2 October. Available from: https://www.kbc.co.ke/ps-kibicho-defends-huduma-namba-in-court/ [2 October 2019].

¹⁸⁹ County Government of Makueni *Projects* available from https://www.makueni.go.ke/projects/

¹⁹⁰ Kariuki J 2018 'Makueni goes online to lift tendering veil' *Business Daily* 8 July. Available from: https://www.businessdailyafrica.com/news/counties/Makueni-goes-online-to-lift-tendering-veil/4003142-4652620-y102qw/index.html

¹⁹¹ Kenya Law. Available from: http://kenyalaw.org/kl/

¹⁹² Kenya National Bureau of Statistics. https://www.knbs.or.ke/

¹⁹³ Hurumap *Making Census Data Easy to Use*. Available from: https://kenya.hurumap.org/

¹⁹⁴ Code for Africa *Air Quality Datasets*. Available from: https://africaopendata.org/dataset

¹⁹⁵ Independent Electoral and Boundaries Commission 2018 *Election Results*. Available from: https://www.iebc.or.ke/election/?election-results

¹⁹⁶ Mutung'u G 2018, *The Influence Industry Data and Digital Election Campaigning in Keny*a available from: https://cdn.ttc.io/s/ourdataourselves.tacticaltech.org/ttc-influence-industry-kenya.pdf

¹⁹⁷ Parliament of Kenya. Available from: http://parliament.go.ke/

Citizen groups such as Mzalendo¹⁹⁸ analyse parliamentary data and rank Members of Parliament on their performance. Mzalendo¹⁹⁹ and Jadili²⁰⁰ are platforms for citizen interaction with Bills, Policies and parliamentary deliberations.

The Communications Authority publishes quarterly statistics reports on the status of the sector. The report includes the services available and the number of persons accessing them. The statistics are compiled from returns filed by licensees of the authority. The statistics are used in government planning, and by other relevant stakeholders working in the sector. In 2019, the report indicated that the country had exceeded 100% mobile penetration.²⁰¹ This led to questions regarding the methods used to calculate the penetration rate as the statistics appeared not to take into account persons with multiple subscriptions of SIM cards.²⁰²

The Kenya Open Data Portal contains government datasets. It had been viewed 44 million times by 2015 and over 2.6 million people had interacted with the data.²⁰³

Government policy to ensure provision of websites with appropriate language and browser access, and evidence concerning effective implementation

The Government Enterprise Architecture Standards provide guidelines for the standardisation of government systems. The policy, which is in its first edition, does not succinctly offer directions on the use of local languages. This is partly because the document majorly addresses government systems where government officials are the users. Consequently, although the Constitution provides for three national languages i.e. English, Swahili and Kenyan Sign Language, most of the websites are in English.

Proportion of government services with websites

The United Nations e-government survey 2018 ranked Kenya as fairly developed in the E-Government Development Index. Kenya is in the middle EGDI 2018 (Between 0.25 to 0.50).²⁰⁴ With regard to the level of online service index, Kenya is ranked as high OSI in relation to the corresponding EGDI level. E-participation is defined as the process of engaging citizens through ICTs. Kenya is ranked as high EPI (between 0.50 and 0.75). In the e-government development index, Kenya is ranked as 122. On the demand side, many residents while grateful for decentralisation of government services express disquiet at the high cost of accessing these services. This is because many users are not digitally literate and therefore have to depend on the services of intermediaries to

¹⁹⁸ Mzalendo *About*. Available from: http://info.mzalendo.com/info/mzalendo-overview

¹⁹⁹ Mzalendo Dokeza- Give your views on Bills. Available at https://dokeza.mzalendo.com/

²⁰⁰ Jadili *Add your voice*. Available at http://jadili.ictpolicy.org/

²⁰¹ Communications Authority 2019, *Sector Statistics Quarter 4 2018/19* available from: https://ca.go.ke/wp-content/uploads/2018/12/Sector-Statistics-Report-Q1-2018-2019.pdf

²⁰² Sunday F 2018, 'Kenya's Internet usage figures raise authenticity questions' *The Standard* 23 October. Available from: https://www.standardmedia.co.ke/article/2001300026/kenya-s-internet-usage-figures-raise-authenticity-questions

²⁰³ CIO 2015 'Kenya Open Data portal hits 44 million page views'. Available at

²⁰⁴ United Nations 2018 e-government survey. Available from: https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2018-Survey/E-Government%20Survey%202018 FINAL%20for%20web.pdf

access e-government services. A typical service such as the filing of tax returns, costs Ksh. 400 (USD 4) at a cyber cafe in Nairobi.

Challenges

There are several challenges that hamper openness in Kenyan ICT space. They include:

- a) The lack of non-commercial perspectives in conceptualising provision of ICTs.
 Hence the licensing frameworks are largely focussed on facilitating commercial
 players.
- b) The disruptive nature of the internet has resulted in cross and co-regulation of ICT players. This sometimes results in competition among regulators to the detriment of the players.
- c) There is a vacuum on how to approach new technologies eg cryptocurrencies. This sometimes slows down innovation, particularly where a regulator approaches new technology from an old regulatory model.
- d) Kenya has not adopted open standards, hence many government MDAs procure technology that may not be open. There is danger of vendor lock in. In addition, closed standards may deny local technologists transfer of knowledge.
- e) PWDs face numerous challenges in accessing technology. There is a need for more awareness and policies for accessibility of government services online.
- f) The domination of the Kenyan internet market by one company, Safaricom, raises challenges in balancing between regulation of competition while encouraging growth of the industry.
- g) The lack of utilisation and optimisation of the universal service fund creates doubts as to the efficacy of universal service funds in enhancing access to the internet.
- h) The lack of awareness and fear about open educational resources may result in OER not being promoted in ongoing education reforms.
- i) Regulatory discretion in areas such as spectrum allocation makes the process uncertain.
- j) The low representation of stakeholder groups such as civil society and academia in policy making means that the country misses out on varied perspectives. It may also explain the high number of court cases challenging ICT policy decisions.
- k) Lack of awareness and an information sharing culture among MDAs dilutes the enjoyment of the right of access to information

 Lack of access to the internet coupled with low levels of digital literacy hampers e-government as people incur more expenses to use intermediaries to access these services.

Policy Recommendations for Various Stakeholders

Government

- The government should review the licensing framework to include noncommercial business models for provision of ICT services. These include community networks.
- 2. Regulators should should adopt the multistakeholder model, where they consult all parties. For example, regulation of cryptocurrencies could benefit from research by academia, policy perspectives from civil society as well as experience in regulating ICTs from ICT regulators.
- 3. Government should encourage the use of free and open software in its ranks, as this promises more transfer of knowledge hence more holistic development.
- Government should enforce directives on accessibility by ensuring that all broadcasters comply with requirements for making their content accessible to persons with disabilities.
- 5. Authorities should publish information on consumer complaints handled.
- 6. Government departments need to regularly update and publish data for open access. This includes data on open contracting.
- 7. Government departments that publish data should adopt open data standards, for example publishing data in machine readable formats.
- 8. Government should sensitise its officers on the importance of open data and access to information, so that the officers stop creating barriers to these resources.
- 9. Government should pilot other methods of access to e-government services, particularly for marginalised and underserved persons, to cushion them from additional barriers to accessing the services. For example, the government could partner with educational institutions for their facilities to serve as e-government centers and officers in those facilities to work part time in the centers.
- 10. The government should develop a policy to ensure its websites have content in local languages and formats that are widely understood. This includes local languages as well as videos, for example with instructions on application for passports.

Private sector

 The private sector should collaborate more with universities in research. Public universities which are poorly funded but well resourced with academics are a ready resource on many issues including increasing access to the internet and advancing local content.

Academia

- Academia should carry out research for informed decision making on the issue of net neutrality. There is also need for research on the effects of zero rated services offered with mobile network plans.
- 2. Academia should make use of available open data to share insights on the society. They should also give feedback to the open data producers on the challenges they face while using the data.
- 3. Academia should curate government content for use by future generations.

Civil Society

- 1. Civil society should rank government websites and portals for ease of use.
- 2. Civil society should test open data spaces and practices to provide evidence based policy making on open data.
- 3. Civil society, like other actors, should improve the accessibility of their websites. For example, website content should as far as practicable be in machine readable format to accommodate those with visual and other disabilities. Consumer engagement mechanisms on websites should also be designed to be inclusive to the digitally illiterate and semi-literate as well as persons with disabilities.
- 4. Civil society organisations should share more policy perspectives on the role of free and open software in the development of the internet in Kenya.
- 5. CSOs should create awareness on consumer digital rights. They should also analyse the nature of complaints so as to advocate for more long term solutions for the most pressing problems. For example, consumer complaints on unsolicited political messaging could be resolved through policy interventions such as requiring bulk SMS operators to be accountable for messages sent through their systems.

Chapter 5: Category A - Accessibility to All

Theme A - Policy and Legal Framework

A.1 Is statistical information concerning access and use of Internet regularly gathered by national statistical systems and/or other competent authorities, on a systematic basis?

Statistical information concerning access and use of the Internet is regularly gathered by the Communications Authority (CA). The license agreement granted by the CA obliges Internet Services Providers to provide internet usage data on a quarterly basis. The 2019 Communications Authority of Kenya Sector Statistics for January to March 2019 puts the percentage of total internet users at 97%. However, the statistics have been criticised as not being completely accurate or reliable because given the methodology adopted to calculate the results. For example, mobile internet users are established by the number of SIM-cards registered instead of unique users, as one person can have multiple devices with multiple SIM cards.

Additionally, the CA partners with the Kenya National Bureau of Statistics (KNBS) in conducting regular household surveys.²⁰⁶ In 2010, the CA and KNBS carried out a National ICT Survey,²⁰⁷ which provided gender and regionally disaggregated data on ICT use. The KNBS also collects information concerning ICT access during the national census held every 10 years.

A.4 Does the government have a policy and programme to implement universal access to reliable, affordable broadband, and is this effectively implemented?

There are no laws that expressly provide for entitlement to internet access. However, there are some laws that promote access to information such as Article 35 of the Constitution²⁰⁸ statutes such as the Access to Information Act, 2016. Likewise, freedom of the media is provided under Article 34 of the Constitution and the right of access to information is provided under article 35 of the Constitution.²⁰⁹

2016, KNBS, Available from: http://statistics.knbs.or.ke/nada/index.php/catalog/88 [1 September 2019]

Communications Authority of Kenya, Industrial Research and Statistics, Available from: https://ca.go.ke/wp-content/uploads/2019/06/Sector-Statistics-Report-Q3-2018-19.pdf [20 September 2019].
 Kenya National Bureau of Statistics, 2018, KENYA - Kenya Integrated Household Budget Survey 2015-

²⁰⁷ Communications Commission of Kenya, 2010, National ICT Survey Report, Available from: https://ca.go.ke/wp-content/uploads/2018/02/National-ICT-Survey.pdf [5 September 2019]

Kenya Law Reform Commission, 35. Access to information - Kenya Law Reform Commission (KLRC), Available from: http://www.klrc.go.ke/index.php/constitution-of-kenya/112-chapter-four-the-bill-of-rights/part-2-rights-and-fundamental-freedoms/201-35-access-to-information [3 September 2019]

Kenya Law Reform Commission, 35. Access to information - Kenya Law Reform Commission (KLRC), Available from: http://www.klrc.go.ke/index.php/constitution-of-kenya/112-chapter-four-the-bill-of-rights/part-2-rights-and-fundamental-freedoms/201-35-access-to-information [3 September 2019]

The Kenya's e-government strategy was launched in 2004²¹⁰ and it seeks to increase the efficiency of public service provision.²¹¹ Further, the *ecitizen.go.ke* portal provides a one-stop platform through which services by different ministries are offered to citizens. These include: taxation, driver's license, marriage certificate, business registration, land search, visa application, and passport application, and payment for the services. Essential services such as payment of taxes, application for a birth certificate, and drivers licence can only be issued through the portal. This means that citizens require a entitlement to internet access.

Internet penetration rates have grown tremendously over the years influencing increased digitization of government services. For wider reach, government agencies communicate and publish important public information through social media and websites.

Kenya has put in place measures to promote universal access to communications and the Internet. The Kenya Communications (Amendment) Act, 2009 established a Universal Access Fund (USF). The fund is financed by mandatory contributions of 0.5% of the profit of licenced telecommunications companies. The USF has a Board established to provide a framework for the management and administration of the fund. The fund carries out four key programmes: mobile telephone network expansion that seeks to cover mobile networks gaps; community broadband networks that establish broadband connections at major community service locations; ICT content applications, where the fund will promote the development of relevant local content; and, ICT capacity building and awareness.

The spectrum regulation framework stipulates that all spectrum should be allocated through reasonable pricing in accordance with the importance and use in the economy. In practice, spectrum has been allocated through auctions and on a first come first serve basis and some have been allocated for community based projects such as radio programs.²¹³ However, challenges noted are that in some cases, spectrum is allocated to players who do not make use of it and at the same time, there is no policy to address this.

Over the years, there has been little communication to the public on the use of the fund. Recently, the CA has been proactive in communicating the impact of the USF through video productions of the impact of USF in the newly covered regions.²¹⁴ The CA conducted an ICT Access Gaps study in 2016 where it identified communication gaps

https://www.infodev.org/infodev-files/resource/InfodevDocuments_1108.pdf [18 November 2019]

²¹⁰ Ministry of Information, Communication and Technology, 2004, E-government Strategy Accessed from: http://www.ict.go.ke/wp-content/uploads/2019/05/KENYA-E-GOVERNMENT-STRATEGY-2004.pdf [25 August 2019]

²¹¹ Ministry of Information, Communication and Technology, 2004, E-government Strategy Accessed from: http://www.ict.go.ke/wp-content/uploads/2019/05/KENYA-E-GOVERNMENT-STRATEGY-2004.pdf [25 August 2019]

²¹² Communications Authority of Kenya, Purpose of the Fund, Available from: https://ca.go.ke/wp-content/uploads/2018/02/Universal-Service-Fund-Framework.pdf [5 October 2019]

²¹³ Info Dev, 2010, National Broadband; build it and they will come, Available from:

²¹⁴ KICTANet, August 19, 2019, [kictanet] Two videos on Network Coverage in Bungoma and Kitui Counties, and in Turkana and Marsabit, Available from: https://lists.kictanet.or.ke/pipermail/kictanet/2019-August/035046.html [12 October 2019]

within the country.²¹⁵ The fund was applied to implement projects designed to address the gaps identified by the study. Through discussions on the Kenya ICT Action Network (KICTAnet) mailing list, the CA gave some examples on how the USF was used to provide affordable broadband to the masses.²¹⁶ According to the report, 62 sub-locations within Kenya had benefited from the mobile voice infrastructure project executed through the fund.²¹⁷ The CA had also connected over 600 secondary schools out of an initial projection of 896 schools in their Education Broadband Connectivity Project.²¹⁸

The National Broadband Strategy 2018 - 2023 is aimed at transforming Kenya into a globally competitive knowledge-based society enabled by affordable, secure and fast broadband connectivity.²¹⁹

The government is also implementing a project to create 4 ICT hubs in each of the 290 constituencies, and equip them with computers and the internet.²²⁰ Additionally, the country has 64 public libraries in 35 of the 47 counties.²²¹ Public libraries managed by Kenya National Library Service provide free internet, and computers for public access. Users can also bring their own devices to access the Internet. However, access to the library is subject to a small convenience fee of ksh20 (about \$0.2) per day.²²²

The government has also established Huduma centres in every county, which serve as focal points for offering e-government services. The centres have computers which serve as cyber cafes at a small convenience fee.

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²¹⁵ Communications Authority of Kenya, 2016, ICT Access Gap Study, Available from: https://ca.go.ke/industry/universal-access/ict-access-gap-study/ [10 September 2019]

²¹⁶ KICTANet, 24 April 2019, [kictanet] Online discussion on State of Broadband in Kenya, Available from: https://lists.kictanet.or.ke/pipermail/kictanet/2019-April/034423.html [10 September 2019]

²¹⁷ KICTANet, 29 April 2019, [kictanet] Online discussion on State of Broadband in Kenya, Available from: https://lists.kictanet.or.ke/pipermail/kictanet/2019-April/034462.html [10 September 2019]

 ²¹⁸ KICTANet, 10 September 2019, [kictanet] Two videos on Network Coverage in Bungoma and Kitui Counties, and in Turkana and Marsabit, Available from: https://lists.kictanet.or.ke/pipermail/kictanet/2019-september/035087.html [10 September 2019]
 219 Republic of Kenya, 2019, National Broadband Strategy 2018-2023, Available from: https://ca.go.ke/wp-

Republic of Kenya, 2019, National Broadband Strategy 2018-2023, Available from: https://ca.go.ke/wp-content/uploads/2019/05/Kenya-National-Broadband-Strategy-2018-2023.pdf [10 September 2019]

²²⁰ National Government CDF, 2019, THE CONSTITUENCY INNOVATION HUB PROJECT, Accessed from: https://www.ngcdf.go.ke/index.php/news/74-the-constituency-innovation-hub-project [13 September 2019]

²²¹ Kenya National Library Service, 2017, Contact Us, Available from: https://www.knls.ac.ke/index.php/contact-us [14 September 2019]

²²² Kenya National Library Service, 2017, Fees & Pricing Available from: https://www.knls.ac.ke/index.php/shapebootstrap [14 September 2019]

Theme B - Connectivity and Usage

B.1 What proportion of the population uses the Internet, with what frequency, and is this proportion growing?

Access to and the use of the internet has increased over the years due to continued investment in the sector by the government and the private sector. As of March 2019, the total internet subscriptions stood at 46.8 million, out of which 46.7 percent (21.9 million) were on broadband.²²³ That puts total internet subscriptions at 97.9 percent of the country's population. As of 2016, the International Telecommunication Union reported that 30% of households in the country had internet access.²²⁴

The growing numbers of social media users is an indicator of improved connectivity and usage. WhatsApp is the most widely used social media platform with 12 million users. Possible reasons could be that the cost of instant messaging is low compared to Short Message Services (SMS) that are charged per message, and that it allows for better group coordination. An interesting development is the growth of podcasting and vlogging by numbers and diversity of content. Video content creation has become popular both as main careers and as a hobby. Possible reasons could be that the cost of instant messaging is low compared to Short Message Services (SMS) that are charged per message, and that it allows for better group coordination. An interesting development is the growth of podcasting and vlogging by numbers and diversity of content. Video content creation has become popular both as

The below table shows the number of social media platform users in the country.

Platform	Number of Users per Month
Whatsapp	12 Million
Facebook	7.1 Million
Youtube	8 Million
Instagram	4 million
Linkedin	1 Million
Twitter	1 Million
Snapchat	0.25 Million

Source: Nendo Social Media Report 2017²²⁷

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²²³ Communication Authority of Kenya, March 2019, Sector Statistics Report Q3 2018-19, Available from: https://ca.go.ke/wp-content/uploads/2019/06/Sector-Statistics-Report-Q3-2018-19.pdf. [31 August 2019] https://ca.go.ke/wp-content/uploads/2019/06/Sector-Statistics-Report-Q3-2018-19.pdf.

households and individuals, International Telecommunication Union, Available from:
https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2019/CoreHouseholdIndicators_Jun2019.xlsx [3 September 2019]

Airtel Now Offers More Data, Free WhatsApp On Its Amazing Data Bundles https://airtel.africa/media/more-data-free-whatsapp

²²⁶Bloggers Association of Kenya, 2017, State of the Internet in Kenya Report: https://www.ifree.co.ke/wp-content/uploads/2018/02/State-of-the-Internet-in-Kenya-report-2017.pdf, [17 November 2019]

²²⁷ Nendo Social Media Report, 2017, How Kenyans Use their Data: https://www.nendo.co.ke/data [17 November 2019]

According to a Hootsuite research,²²⁸ the active social media users were 8.2 million with a population penetration rate of 16%. Of that, the mobile social media users were 7.7 million representing 15% penetration rate. The After Access report put the social media users in Kenya at 25% from a 2017 research.²²⁹

B.3 What proportion of the population subscribes to communications/broadband services, and is this growing?

According to the 2019 CA report, the total fixed broadband users are 402,103, which is approximately 0.84% of the population. In 2016, Kenya had a maximum capacity of 848 Gbps and utilized 467 Gbps. By 2019 capacity increased by 458% and usage similarly increased by 101% to 977 Gbps.

Kenya's fixed-broadband market is dominated by four telecom operators, taking 84% of market share in 2018; Wananchi Group 37%, Safaricom 18%, Mawingu 15% and Jamii telecoms 12%. Wananchi Group Holdings owns Zuku, which was the first provider to push for Fiber to home connectivity in Nairobi in 2012. Today, Safaricom, Jamii telecom and other small and medium enterprises offer fiber to home connectivity, and are spreading to other major cities in the country. In effect, Kenya's fixed-broadband market grew by 82.3% year-over-year in 2017. 230

The table below shows the trends on fixed Broadband Subscriptions by Speed

Fixed broadband speed	2014	2015	2016	2017	2018
≤ 256Kbps	2,272	2,500	862	854	570
>256Kbps ≤ 512Kbps	10,572	3500	4,808	2,927	505
>512Kbps ≤ 1Mbps	62,146	18,000	22,702	14,459	8,905
>1Mbps ≤ 2Mbps	3,810	4,000	33,574	96,391	87,772
>2Mbps	9,567	69,000	91,046	173,672	273,746

Source KNBS²³¹

According to the GSMA, the percentage of population covered by mobile broadband signal is 78.6%. This is disaggregated as follows: 95.3% on 2G, 88.0% on 3G, and 61.0% on 4G. The number of 4G technology mobile transceivers grew from 3,873 in

Hootsuite and We Are Social, 2019, Digital 2019 Kenya (January 2019) v01, Available from: https://www.slideshare.net/DataReportal/digital-2019-kenya-january-2019-v01 [13 September 2019]
 After Access, 2017, Let the people speak: using evidence from the Global South to reshape our digital future, Available From: https://afteraccess.net/wp-content/uploads/AfterAccess_IGF2017v2_1.pdf [17 October 2019]

²³⁰S&P Global, 2017, Kenya Fixed Broadband, FTTH Fixed Wireless Improving Access Speeds, Retrieved from: https://www.spglobal.com/marketintelligence/en/news-insights/research/kenya-fixed-broadband-ftth-fixed-wireless-improving-access-speeds [20 November 2019]

²³¹ Kenya National Bureau of Statistics, 2019, Economic Survey, Available from: https://www.knbs.or.ke/download/economic-survey-2019/ [19 November 2019]

2017 to 7,469 in 2018.²³² In 2018 mobile phone penetration was at 103% per 100 inhabitants.²³³ This was attributed to ubiquitous use of mobile mobile money transfer services and consumer behavior; and, owning more than one SIM card to take advantage of the different voice, data and mobile transfer offers by different mobile service providers.

According to the ITU, 68.2% of individuals were using a mobile phone in 2015.²³⁴ Recent research by the GSMA puts mobile phone ownership at 50.6%.²³⁵ The average mobile download speed in Kenya is at 16.87mbps, while the average upload speeds are at 6.88 mbps.

Below is a table showing the average speeds offered by the major mobile service providers.

Carrier Name	Download Trimean	Upload Trimean
Safaricom	20.97	9.29
Orange	15.93	7.83
Airtel	9.29	2.55

Source: Ookla report 2017²³⁶

There is no data in domestic internet bandwidth per internet user disaggregate by district. As of 2016, the International Internet bandwidth per user was 25.2kbps.²³⁷ Kenya experienced a year-on-year average growth rate of 141.08% for the time period 2012 to 2016. Among the selected countries, Kenya had the highest year-on-year average growth rate at 141.08%. Data from Packet Clearing House showed that peak data of 9.4G was transferred through the Nairobi Kenya Internet Exchange Point in 2019, with the average data transfer being 5.3G.²³⁸

A report by After Access, with a nationally representative survey sample size of 1,208 of ICT access and use by households and individuals put mobile ownership at 87% of the

https://www.knbs.or.ke/download/economic-survey-2019/ [19 November 2019]

D/Statistics/Documents/statistics/2019/CoreHouseholdIndicators Jun2019.xlsx [25 October 2019]

http://www.mobileconnectivityindex.com/#year=2018&zonelsocode=KEN&analysisView=KEN [20 October

https://www.speedtest.net/awards/reports/2017/2017_Kenya_Safaricom_Mobile.pdf [25 October 2019]

https://tcdata360.worldbank.org/indicators/entrp.inet.bandwidth?country=KEN&indicator=3405&viz=line_cha rt&years=2012,2016 20 October 2019]

238 Packet Clearing House, 2019, Internet Exchange Directory, https://www.pch.net/ixp/dir [1 October 2019]

²³² GSMA, 2018, GSMA Mobile Connectivity Index, Available from:

http://www.mobileconnectivityindex.com/#year=2018&zonelsocode=KEN&analysisView=KEN [20 October

²³³ Kenya National Bureau of Statistics, 2019, Economic Survey, Available from:

²³⁴ ITU, Mobile Cellular Statistics 2000-2008: https://www.itu.int/en/ITU-

²³⁵ GSMA, 2018, GSMA Mobile Connectivity Index, Available from:

²³⁶ Ookla, 2017, Speed Test Awards Report, Available from:

²³⁷ The World Bank, 2016, Int'l Internet bandwidth, kb/s per user, Available from:

population. Of those who own mobile phones, 59% owned a basic phone, 28% a smartphone, and 14% a feature phone.²³⁹

According to the ITU,²⁴⁰ mobile cellular telephone subscriptions as of 2018 stood at 49,501,430. From further analysis, it seems ITU took the total number of SIM card subscriptions. Mobile phone subscriptions per 100 users was 73.84 as of year 2016.²⁴¹ Kenya experienced a year-on-year average growth rate of 4.67% for the time period 2012 to 2016. Among the selected countries, Kenya had the lowest year-on-year average growth rate at 4.67%.

According to ITU, the number of fixed broadband subscriptions per hundred population was 0.72 as of 2018.²⁴² Kenya experienced a year-on-year average growth rate of 108.52% for the time period 2005 to 2018.²⁴³

During the fourth quarter of the 2018/19 financial year, the number of broadband subscriptions stood at 22.2 million.²⁴⁴ Fixed broadband subscriptions was 422,345. There is no data on unique mobile broadband subscribers; but using the available Communications Authority of Kenya data, the number of unique mobile broadband users can be calculated using the formula: Total broadband subscribers subtract Fixed broadband. This gives the total number of unique mobile broadband users at 21,777,655.

	2014	2015	2016	2017	2018
Mobile phone subscribers per 100 inhabitants	78.30	85.41	85.93	91.89	103.45
Wireless Internet subscribers per 100 inhabitants	38.10	53.90	58.50	71.20	94.90
Internet Subscribers per 100 Inhabitants	38.30	54.19	58.82	71.61	95.52
Bits per second per capita	12,157.90	20,292.80	19,890.40	20,630.20	2 5,033.17

²³⁹ After Access, The Inside Internet Story of Africa, Asia, and Latin America, Available from: https://afteraccess.net/wp-content/uploads/After-Access-Website-layout-r1.pdf [22 October 2019]

²⁴⁰ ITU, Mobile Cellular Statistics 2000-2008, Available from: :https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2019/CoreHouseholdIndicators_Jun2019.xlsx [25 October 2019]

²⁴¹ The World Bank, 2016, Mobile phone subscriptions/100 pop., Available from: https://tcdata360.worldbank.org/indicators/entrp.mob.sub?country=KEN&indicator=3423&viz=line_chart&ye_ars=2012,2016 [25 October 2019]

²⁴² ITU, Fixed Broadband 2000 Jun - 2019 Jun Statistics, Available from: https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2019/Fixed_broadband_2000-2018_Jun2019_revised27082019.xls

²⁴³ The World Bank, 2018, Fixed broadband subscriptions (per 100 people), Available from: https://tcdata360.worldbank.org/indicators/h588c14bc?country=KEN&indicator=1742&viz=line_chart&years=1998,2018 [25 October 2019]

²⁴⁴ Communication Authority of Kenya, June 2019, Sector Statistics Report Q4 2018-19, pg19, Available from: https://ca.go.ke/wp-content/uploads/2019/09/Sector-Statistics-Report-Q4-2018-19.pdf. [31 September 2019]

Broadband subscription per 100 inhabitants (wireless)	9.68	16.20	27.70	36.50	45.20
Broadband subscription per 100 inhabitants (Fixed)	9.88	16.40	28.00	37.12	45.92

Source: KNBS 2019

Kenya has a total of 5,688,554 IP addresses assigned.²⁴⁵ The total population from 2019 census is 47,564,296,²⁴⁶ giving the number of IP addresses per 100 as 11.96 IP addresses.

B.4 What barriers to access are identified by users and non-users of the Internet?

There is no aggregate data on access barriers identified by users. However, the perception barriers for non-users identified were: illiteracy, lack of content in local languages, lack of digital skills, and physical accessibility challenges. Perception barriers identified for users were; data affordability, device affordability, content concerns, privacy and securiton, gender issues, and electricity.²⁴⁷

The government has developed surveys and consultation arrangements that seek to address these variations of access and use in the different regions and among groups. The CA regularly holds public consultative meetings across the country named *Kikao Kikuu*,²⁴⁸ which is Swahili for "great gatherings". During the last census in 2019, the public was asked whether they used the internet, had a modem, and whether they have ever shopped online.

Also, there are several surveys that have been carried out on perceptions of the internet. One survey by After Access²⁴⁹ interviewed 1,208 respondents from across Kenya. On barriers to Internet usage, 27 respondents indicated that they did not know what the internet was, 21 said they did not have a device to access the internet, 12 said they did not know how to use the internet, 4 said the internet was too expensive, and 36 said they had other reasons on the barriers to internet use. On barriers to mobile ownership, 58 said they could not afford a mobile phone, 23 said they did not have mobile coverage where they live, 44 said they did not have electricity at home to charge the mobile phone, and 18 said they did not know how to use mobile phones.

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²⁴⁵ IP2Location, 2019, Kenya IP Address Ranges, Available from: https://lite.ip2location.com/kenya-ip-address-ranges [25 October 2019]

²⁴⁶ Kenya National Bureau of Statistics, 4 November 2019, 2019 Kenya Population and Housing Census Results, Available from: https://www.knbs.or.ke/?p=5621 [6 November 2019]

²⁴⁷ Research ICT Africa, 2017, Internet use, Barriers and Strategies: Perceptions from Kenya, Nigeria, Rwanda and South Africa, Available from:

https://www.researchictafrica.net/docs/RIA%202016%20Comparative%20FGD%20study_Final_Web%20ver_sion.pdf [25 September 2019]

²⁴⁸Communications Authority of Kenya, 8 January 2018, Kikao Kikuu, Available from: https://ca.go.ke/kikao-kikuu/ [28 October 2019]

After Access, The Inside Internet Story of Africa, Asia, and Latin America, Available from: https://afteraccess.net/wp-content/uploads/After-Access-Website-layout-r1.pdf [22 October 2019]

The blogging industry has grown significantly both in terms of numbers and in terms of diversity of content. There are affordable and free online services for individuals to express their views. Most individuals and civil society organizations express their views on free platforms such as wordpress.com, Facebook, Medium, blogspot, Youtube, Twitter, and Instagram. There are 83 registered domain registrars who also offer website hosting, and domain name registration.²⁵⁰ Domain and hosting prices (combined cost about 40 USD) are not affordable to the low income populations.

Theme C - Affordability

C.1 Are mobile handsets capable of Internet connectivity affordable to all sections of the population?

Access to the internet is expanding, and is driven largely by mobile broadband. Kenya has a mobile penetration of 91%, and following the same trend, internet penetration rate is also considerably high at 84%.²⁵¹ A major driving factor for this trend is the availability of more affordable feature phones that are internet enabled. The cost of the cheapest internet enabled feature phone or smartphone as a proportion of monthly GDP per capita is 33.²⁵²

Entry-level fixed broadband as of September 2019 was KES 2,900 (USD 29) for a 5 Mbps link from Safaricom,²⁵³ KES 2,499 (USD 24.9) for 5 Mbps link from Zuku,²⁵⁴ and KES 1,500 (USD 15) for a 2 Mbps link from Poa Internet.²⁵⁵ In a survey conducted by After Access, 4.6% of males and 3.4% of females expressed that internet access was expensive.²⁵⁶ And speed of entry level broadband, according to the ITU, is at 30 Mbit/s.²⁵⁷

C.2 Is broadband access and use affordable to all sections of the population?

The monthly cost of a 100 MB prepaid mobile broadband data plan (expressed as a proportion of monthly GDP per capita) is 47.8. The monthly cost of a 500 MB mobile broadband data plan (expressed as a proportion of month GDP per capita) is 47.5, and monthly cost of a 1 GB mobile broadband data plan (expressed as a proportion of monthly GDP per capita) is 47.9.

²⁵⁰KENIC, 2018, Licensed Registrars, Available from: https://www.kenic.or.ke/index.php/en/licensed-registrars/page-6 [26 September 2019]

Jumia Group, 2019, Kenya Mobile Report, Available from: https://www.jumia.co.ke/mobile-report/#:~:targetText=Kenyan%20Facts&targetText=Other%20engines%20identified%20as%20driving.to%20the%20Internet%20in%20Kenya.[19 November 2019]

²⁵² GSMA, 2018, GSMA Mobile Connectivity Index, Available from:

http://www.mobileconnectivityindex.com/#year=2018&zly onelsocode=KEN&analysisView=KEN [20 October 2019]

²⁵³ Safaricom, October 2019, Safaricom Home Fibre, Available from: https://www.safaricom.co.ke/home/home-fibre.php [25 October 2019]

²⁵⁴ Zuku, October 2019, Home Internet, Available from: https://zuku.co.ke/triple-play/ [25 October 2019]

²⁵⁵ Poa Internet, 2019, Available from: https://poa.co.ke/ [25 October 2019]

²⁵⁶After Access, Reports - After Access, Available from: https://afteraccess.net/reports [3 October 2019]

²⁵⁷ https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-2018-Vol-1-E.pdf

Mobile broadband connection as a percentage of Monthly GNI per capita through analysis of various service providers is shown on the table below. Safaricom²⁵⁸ offered monthly internet bundles of 2 GB at USD 5, 5 GB at USD 10, and 25 GB data at USD 30. Airtel²⁵⁹ offered 1.5 GB at USD 3, 4 GB at USD 5, and 10 GB at USD 10. Faiba 4G from Jamii Telecommunications Limited²⁶⁰ did not have comparable monthly plans, but it had 25 GB data at USD 10, 40 GB data at USD 20, and 70 GB data at USD 30.

Safaricom Monthly data	Monthly GNI pc	Airtel Monthly data	Monthly GNI pc	Faiba 4G Monthly data	Monthly GNI pc	Telkom Monthly data	Monthly GNI pc
2 GB at USD 5	3.2%	1.5 GB at USD 3	1.9%	25 GB at USD 10	6.5%	1 GB at USD2.5	1.6%
5 GB at USD 10	7.8%	4 GB at USD 5	3.2%	40GB at USD 20	13%	4 GB at USD 5	3.2%
25 GB at USD 30	19.5%	10 GB at USD 10	6.5%	70 GB at USD 30	19.5%	10 GB at USD15	9.75%

Practical data as of September 2019 for three cellular networks. A comparison of Safaricom, Airtel, and Jamii Telecommunications Limited's Faiba 4G.

According to the ITU 2017 data, 0.7GB accounts for 4% of the monthly GNI per capita. The World Bank indicated Kenya's affordability index in 2016 as 4.31. The country experienced a year-on-year average growth rate of 6.72% for the time period 2012 to 2016.²⁶¹

Kenya has a number of zero rated services and initiatives from the government and private sector, which help in improving internet affordability. Availability of zero-rated services have been pushed by the stiff competition in the mobile service industry and marketing trends. Airtel Kenya and Safaricom offer Free whatsapp, free Facebook, ²⁶² and free Wikipedia that are non exhaustible under bundle offers.

Additionally, the Universal Service Fund (USF) framework has a Community Broadband Networks component whose purpose is to take zero-rated broadband connectivity into towns and villages where broadband is currently unavailable. It aims to establish broadband connections at major public institutions within designated locations such as:

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²⁵⁸ Safaricom PLC, 2019, Zidisha Plus Data Bundles, Available from:

https://www.safaricom.co.ke/business/sme/mobile-solutions/zidisha-plus-data-bundles [20 September 2019] ²⁵⁹ Airtel Kenya, 2019, airtel: Prepaid | Postpaid | 4G, Available from: https://www.airtelkenya.com/internet-amazing-data-bundle [20 September 2019]

²⁶⁰ Faiba 4G, 2019, Faiba Mobile Products, Available from: https://faiba4g.co.ke/4g [21 September 2019]
²⁶¹ The World Bank, 2016, 4th pillar: Affordability, Available from:

https://tcdata360.worldbank.org/indicators/entrp.afford?country=KEN&indicator=3481&viz=line_chart&years=2012,2016 [20 October 2019]

²⁶² Safaricom PLC, March 2019, Free Facebook Terms and Conditions, Available from: https://www.safaricom.co.ke/free-facebook-terms-and-conditions [21 September 2019]

schools, health facilities, government offices, post offices, libraries, and other community service locations.²⁶³

Some service providers have also launched price packages that target special and low income groups. For example, Safaricom has age specific products such as the Safaricom blaze offered to the youth under 26 years with cheaper internet bundles with zero rated access to some internet platforms like Whatsapp.²⁶⁴

Theme D - Equitable Access

D.1 Are there significant differences in broadband access and use between regions and between urban and rural areas?

There are significant differences in broadband access and use between regions and between urban and rural areas. The After Access Survey²⁶⁵ found that the number of Internet users in rural areas was 17%, and those of urban areas at 55%. Also, more options for internet connectivity are available in urban areas than in rural areas. In urban areas, there is fixed broadband, 3G and 4G bundled mobile broadband and satellite; while there are wide variations in quality of connectivity in the rural areas. Data from nPerf shows that most of the regions away from the centre of the country like in the Northern parts of the country don't have access at all.²⁶⁶



Safaricom 3G / 4G / 5G coverage map, Kenya

Source: nPerf

²⁶³ Communications Authority of Kenya, Universal Service Fund Framework, Available from: https://ca.go.ke/wp-content/uploads/2018/02/Universal-Service-Fund-Framework.pdf [5 October 2019] ²⁶⁴ Safaricom PLC, 2019, bundles - BLAZE, Available from: https://blaze.co.ke/bundles/ [15 September 20191

²⁶⁵ After Access, The Inside Internet Story of Africa, Asia, and Latin America, Available from: https://afteraccess.net/wp-content/uploads/After-Access-Website-layout-r1.pdf [22 October 2019]

²⁶⁶Nperf, Safaricom 3G / 4G / 5G coverage map, Kenya, Available from: https://www.nperf.com/en/map/KE/-/2665.Safaricom/signal/ [23 September 2019]

Moreover, as shown in the chart above, infrastructure investment has followed the discriminatory policy both in the colonial and early years of post independence. In 1896, the Kenya - Uganda Railway was built along the lower part of Kenya, connecting Mombasa, Nairobi, Busia and Kisumu, to transport agricultural products across these regions and outside the country. The country has continued to build other infrastructure along the railway line. Using the nPerf data, it is apparent that there is very low connectivity and internet enabling infrastructure outside the main transport corridor. The northern, and far east part of Kenya has much lower coverage.

The data available from different sources have not been disaggregated to give comparisons of connectivity between urban and rural areas and in different regions. However, the nPerf²⁶⁸ graph shows the regions without any mobile network coverage, meaning that the communities that live in those regions do not have access to broadband access. This probably explains why smartphone penetration in rural areas stood at 17% compared to that of urban areas at 55%, and social media use at 49.5% in urban areas compared to 16% in rural areas.²⁶⁹

D.5 Do adults in all age groups make use of the Internet to the same extent?

The proportion of men who had undergone secondary education as of 2009 was 84% and that of women was 80%.²⁷⁰ According to the World Bank, the total Adult literacy rate was 77.97% in 2016.²⁷¹ According to Hootsuite, the literacy rate of males aged over 15 years was 84%, and females as 74%, with the overall literacy rate of those over 15 years as 79%.²⁷²the proportion of women in wage employment was 34% while that of men was 66%. In effect, there are significant differences in internet access and use between men and women. Internet users among women was 21% while internet usage among men was 31%. Gender parity on internet usage was 10%.²⁷³

Significantly, mobile ownership among men in Kenya is at 92%, while ownership among women stands at 82%. Gender parity is at 10%.²⁷⁴ The After Access research showed that 24% of women mobile users had a smartphone, compared to 31% of men. Only

²⁶⁷Kenya Railways Corporation, Kenya Railway History, Available from: http://krc.co.ke/?page_id=216 [17 October 209]

²⁶⁸ Nperf, Safaricom 3G / 4G / 5G coverage map, Kenya, Available from: https://www.nperf.com/en/map/KE/-/2665.Safaricom/signal/ [23 September 2019]

²⁶⁹ After Access, 2017, Let the people speak: using evidence from the Global South to reshape our digital future, Available From: https://afteraccess.net/wp-content/uploads/AfterAccess IGF2017v2 1.pdf [17 October 2019]

²⁷⁰ https://www.knbs.or.ke/download/women-men-kenya-facts-figures-2017/

²⁷¹ The World Bank, 2016, Adult Literacy Rate, %, % Adults, Available from: https://tcdata360.worldbank.org/indicators/entrp.lit?country=KEN&indicator=3421&viz=line_chart&years=2012;2016 [25 October 2019]

Hootsuite and We Are Social, 2019, Digital 2019 Kenya (January 2019) v01, Available from: https://www.slideshare.net/DataReportal/digital-2019-kenya-january-2019-v01 [13 September 2019] After Access, Reports - After Access, Available from: https://afteraccess.net/reports [3 October 2019]

Research ICT Africa, Understanding the Gender Gap in the Global South: https://afteraccess.net/wp-content/uploads/2018-After-Access-Understanding-the-gender-gap-in-the-Global-South.pdf

22% of women, and 32% of men were internet users. Also, the percentage of mobile ownership stood at 92% for men and 83% for women. 275

In yet another research by GSMA, women's level of mobile ownership was found to be lower than that of men. Based on a total population over 18 years, 82% of women had access to mobile phones compared to 86% of men.²⁷⁶ For many internet users, mobile is their sole or primary means of accessing the internet. From the GSMA report, 75% of women and 63% of men who used the internet in the past three months at the time of the survey, did so only on a mobile.

The table below shows patterns of social media usage aggregated by gender. Wider disparities exist and men are more active in social media, reading news, following local politics, and government projects and policies. Women are more active in making social connections, chatting and staying in contact with friends and family.

Activity	Male	Female
Reading News	83%	75%
Chatting	96%	96%
Making calls	60%	65%
Playing games	46%	45%
Staying in contact with friends and family	92%	92%
Making professional and business contacts	52%	49%
To market products and services	32%	29%
Follow government projects and updates on policies	59%	50%
Make friends	94%	88%
Follow local politicians	62%	50%
Get and share opinions	82%	87%
Share videos, pictures and music	81%	87%
Share content	45%	37%
Look for educational content	74%	67%

²⁷⁵ After Access, The Inside Internet Story of Africa, Asia, and Latin America, Available from: https://afteraccess.net/wp-content/uploads/After-Access-Website-layout-r1.pdf [22 October 2019]

²⁷⁶ GSMA, 2019, The Mobile Gender Gap: Africa, Available from:

https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/The-Mobile-Gender-Gap-in-Africa.pdf [25 October 2019]

Source. Research ICT Africa 2017²⁷⁷

This data shows that there is an increase of internet usage by women through blogs and videos. In 2017, the Bloggers Association of Kenya reported an increase of womenowned blogs and vlogs submitted for nomination. For the first time, women were awarded the accolade of 8 categories in the 2017 Annual Bloggers Awards.²⁷⁸

There are also significant differences in the perceptions of barriers to Internet access and use between men and women. The table below shows the reasons given for not using the internet.

Perceptions of barriers to internet access and use	Male	Female
Don't know what the internet is	15.9%	35.3%
Have no access to devices (computers and smartphones)	24.7%	18.9%
No internet, Not useful	29.4%	23.5%
Do not know how to use it	13.6%	10.2%
Not available in my area/ no mobile coverage	2.8%	1.9%
Too expensive	4.6%	3.4%

Source: Research ICT Africa 2017²⁷⁹

A GSMA survey of 2015 found that there was lack of awareness and locally relevant content, lack of digital literacy and skills, and affordability among top barriers for non-internet users. Of those interviewed, 46% said they don't use the internet because of lack of awareness and locally relevant content, 37% for lack of digital literacy and skills, 25% for affordability, 4% for lack of network coverage, 2% for security and trust barrier, and 22% for other reasons.²⁸⁰

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²⁷⁷ Research ICT Africa, 2017, Internet use, Barriers and Strategies: Perceptions from Kenya, Nigeria, Rwanda and South Africa, Available from:

https://www.researchictafrica.net/docs/RIA%202016%20Comparative%20FGD%20study_Final_Web%20ver_sion.pdf [25 September 2019]

²⁷⁸ Bloggers Association of Kenya, 2017, State of Internet in Kenya Report: https://www.ifree.co.ke/wp-content/uploads/2018/02/State-of-the-Internet-in-Kenya-report-2017.pdf [17 November 2019]

²⁷⁹Research ICT Africa, 2017, Internet use, Barriers and Strategies: Perceptions from Kenya, Nigeria, Rwanda and South Africa. Available from:

https://www.researchictafrica.net/docs/RIA%202016%20Comparative%20FGD%20study_Final_Web%20version.pdf [25 September 2019]

²⁸⁰ GSMA, 2015, Connected Society Consumer barriers to mobile internet adoption in Africa, Available from: https://www.gsmaintelligence.com/research/?file=8170bf058e42cdb8c186c6c75fb2b30e&download [22 October 2019]

There is no precise data on the proportion of adults in different age groups using the Internet, but Internet use by gender was at 31% for males, and 21% for females; while social media use by gender was 30% for males and 21% for females.²⁸¹

Theme E - Local Content and Language

E.1 How many Internet domains and servers are there within the country?

The Kenya Network Information Center (KeNIC) puts domain registrations for .ke domains at 93,446 as of September 2019.²⁸² This number does not differentiate whether the domains are registered by Kenyans, or also by users from other countries. Data for gTLDs and ccTLDs is not reliable. For example, Domain Name Stat puts all registered domains in Kenya at 68,261²⁸³ with .com taking 60% of all domains at 40,652. However, this data is in complete contrast of .ke domains that stand at 93,446.

The table below shows country domain registration trends.

Domain	Users	2014	2015	2016	2017	2018
ac.ke	Institutions of Higher Education	792	580	726	786	891
.co.ke	Companies	35,274	46,451	58,165	68,430	77,820
.go.ke	Government entities	314	290	363	414	502
.info.ke	Information/blogs	105	115	144	374	443
.me.ke	Personal websites and email	650	260	236	386	345
.mobi.ke	Mobile content	48	35	44	126	180
.ne.ke	Network devices	65	140	175	466	277
.or.ke	NGOs	1,190	1,485	1,860	1,981	1,976
.sc.ke	Lower and middle institutions of learning	95	665	833	1,027	1,212
.ke	Second level domain	-	-	-	-	2,098

²⁸¹ After Access, 2017, Let the people speak: using evidence from the Global South to reshape our digital future, Available From: https://afteraccess.net/wp-content/uploads/AfterAccess_IGF2017v2_1.pdf [17 October 2019]

²⁸² KENIC, .ke Domain Statistics, Available from: https://www.kenic.or.ke/index.php/en/domain-statistics/ke-statistics [13 October 2019]

²⁸³ Domain Name Stat, October 2019, Available from: https://domainnamestat.com/statistics/country/KE [25 October 2019]

The World Economic Forum's Global Information Technology Report indicates that the number of secure web servers per million population is 7.80 as of 2016. Kenya experienced a year-on-year average growth rate of 32.92% for the time period 2012 to 2016.²⁸⁴

E.4 Is there a substantial and growing volume of Internet content in diverse local and indigenous languages, including locally-generated content?

For local content diversity, the country does not need to add new scripts for access. Kenyan languages use the Latin script²⁸⁵ which is supported by all domain and online services. Kenyan websites use the Latin script. Therefore, users can access content in their language using the Latin script. There is a small population of Arabic speakers, who can access the Arabic Script in registering domain from registries that support Arabic scripts.²⁸⁶ However, the Kenyan .ke registry only accepts Latin script registrations.

Kenya has 68 local languages²⁸⁷ with English and Kiswahili being the official languages.²⁸⁸ Local languages are not so popular on the internet considering that English, Swahili and Sheng (Swahili slang) dominate most conversations on online platforms. Community radios which target specific audiences and local communities speak in local languages, but most online platforms are in English, with a very few percentage in Kiswahili.

Government websites are used by the government to relay information to the citizens remotely and offer public services. Language is an important aspect of service delivery. There is no study that shows preference of Kenyans in the usage of language in written communications. A recent research by Research ICT Africa²⁸⁹ website shows that only 1.96 of the sampled population expressed that language was a barrier to internet use.

²⁸⁵ Wikipedia: https://en.wikipedia.org/wiki/Latin_script#/media/File:Latin_alphabet_world_distribution.svg, retrieved on 13/11/2019

²⁸⁸Kenya Law Reform Commission, Constitution of Kenya 7. National, official and other languages, Available from: http://www.klrc.go.ke/index.php/constitution-of-kenya/108-chapter-two-the-republic/173-7-national-official-and-other-languages [23 October 2019]

²⁸⁴ The World Bank, 2016, Secure Internet servers/million pop., Available from: https://tcdata360.worldbank.org/indicators/entrp.inet.secure?country=KEN&indicator=3407&viz=line_chart&years=2012,2016 [25 October 2019]

²⁸⁶ ICANN, 8 September 2015, Linguistic Diversity in the Internet Root: The Case of the Arabic Script and Jawi, Available from: https://www.icann.org/news/blog/linguistic-diversity-in-the-internet-root-the-case-of-the-arabic-script-and-jawi [13 October 2019]

²⁸⁷ Wikipedia, 30 October 2019, Languages of Kenya, Available from: https://en.wikipedia.org/wiki/Languages of Kenya [2 November 2019]

²⁸⁹ After Access, 2017, Let the people speak: using evidence from the Global South to reshape our digital future, Available From: https://afteraccess.net/wp-content/uploads/AfterAccess_IGF2017v2_1.pdf [17 October 2019]

Although Kenya has English and Kiswahili as the official languages, major government websites such as the judiciary.go.ke, ecitizen.go.ke, klrc.go.ke, parliament.go.ke, and president.go.ke are all in English.

Theme F - Capabilities / Competencies

F.1 Do school and higher educational curricula include training in ICTs and media and information literacy, focused on effective and safe use, and are these curricula implemented in practice?

Digital literacy is one of the seven competencies outlined in the Basic Education Curriculum Framework 2017.²⁹⁰ The policy broadly describes digital literacy as having the knowledge, skills and behaviours which are necessary to effectively and safely use a wide range of digital content and devices. The description also includes the ability to engage in online communications on different platforms, being aware of and adhering to ethical behaviour protocols, being aware of societal issues raised through digital media, and being able to search, evaluate and use digital information. Digital literacy is treated as a multidisciplinary course incorporated in geography, social science, languages and computer courses. It is also incorporated in most levels of learning; from middle level education to tertiary level of education.

Intercultural dialogues have played critical roles in promoting cultural diversity, social cohesion and tolerance in online platforms. The National Cohesion and Integration Commission's (NCIC) policy recognizes the role of education in fostering peace and cohesion.²⁹¹ The NCIC policy strategy therefore includes intercultural education in national and secondary education. It has also seeks to promote cultural events and festivals targeting learning institutions. Education is needed to implement the constitution, which emphasised promotion of social cohesion and peace between communities. In 2012, the Commission trained 150 curriculum developers from the Kenya Institute of Curriculum Development (KICD) on how to infuse cohesion and integration issues in the education curriculum for primary and secondary schools.²⁹²

Among the broad strategies in the revised ICT Policy 2016 is facilitation of ICT based delivery systems in education.²⁹³ The policy provides that ICT is expected to be integrated seamlessly in teaching and learning across all levels of education with new methods of delivery and learner assessments. Under the basic education policy framework, ICT skills and training is offered to junior high school students to enable them to use technology in learning other subjects. In the senior high school levels, students who wish to continue pursuing computer studies go through the course with the aim of specializing on computer hardware and applications as a technical pathway.

²⁹⁰ Ministry of Education, 2017, Basic Education Framework, Available from: http://www.education.go.ke/index.php/downloads/file/632-basic-education-framework [25 October 2019]

²⁹¹ National Cohesion and Integration Commission, 2014, Amani Club Guidelines, Available from: https://cohesion.or.ke/index.php/resources/downloads?download=7:amani-club-guidelines [30 October 2019]

²⁹² National Cohesion and Integration Commission, 2015, Policy strategy 2015-2020, Available from: https://www.cohesion.or.ke/index.php/resources/policies-and-regulations [30 October 2019]

²⁹³ Ministry of ICT, 2016, National ICT Policy, Available from: http://icta.go.ke/pdf/National-ICT-Policy-20June2016.pdf [25 October 2019]

To cater for learners with disabilities, the Kenya Institute of Special Education (KISE) was established as a semi autonomous government agency under the Ministry of Education. KISE developed a sector policy for learners and trainees with disability to align education and training services for learners and trainees with disabilities with the relevant national policy frameworks.²⁹⁴ The Policy includes ICT training for curriculum delivery and ICT training for students with disabilities. However, the policy also notes challenges in ICT human resources that has led to under deployment of teachers with competent ICT skills to special schools all over the country.

Substantial ICT training in primary schools mostly exists in private schools. In 2013, the government introduced ICT in the delivery of curriculum, starting with the lower primary. Under the government led digital literacy program, over 75,000 teachers in public primary schools were trained in readiness for the project implementation.²⁹⁵ However, the project did nor succeed because of the challenges of poor connectivity to the electricity grid, lack of proper classroom facilities and insufficient skilled teachers. The Ministry of Education suspended issuance of tablets to class one pupils under the digital literacy programme, opting instead to build computer laboratories. Each of the 25,000 public primary schools were expected to get one computer laboratory.²⁹⁶

There is no aggregate data in the number of schools connected to the internet, or the proportion of learners who have internet in schools. Kenya had a total of 94,399 educational institutions in 2018. There were 11,399 secondary schools, 37,910 primary schools, 2,289 technical vocational institutions, and 63 universities. In the same period, 896 secondary schools were connected to broadband using satellites.²⁹⁷ There have been several initiatives to connect schools to the internet. The Kenya Education Network in 2014, connected 240 schools in Nairobi through the School Connectivity Initiative, with mixed results.²⁹⁸

In 2018, the Communications Authority announced that it had provided broadband connectivity through the USF to 896 public secondary schools spread across 47 counties, with internet connection speeds of 5 Mbps downlink and 1 Mbps upload. In the project, the CA targeted to connect all the 8,500 public secondary schools to high-speed broadband connectivity over a five-year period in order to enhance the delivery of educational content and quality learning using ICT platform.²⁹⁹ The Craft Silicon

²⁹⁴ Ministry of Education, 2018, Sector Policy for Learners and Trainees with Disabilities: http://www.education.go.ke/index.php/downloads/file/510-sector-policy-for-learners-and-trainees-with-disabilities

²⁹⁵ Ministry of ICT, Digital Literacy Programme(DLP), Available from: www.ict.go.ke/digital-literacy-programmedlp/ [15 September 2019]

²⁹⁶ Ouma Wanzala, 25 February 2019, Daily Nation, Education ministry abandons Uhuru's laptop project, Available from: https://www.nation.co.ke/news/education/Ministry-abandons-laptop-project/2643604-4997644-10p9jfgz/index.html [3 September 2019]

²⁹⁷ Kenya National Bureau of Statistics, 2019, Kenya Economic Survey 2019, Available from: https://africaopendata.org/dataset/kenya-economic-survey-2019/resource/5b9357a4-6227-4fbf-9e10-ae7043a41ce3 [7 September 2019]

 ²⁹⁸ KENET, Schools Connectivity Initiative, Available from: https://schools.kenet.or.ke [15 September 2019]
 ²⁹⁹ Communications Authority, 3 June 2018, CA Connects 896 Public Schools To High-speed Internet, Available from: https://ca.go.ke/ca-connects-896-public-schools-to-high-speed-internet/ [15 September 2019]

Foundation's Mobile Lab equipped with 34 computers and supporting technology, converted a bus into a mobile and solar-powered ICT classroom. The bus has been used by over 6,000 young people in Nairobi.³⁰⁰

F.3 What proportion of the population and the workforce is skilled in the use of ICTs?

In a 2011 survey conducted by IDC,³⁰¹ 82% of respondents indicated that they were confident in their skills to create a blog or web page. However, 10% were neutral, 8% were not confident, and 2% did not know. On using an internet search engine, 79% said they were confident, 12% were neutral, 8% were not confident, and 1% said they don't know. On using email to communicate with others, 68% said they were confident, 12% were not confident, 12% were neutral, and 8% did not know. On finding, downloading and installing software, 49% said they were confident, 26% were not confident, 16% were neutral, and 9% did not know. On posting messages to chat rooms, newsgroups or online discussions, 29% said they were confident, 39% were not confident, 16% were neutral, and 16% did not know.

The National ICT Masterplan notes that the country does not have sufficient local high end skills, resulting in the local industry importing such skills.³⁰² These high-end skills set are found in ICT professionals such as ICT projects managers, network engineers, network administrators, system administrators, application developers, and information system analysts who manage complex system design, development, and integration.

Small and medium enterprise (SME) sector constitutes the largest proportion of businesses in Kenya. A recent study showed that ICT technology most widely used by the small and informal businesses in Kenya was the mobile phone, with 71.6% of respondents using their private mobile phones for business, and only 3.7% having a dedicated business phone. Turther, the use of computers and the Internet was found to be limited, at 1.4% and 3.7% respectively. There is no data to show the proportion of skill level in the workplace.

A 2017 UNESCO study found the number of students not achieving minimum proficiency levels in mathematics in sub-Saharan Africa for school going children in primary and lower secondary schools was 193 million representing 84% of all students, against a

http://icta.go.ke/pdf/THE%20NATIONAL%20ICT%20MASTERPLAN%202017.pdf

³⁰⁰ ITU, 30 August 2016, Craft Silicon Foundation's Mobile Lab Teaches Digital Skills to Youth in Kenya, Available from: http://digitalinclusionnewslog.itu.int/2016/08/30/craft-silicon-foundations-mobile-lab-teaches-digital-skills-to-youth-in-kenya/ [7 September 2019]

³⁰¹ IDC, 2011, Kenya ICT Board ICT Monitoring and Evaluation Indicators Study, Available from: http://icta.go.ke/pdf/Julisha%20Final%20Report%201.pdf [12 November 2019]

³⁰² National ICT Masterplan

³⁰³ State of ICT in Africa https://researchictafrica.net/wp/wp-content/uploads/2019/06/After-Access_The-state-of-ICT-in-Kenya.pdf

global average of 56%.³⁰⁴ In sub-Saharan Africa, only one in ten students reach a minimum level of proficiency in reading and mathematics.³⁰⁵ Globally, six out of ten children and adolescents are not achieving minimum proficiency levels in reading and mathematics.

The UNESCO dataset on distribution of tertiary graduates in Kenya by field of study in 2016 shows that 5.97% of graduates being from Social Sciences, Journalism and Information programmes; 7% from Natural Sciences, Mathematics and Statistics programmes; 5.26% from Information and Communication Technologies programmes; 4.22% from Engineering, Manufacturing and construction programmes; 2.75% from Agriculture, Forestry, Fisheries and Veterinary programmes; 16.48% from Science, Technology, Engineering, Mathematics (STEM) programmes; and 82.03% from Programmes other than STEM. The percentage of males graduating with STEM subjects was 20.84% and females 11.19%. The percentage of males graduating with ICT courses was 6.71% and females 3.50%.

Policy Recommendations for Various Stakeholders

Government

- 1. Invest in regular evidence-based research for decision-making. Government agencies should work with research methodologies that are verifiable and can be interrogated by the public.
- Regular studies on accessibility should be carried out to provide for time comparison, and insights for policy intervention. Specifically, access gap studies with aggregated statistics with respect to gender and location should be carried out on a regular basis.
- 3. The government, through incentives and regulations, should be more proactive in promoting competition in the provision of internet services; last mile connectivity and Internet Exchange Points (IXPs). Cost of starting internet provision enterprises should be lowered with tax incentives and construction of publicly shared infrastructure such as telecommunication masts and ducts. This would lead to better quality of service and affordable prices.
- 4. The government should promote information asymmetry by availing research data periodically for public consumption.
- 5. Kenya has several policies that promote access to the internet. However, their implementation has faced several challenges of administration and governance. Such policies, for example, access to information, cybersecurity and Universal Access should be implemented and evaluated periodically.

³⁰⁴ UNESCO, 21 September 2017, More Than One-Half of Children and Adolescents Are Not Learning Worldwide, Available from: http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf [17 October 2019]

³⁰⁵ UNESCO, 2019, Meeting commitments, are countries on track to achieve SDG4, Available from: http://uis.unesco.org/sites/default/files/documents/meeting-commitments-are-countries-on-track-achieve-sdg4.pdf [17 October 2019]

³⁰⁶ UNESCO, 2019, Education: Distribution of tertiary graduates by field of study, Available from: http://data.uis.unesco.org/index.aspx?queryid=163 [2 November 2019]

- 6. Government websites should offer services in both English and Swahili as those are the most widely used languages in the country. Counties should also have their websites in local languages to serve those who cannot read and communicate in both english and Swahili. For the population that can neither read nor write, government website content should also include videos and infographics.
- 7. The government should lower taxes for mobile phones to increase affordability among the citizens.

Academia

- 1. Academic institutions should identify their needs and work on innovations that are tailored towards the creation of relevant local content that can drive demand for internet access among the rural communities.
- 2. Learning institutions should develop courses on digital literacy, from primary schools to higher learning.

Civil Society

- 1. Civil society should advocate and work with other stakeholders to develop policies that promote internet access.
- Civil society organizations, especially those that exist to provide critical cheaper services to communities, such as provision of water and affordable energy alternatives for cooking should consider providing internet and its associated services.

Private sector

 Telecommunication companies should invest in infrastructure in areas that are still unconnected or are not profitable as part of Corporate Social Responsibility (CSR).

2. Community networks offer an alternative the best for connecting the unconnected citizens. This can be a shared responsibility between multiple stakeholders. Through affordable business models, the private sector can offer free internet services in exchange for other valuables such as advertisements and surveys. A good example of such models is Surf Kenya that is available in Western, Central and Coastal parts of Kenya.³⁰⁷

³⁰⁷ Surf Kenya, 2017, Home | Surf Kenya, Available from: https://www.surf.co.ke/ [22 September 2019]

Chapter 6: Category M – Multistakeholder Participation

Theme A – Policy, Legal and Regulatory Framework

A.1 Is there an overall policy, legal and regulatory framework for Internet development and policymaking which is consistent with international norms?

Article 2 of Kenya's constitution³⁰⁸ affirms the supremacy of the constitution and states that it: 'is the supreme law of the Republic and binds all persons and all State organs at both levels of government'. Further, in subsection 6, it provides for ratification of all laws stating that "any treaty or convention ratified by Kenya shall form part of the law of Kenya under this constitution." This means that Kenya is now a monist state, as international law automatically becomes part of the national law without a need for domestication. Accordingly, the country aligns with the international norms provided for in Article 2 (5) which provides that the "general rules of international law shall form part of the law of Kenya."

Kenya is therefore bound by the provisions on freedom of expression in regional and international instruments. Such provisions include: Article 9 of the African Charter on Human and People's Rights,³⁰⁹ Article 19 of the Universal Declaration of Human Rights,³¹⁰ and Article 19 of the International Convention on Civil and Political Rights.³¹¹ As such, any person whose rights are violated or is threatened in regard to their activities online has a basis to seek redress in a court of law for the particular breach or the protection of the law. The African Commission on Human and Peoples Rights ³¹² has principles on freedom of expression to guide African states on implementation of the freedom of expression.

In addition, the country's Constitution has a Bill of Rights considered progressive, and which applies and binds all citizens and State organs. It provides the broad structure that promotes freedom of expression. Article 33³¹³ of the constitution provides that: "every person has the right to freedom of expression, which includes - freedom to seek, receive or impart information or ideas; freedom of artistic creativity; and academic freedom and freedom of scientific research."

Further, the Bill of Rights provides for several fundamental rights and freedoms. They include the rights to privacy; access to information; to property; and to consumer

http://www.achpr.org/files/instruments/achpr/banjul_charter.pdf

http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf

³⁰⁸ The Constitution of Kenya. http://kenyalaw.org/kl/index.php?id=398

³⁰⁹ the African Charter on Human and People's Rights

³¹⁰ Universal Declaration on Human Rights.

³¹¹ International Convention on Civil and Political Rights

http://www.ohchr.org/Documents/ProfessionalInterest/ccpr.pdf

³¹² African Commission on Human and Peoples Rights. http://www.achpr.org/

³¹³ Ibid.

protection. Others are the right to fair administrative action; access to justice and fair hearing; freedom of conscience, religion and opinion; freedom of expression; and freedom of the media.

Moreover, Article 21³¹⁴ of the Constitution requires the State and every State organ to observe, respect, protect and fulfill the rights and fundamental freedoms in the Bill of Rights. The State is also required to enact and implement legislation to fulfill its international obligations in respect of human rights and fundamental freedoms. Article 22 further addresses the question of legal standing in court and grants every person the right to institute court proceedings if a right or fundamental freedom in the Bill of Rights has been denied, violated or infringed, or is threatened.³¹⁵

Existence of legal and regulatory frameworks to enable e-commerce, digital signatures, cybersecurity, data protection and consumer protection

Kenya's Computer Misuse and Cybercrimes Act 2018 assented to on May 30th 2018 aims to provide a legal framework for tackling cybercrime, including providing for investigation and prosecutorial procedures. However, the Act contains some controversial provisions such as the reintroduction of criminal defamation, and offences relating to fake news and false publications that in effect limit freedom of expression. Accordingly, its full implementation was suspended after the Bloggers Association of Kenya (BAKE) obtained a conservatory order that suspended the entry into force of 26 sections of the Act. HAKE challenged the law for contravening constitutional provisions on freedom of opinion, freedom of expression, freedom of the media, freedom and security of the person, right to privacy, right to property and the right to a fair hearing. Article 19 Eastern Africa supported BAKE's position and described the controversial provisions as "extremely vague and ambiguous" and if sanctioned would allow for gagging of legitimate expression online. The case is ongoing and the final verdict is yet to be made.

Kenya's Data Protection Act, 2019 became law on November 20, 2019 upon being assented by Kenya's President.³²⁰ The Act gives effect to article 31 of Kenya's Constitution which is on privacy. This Article provides that:

³¹⁵ KHRC. The ICT legislative and policy environment in Kenya. 2014. https://tinyurl.com/qmwersy

Cybercrimes Act, 2018. https://www.africalegalnetwork.com/legal-alert-kenya-high-court-suspends-computer-misuse-cybercrimes-act-2018/

³¹⁴ The Constitution of Kenya. http://kenyalaw.org/kl/index.php?id=398

³¹⁶ Kenya Gazette Supplement. *The Computer Misuse and Cybercrimes Act, 2018.*http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/ComputerMisuseandCybercrimesActNo5of2018.pdf
317 Africa Legal Network (ALN). *Legal Alert | Kenya | High Court Suspends the Computer Misuse and Cybercrimes Act, 2018, https://www.africalegalnetwork.com/legal-alert-kenya-high-court-suspends-*

³¹⁸Sections of Kenya's Computer Misuse and Cybercrimes Act, 2018 Temporarily Suspended. https://cipesa.org/2018/05/sections-of-kenyas-computer-misuse-and-cybercrimes-act-2018-temporarily-suspended/

³¹⁹ Article 19. *Kenya: Suspension of Cybercrimes Act provisions a welcome step to protect free expression.* June 05, 2018. https://www.article19.org/resources/kenya-suspension-of-cybercrimes-act-provisions-a-welcome-step-to-protect-free-expression/

³²⁰Business Daily. *Uhuru signs Data Protection Bill into law.* November 8, 2019. https://www.businessdailyafrica.com/releases/Uhuru-signs-Data-Protection-Bill-into-law/1941082-5341658-njto1jz/index.html

Every person has the right to privacy, which includes the right not to have—

- (a) Their person, home of property searched;
- (b) Their possessions seized;
- (c) Information relating to their family or private affairs unnecessarily required or revealed; or,
- (d) The privacy of their communications infringed.

The Data Protection Act provides for the establishment of the office of the Data Commissioner, and lays down the rules for the protection of personal data by both public and private entities. However, the Act has been challenged in court by a renowned Activist, who claims that the Act was enacted through unconstitutional exercise as the Senate was blocked from inputting into the Act when it was a Bill. Further, that the Act is invalid as it contains unconstitutional provisions.³²¹

However, there are still a number of laws that protect the right to privacy of personal data. These include the Official Secrets Act; Children's Act; HIV and AIDS Prevention and Control Act; Witness Protection Act; and the Banking Act. Others are the Credit Reference Bureau Regulations and Capital Markets Act; Access to Information Act; and the Public Archives and Documentation Service Act; the Kenya Information and Communications Act (KICA); Private Security Regulation Act; and the Elections (Technology) Regulations, 2017.

Together with professional ethics and pronouncements of the courts, these laws regulate aspects of data processing in specific cases. However, they do not comprehensively cover all instances of data processing. For instance, educational institutions collect personal data of their students. These institutions are not beholden to protect the data from unauthorised access and use. In addition, online platforms that people use to access internet services for example Facebook and Twitter are not subject to data protection licence conditions under the Kenya Information and Communication Act (KICA).

Ecommerce and Digital signatures

Kenyans are able to conduct bank transactions online, and shop online. They can also trade or make payments using mobile money. Government services are accessible online and Kenyans can access government services through the ecitizen portal.³²²

In regard to digital signatures, the Kenya Information and Communication Act (KICA)³²³ section 83 (O) (3) defines what constitutes an electronic signature. Further, section 83 (P) provides what constitutes the legal recognition of electronic signatures.

Theme B - National Internet Governance

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³²¹ Petition 454 of 219.

 $^{^{322}}$ E-citizen: Services and information. $\underline{\text{https://www.ecitizen.go.ke/ecitizen-services.html}}$

³²³Kenya Information and Communication Act (KICA). https://kfcb.co.ke/wp-content/uploads/2016/07/Kenya Information and Communications Act.pdf

B.2 Does the government actively involve other stakeholder groups in developing national Internet policies and legislation?

Kenya has a multistakeholder model of policy making enshrined in its Constitution³²⁴ entrenched in Article 10 which requires the involvement of citizens in policy-making processes, including whenever any State Organ, State Officers or public officers applies or interprets the Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions. This requirement is considered as one of the national values and principles of governance. Others include: Patriotism, national unity, sharing and devolution of power, the rule of law, democracy and participation of the people. This article therefore places a constitutional requirement of public participation in any public policy making process.

Where Internet policy is concerned, the National Communication Secretariat (NCS)³²⁵ in the Ministry of ICT, and the Communications Authority (CA)³²⁶ spearhead policy making processes. The NCS formulates policy papers, session papers and laws on ICT, while CA is responsible for facilitating the development of the information and communications sectors mostly through formulation of legislation. CA usually calls for public participation even though sometimes the timeframe provided within which stakeholders should give input is often short and unrealistic for any meaningful input. The NCS also attempts to engage the public, with a key example being during the ICT policy review of 2016 where different industry stakeholders were involved in the review of this policy.

Both institutions place public consultation announcements on their websites, in newspapers and on television. These are also sometimes followed by face to face meetings with stakeholders where issues are raised and discussed, including those considered controversial. However, even with these consultations, there are times when input made by stakeholder groups is never reflected in final outcome documents.

Other institutions charged with internet policy development are the National Assembly and the Senate ICT Committees. Their work falls under the legislative role of Parliament, which is derived from the people. The two ICT Committees in line with the Parliamentary Standing Orders, usually call for public engagement through the newspapers, which are followed by public hearings after stakeholders have sent in their memos to the Clerks of the relevant houses of Parliament. This participation of citizens in law making processes is a constitutional requirement grounded in Article 118 (1) (b) which requires Parliament to "facilitate public participation and involvement in the legislative and other business of parliament and its committees." Additionally, the

³²⁴ The Constitution of Kenya 2010

³²⁵ The National Communications Authority. https://ncs.go.ke/index.php/about-us

³²⁶ Communications Authority of Kenya. https://ca.go.ke/

³²⁷ The Constitution of Kenya: Role of Parliament. http://www.klrc.go.ke/index.php/constitution-of-kenya/122-chapter-eight-the-legislature/part-1-establishment-and-role-of-parliament/262-94-role-of-parliament

³²⁸ Article 118 of Kenya's Constitution on Public Access and Participation. http://www.kenyalaw.org:8181/exist/kenyalex/actview.xql?actid=Const2010

National Assembly Standing Order 127 (3)³²⁹ requires the "departmental committee to which a Bill is committed to facilitate public participation and take into account the views and recommendations of the public when the committee makes its report to the house."

An example is where both the National Assembly and the Senate proposed legislation separately but called for public participation is the Data Protection Bill 2019. Both committees gazetted their public consultation announcements. The public participation engagements were set to be carried out across different parts of Kenya in line with the Standing Orders.³³⁰

Other proposed draft bills by Parliament have also been made available through online channels such as government websites. For example the the Kenya Information and Communication (Amendment) Bill 2019 (No. 61 of 2019 and No. 20 of 2019) were posted on the National Assembly website and stakeholders urged to send in memorandum.³³¹

The Communications and Multimedia Appeals Tribunal, established under the Kenya Information and Communications (Amendment) Act of 2013 has been reviewing its mandate to adjudicate disputes in the entire communications and multimedia sector. The Tribunal also put out a call for recommendations on the Judiciary website.³³²

Nevertheless, it is not always easy for the public to access bills tabled in Parliament³³³ or even in Newspapers especially if they cannot afford to purchase them on a daily basis, or have internet access. Parliamentary notices in newspapers are seen by only about 2% of the Kenyan population.³³⁴ The notices are not usually placed on radio stations, despite the fact that they are accessed by 80% of Kenyans.³³⁵ In addition, there are times when the notice periods given for input by the public are very short. Further, as a result of security concerns, public access to Parliament buildings is highly controlled.

Given the circumstances, it is difficult to monitor bills, including changes made in real time at different stages of the legislative process. The current process only allows for tracking of the bills and not the substantive content. It is worth noting that the National Assembly has published two bills on public participation. They are Public Participation (No. 69 of 2019) which seeks to give effect to Article 10 of Kenya's Constitution, through the provision of a general framework for effective participation, and Public Participation

³²⁹ Standing Orders of the National Assembly. *Order 127 on Committal of Bills to Committees and public participation* http://www.parliament.go.ke/sites/default/files/2017-

^{05/}Standing Orders National Assembly.pdf

³³⁰ Parliament sets public participation date for data protection bill 2019. https://techweez.com/tag/national-assembly/

³³¹Kenya Information and communication Amendment bill

^{2019.} http://parliament.go.ke/sites/default/files/2019-

^{10/}Kenya%20Information%20and%20Communication%20%28Amendment%29%20Bill%2C%202019-No.2 compressed.pdf

³³² Communications and Muilti-Media Tribunals. https://www.judiciary.go.ke/communication-and-multimedia-appeals-tribunal/#1535537953409-7184729a-b

³³³ Open Government Partnerships. *Enhance Transparency in the Legislative Process* (KE0012). https://www.opengovpartnership.org/members/kenya/commitments/KE0012/334 lbid.

³³⁵ ibid.

bill (No.2) (National Assembly Bill No, 71 of 2019).

Furthermore, different stakeholders drawn from the business, government, civil society, academia and others participate in ICT policy consultations. Usually they are motivated by different interests. Groups such as the Kenya ICT Action Network (KICTANet), Kenya Private Sector Alliance (KEPSA), the regulator the Communications Authority (CA) are active in different ICT public participation processes. Also, there is a lack of disaggregated data on stakeholders including the number of non-governmental stakeholder groupings that take part in consultations.

B.3 Is there a national Internet Governance Forum and/or other multistakeholder forum open to all stakeholders, with active participation from diverse stakeholder groups?

The social, economic and political environment has ian impact on internet governance engagement in Kenya. The ICT sector continues to play an increasingly important role in the economy of the country, if the high mobile and internet penetration rates of above 100% which highest in East Africa are anything to go by.³³⁶

In addition, Kenya was among the first countries in Africa to host a national Internet Governance Forum (IGF). The Kenya IGF (KIGF), now in its 11th year, has been hailed as one of the continent's success stories. The Kenya ICT Action Network (KICTANet)³³⁷ with the support of industry stakeholders³³⁸ has convened the event since 2008. In 2008, Kenya with the support of the Geneva based Secretariat of the Internet Governance Forum hosted the first ever national Internet Governance Forum in Africa. The hosting was grounded on the outcomes of the World Summit on the Information Society's (WSIS) Declaration of principles on International and regional cooperation whose Article 62 states that:

Regional integration contributes to the development of the global Information Society and makes strong cooperation within and among regions indispensable. Regional dialogue should contribute to national capacity building and to the alignment of national strategies with the goals of this Declaration of Principles in a compatible way, while respecting national and regional particularities. In this context, we welcome and encourage the international community to support the ICT-related measures of such initiatives.³³⁹

In addition, the Tunis Agenda for the Information Society³⁴⁰ Articles 29-37 call for an Internet governance that is multistakeholder in nature. Article 31 states:

We recognize that Internet governance, carried out according to the Geneva

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³³⁶ First Quarter Sector Statistics Report For the Financial Year 2018/2019 https://ca.go.ke/wp-content/uploads/2018/12/Sector-Statistics-Report-Q1-2018-2019.pdf

The Network aims to act as a catalyst for reform in the ICT sector in support of the national aim of ICT-enabled growth and development.

³³⁸ Githaiga, G. and Victor Kapiyo. 2017. *Pioneering Internet Governance in Africa* in GlWatch 2017 Edition, Kenya Chapter. https://www.giswatch.org/sites/default/files/giswatch17_web.pdf

³³⁹ WSIS Declaration of Principles. http://www.itu.int/net/wsis/docs/geneva/official/dop.html

³⁴⁰ WSIS 2003-2005 Tunis Agenda for the Information Society. https://www.itu.int/net/wsis/docs2/tunis/off/6rev1.html

principles, is an essential element for a people-centred, inclusive, development-oriented and non-discriminatory Information Society. Furthermore, we commit ourselves to the stability and security of the Internet as a global facility and to ensuring the requisite legitimacy of its governance, based on the full participation of all stakeholders, from both developed and developing countries, within their respective roles and responsibilities.

KICTANet continues to convene the KIGF, with the support of stakeholders and partners drawn from both state and non-state actors. The hosting of the KIGF is multistakeholder in nature in terms of choice of topics and their discussion, participants, and resources contribution.³⁴¹ KICTANet has also hosted two editions of the sub-regional East Africa IGF, and the 2012 Africa IGF. Further, KICTANet was a key stakeholder member in organising and hosting the global IGF held in 2011 in Nairobi.³⁴²

KIGF is recognised as a National and Regional Initiative (NRIs) under the IGF global secretariat. Its outcomes feed into the global level IGF. Objectives of KIGF include:343 to bring together local stakeholders in open and inclusive dialogue; create opportunities to share best practices and experiences; identify emerging issues and bring them to the attention of the relevant bodies and the general public; and, contribute to capacity building for Internet governance. The forum is held in an informal setting, free from binding negotiations and brings together diverse stakeholders from government, private sector, technical community, academia and civil society to discuss Internet governance issues on an equal footing through an open and inclusive process.

In convening the KIGF, KICTANet adopts the global practice of having in place a Multistakeholder Advisory Group (MAG), which is tasked with the responsibility of steering the forum. The MAG is diverse in nature and representative of diverse stakeholder groups. The topics that form into the discussions of the forum are crowd sourced from a variety of platforms including the KICTANet mailing list, skunkworks technical list and the security mailing lists. The conversations are also held on KICTANet's social media handles including twitter and facebook to enhance participation. The MAG then groups the topics into broad themes and again these are subjected to voting by the stakeholders. The topics that carry the day then form the four main topics of discussion during the face to face convening.³⁴⁴

Events such as the KIGF continue to play a crucial role in increasing regional participation at the global IGF. The multistakeholder model adopted in convening the

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³⁴¹ KICTANet's experience in KIGF convening over the years.

³⁴² Githaiga, G. and Victor Kapiyo. 2017. *Pioneering Internet Governance in Africa* in GIWatch 2017 Edition, Kenya Chapter. https://www.giswatch.org/sites/default/files/giswatch17 web.pdf

³⁴³ 11TH Edition Kenya Internet Governance Forum. https://www.kictanet.or.ke/?page_id=40115

³⁴⁴ Drawn from KICTANet's experience of convening the KIGF.

KIGF continues to be improved with every year. Multistakeholderism continues to be reflected in the selection of topics to be discussed, as well as in funding with businesses, telcos, development partners and the regulator supporting the KIGF in one form or another. Support has included resources as funds, connectivity, airtime, and so on. The same is also true of other ICT processes, although there have been instances where some stakeholders have been seen to wield more control than others. Nonetheless, this multistakeholder model in ICT policy making, if properly implemented, remains a powerful and useful model for public consultation. Increasingly, the various stakeholder groups are getting more organised and are capable of advancing convincing policy positions.

Participation data for national IGF or other fora, aggregate and disaggregated by sex and stakeholder group, with particular attention to participation by selected groups (e.g. education ministries, SMEs, NGOs concerned with children, trades unions), and including arrangements for remote participation

The Kenye Internet Governance Forum throughout its eleven editions has maintained and endeavoured to have a balanced multi-stakeholder process which has diverse groupings. Representation has included government officers drawn from different ministries and sectors who participate in high panel discussions and give keynote speeches, private sector representation from some of the largest telco companies, small medium enterprises, civil society and youth.³⁴⁵

Since 2017, KICTANet in collaboration with Watoto Watch Network,³⁴⁶ has held three Youth IGFs as pre-events at the KIGF. This Youth IGF was inaugurated in 2017.³⁴⁷ The youth IGF happens as a separate one day event, and the participants join the main Kenya IGF event where they are provided a slot in the programme to share the highlights of their discussions. The Youth IGF participants are students drawn from various schools and institutions and who contribute on different internet governance issues affecting the youth.³⁴⁸

Each of the last three editions of the Kenya IGF has had in attendance more than 200 participants of different genders, age and stakeholder groups. They have been drawn from government, the private sector, academia, the media, civil society, technical community and individual users all who deliberate on existing and emerging internet-related matters. The forum is also streamed live and available online on multiple social media channels. Remote participation has also allowed for online conversation through dedicated Twitter hashtag for the specific year. This hashtag has been the country's top trending topic for two consecutive days during the KIGF event. For instance in 2018, the event generated more than 2,000 tweets with estimated economic value was \$18,321.1.349

³⁴⁵ Internet Governance Forum Reports. https://www.kictanet.or.ke/?page_id=40115

³⁴⁶Watoto Watch is a Non-profit organization raising awareness on Child Online Protection by implementing informative and sensitization programs on internet safety. http://watotowatchnetwork.org/

³⁴⁷ Watoto Watch Network Youth IGF https://watotowatchnetwork.org/tag/kenya-youth-igf/

³⁴⁸ Youth IGF 2017. https://kigf.or.ke/category/youth-igf/

^{349 11}th edition Kenya IGF https://www.kictanet.or.ke/?page_id=40115

Moreover, KICTANet has managed to sustain multistakeholder representation and participation at national IGFs. However, more still needs to be done to have participation of different government ministries such as the Ministry of Education, SMEs, NGOs concerned with children, and trade unions. In addition, there is no disaggregated data of participants. Disaggregated data of participants from the different stakeholder groups can help in the evaluation and measurement of participation and will inform meaningful inclusion of various stakeholders in future engagements.

Theme C - International and Regional Internet Governance

C.2. Do government and other stakeholders from the country actively participate in

major international fora concerned with ICTs and the Internet?

Kenya is a member of the International Telecommunication Union (ITU).³⁵⁰ Accordingly, the country is active in the meetings of the three sectors of the ITU that is: the ITU radiocommunication sector (ITU-R) where Kenya is the current Chair of the group; the International Telecommunication Union - Telecommunication (ITU-T) standardization sector; and, the International Telecommunication Union-Development (ITU-D).

The ITU-R ensures the effective use of the spectrum through the management of the radio frequency spectrum and standards for radio communications systems. The ITU-T works towards the promotion of agreed standards for telecommunications equipment and systems. ITU-D creates policies, regulations, strategies for finance and comes up with training programs in developing countries.

Most members in these three sectors are drawn from governments. For Kenya, the only stakeholder who participates in these three meetings is Safaricom. Other stakeholders such as Airtel Networks and Silensec Africa Limited are listed but only attend the ITU-D meetings.³⁵¹ There is also the African Advanced Level Telecommunications Institute from Nairobi, which is the only academia, listed in the universal research category.³⁵²

Kenya also participates in the ITU Plenipotentiary Conference³⁵³ which is the highest level meeting that takes place at the ITU every four years.³⁵⁴ At the conference, the 193 members review the last four years and agree on issues that they think are important, and which the ITU should focus on. Further, membership drawn from 193 member states agree on the ITU's overall strategic plans and provide guidance and direction for the next four years. The conference takes place over a three week period, with the first week dedicated to elections of the ITU leadership for the next four years, including the

³⁵⁰ List of ITU member states. https://www.itu.int/online/mm/scripts/gensel8

³⁵¹ Kenya. https://www.itu.int/online/mm/scripts/gensel9?_ctryid=1000100574

³⁵² List with participants status. https://www.itu.int/online/mm/scripts/gensel9?_ctryid=1000100574

³⁵³ The Plenipotentiary Conference (or Plenipot) is an international treaty conference organised by the ITU every four years.

³⁵⁴ The ITU Plenipotentiary Conference consists of the representatives of the Member States of the Union https://www.itu.int/web/pp-18/en/page/1-about

election of a new Secretary General. Kenya's delegation is usually headed by the Minister of ICT or the Director General of regulator the CA. With the exception of 2012 which took a multistakeholder delegation to the World Conference on International Telecommunications (WCIT), Kenya's delegation usually comprises mostly government officials drawn from the Ministry of ICT, the Communications Authority (CA), and a few members from the National Assembly.

In 2012, the delegation from Kenya to WCIT 2012 was multi-stakeholder in nature. It comprised representatives from industry, technical community, civil society, media, academia and government. But since then, there was a change in leadership at the Ministry of ICT following a new government coming to power in 2013, whose approach to engagement has not been multistakeholder based. Since then, there have been hurdles for non-state actors to be accredited by the government to be part of the country delegations to treaty making ICT processes. This has been the case despite non-state actors petitioning the Ministers of ICT in 2014 and in 2018 seeking accreditation for participation. In 2014, the Minister of ICT in his response to the request for accreditation by non-state actors, indicated that the Kenya Delegation had enough members. This is despite the fact that ITU does not restrict the number of delegates from a county, and in fact."..encourages Member States to have a good gender balance and a range of stakeholders from the public and private sectors, and civil society". But the country is society and civil society.

On both occasions, the Ministry of ICT did not offer valid reasons for declining to accredit the non-state actors to its delegation. However, the non-state stakeholders felt that there is some level of intolerance of any different views or perspectives by state actors. This important to note that non-state actors through multistakeholder processes may at times have opposing viewpoints and recommendations that may be viewed as incompatible with what is agreed as an African Common position. Non-state actors have on several occasions pushed for Kenya to remain committed to the public interest values such as freedom of expression and free flow of information on the Internet, as well as upholding human rights obligations. Nevertheless, the non-state actors have found their way to these meetings through their own means and as a result of accreditation from foreign governments. Notably, in both 2014 and in 2018 (Busan and Dubai), and once at the venue, these non-state actors were invited to participate in the country's deliberations, and on positions that Kenya took on different ICT topics.

Kenya also sends a delegation to the global Internet Governance Forum every year. The delegation usually comprises representatives from the Ministry of ICT, members of staff and board members from the sector regulator, and members of the National Assembly ICT Committee. The CA has also sent representatives to attend the World Summit on the Information Society (WSIS) though there has been no consistency in attendance.

³⁵⁵ Fighting for Internet Freedom: Dubai and Beyond: Joint Hearing Before the ...2013. Washington DC. https://tinyurl.com/vgd4etb

³⁵⁶ ITU. Emerging Trends/ ICT4SDG/ITU Plenipotentiary Conference 2018. October 29, 2018. https://news.itu.int/what-you-need-to-know-about-the-itu-plenipotentiary-conference-2018/ | ICT4SDG |

³⁵⁷ KICTANet's experience during the 2014 and 2018 Plenipots in Busan and Dubai respectively.

 $^{^{358}}$ The African common position is based on the African countries coming together as the African block, and is based on political interests.

In terms of participants to this meeting, the disaggregated data is not available. Further, the list of participants to the ITU meetings is not made public as is only available to members who have an ITU TIES account.³⁵⁹

C3. Does the government and do other stakeholders participate actively in ICANN?

Membership of and active participation in ICANN's Governmental Advisory Committee (GAC)

The Government Advisory Committee (GAC) is an ICANN advisory committee, set up under the ICANN By-laws. Its task is to advise ICANN on Domain Name System (DNS) public policy concerns. Kenya participates in ICANN and is a member of the Government Advisory Committee (GAC). Currently three members, that is two drawn from the Communications Authority (CA), and one from the Ministry of ICT are designated as members. Currently, it is not clear how actively the three members participate in the GAC meetings. Previously, Kenya was very active in GAC and was able to bid to host ICANN 37. Kenya was active for a period spanning 10 to 13 years and contributed substantially to various policy documents and processes such as the Generic Top Level Domain (GTLD) guidebook to accountability. Kenya was also active in supporting the Africa Union's dot. Africa (.africa) work. We were a force to be reckoned with avers Alice Munyua.

In May 2016, ICANN established an African engagement office in Nairobi to support efforts of the global stakeholder engagement team in Africa, and promote capacity building in the domain name space in Africa.³⁶⁴ In January 2017, GAC with the support of the Communications Authority (CA) conducted its first capacity building workshop in Kenya on "Harnessing the Potential of the Africa GAC Members for better Participation in ICANN." This was specifically for Africa GAC members.³⁶⁵ Kenya's ICT Minister delivered the keynote address.

Membership of and active participation in ICANN constituencies, working groups and other fora.

³⁵⁹ **TIES** (Telecommunication Information Exchange Service) is a set of networked information resources and services offered by **ITU** without any charge to **ITU** Members (Member States, Sector Members, Associates, and Academia) to support their participation in the activities of the Union.

³⁶⁰ About GAC. https://gac.icann.org/about/members

³⁶¹ About GAC Membership. https://gac.icann.org/about/members

³⁶² ICANN meetings. https://archive.icann.org/en/meetings/nairobi2010/

³⁶³ Interview with Alice Munyua who was GAC's vice chair for two years. She was the founding Chair of the Public safety working group which she served for 3 years, and the Under-served regions working group for 3 year. The two groups are under GAC. November 20, 2019.

³⁶⁴ ICANN Launches African Engagement Office In Nairobi. https://www.icann.org/news/blog/icann-launches-african-engagement-office-in-nairobi

³⁶⁵ICANN Holds the First Capacity Building Workshop for African GAC Members. https://www.icann.org/news/announcement-2017-01-13-en

Other than in GAC, Kenya is also represented in different ICANN constituencies. Several Kenyans are active in various constituencies and Working Groups at ICANN.³⁶⁶ For Example Kenyans are present in the following groups:

- a) Expedited Policy Development Process (EPDP) working group:³⁶⁷ The EPDP role is to review the Temporary Registration Data Specification on gTLD. It then decides whether it should become an ICANN Consensus Policy as it is, or whether it should be revised in accordance with the GDPR and other relevant privacy and data protection laws and regulations.
- b) The Security and Stability Advisory Committee (SSAC) Caucus³⁶⁸ gives direction to the ICANN community and Board on the security and integrity concerns related to the allocation on the Internet naming and address systems.
- c) The Country Code Names Supporting Organisation (ccNSO) Council³⁶⁹ which is the forum where country code Top Level Domain (ccTLD) managers come together and raise concerns from a global perspective on the topical issues of ccTLDs.
- d) At-Large Advisory Committee (ALAC)³⁷⁰ liaison to the ccNSO. ALAC is the place for individual Internet user's voices and concerns.
- e) NextGEN selection committee,³⁷¹ where those selected to participate in this program are coached and receive travel support. They are mostly students from Continent countries where there is a specific ICANN meeting.
- f) Kenya was also in the leadership of the Non Commercial Users Constituency (NCUC) for three years (2014-2016).³⁷² This is the maximum that a leader can serve in one position. NCUC's role in ICANN is to ensure that the voices of the non commercial users are heard at ICANN.

Challenges

Multistakeholderism in ICT policy making seeks to bring together diverse groups such as the government, industry, technical experts and civil society – to engage in the design and implementation of policy standards. The concept underpinning this model is that all actors that make a significant contribution to the digital governance system should participate in a consensus decision representing a collection of agreed viewpoints rather than a single source of confirmation, and thus gain legitimacy. However, sometimes efforts to build a meaningfully inclusive multistakeholder approach are undermined by mistrust among stakeholders. This has seen instances where some stakeholders have been excluded in some policy making process, or their positions not being reflected in the final outcome documents.

³⁶⁶ Interview with Bob Ochieng ICANN, 8TH October 2019

³⁶⁷ Initial Report of the Expedited Policy Development Process (EPDP) on the Temporary Specification for gTLD Registration Data Team. https://www.icann.org/public-comments/epdp-gtld-registration-data-specs-initial-2018-11-21-en

³⁶⁸ Security and Stability Advisory Committee (SSAC) Caucus. https://www.icann.org/groups/ssac

³⁶⁹ Country Code Names Supporting Organisation (ccNSO) https://ccnso.icann.org/en

³⁷⁰ ALAC. <u>https://atlarge.icann.org/alac</u>

³⁷¹ NextGen @ICANN. https://www.icann.org/public-responsibility-support/nextgen

³⁷² Non Commercial Users Constituency. https://www.ncuc.org/

Further, in instances where the ICT committees of the National Assembly and Senate, as well as the Communication Authority have called for public participation on laws, a low engagement of ordinary citizens has been witnessed. This is either due to lack of understanding on how ICT policy processes relate to them, or have missed the announcement calling for public participation mostly placed in daily newspapers.

Another challenge noted is that sometimes people have participated in these policy engagements, but feel that the processes lack seriousness as there is no criteria on how to participate, forms of redress and feedback mechanisms. Therefore, they appear to be exercises of ticking the box to fulfil a constitutional requirement.

Policy Recommendations for Various Stakeholders

Government

- 1. Enact public participation legislation and policy framework to guide the public participation process. The framework should provide for the avenues, thresholds, timelines and formats for citizen engagement while also ensuring access to draft bills, and reporting back structures and mechanisms.
- 2. Facilitate citizen engagement with Parliament and County Assemblies through alternative media, including radio and mobile phones.
- 3. Adopt open-source platforms to enhance internal parliamentary and County Assembly communication and also facilitate information sharing with the public.
- 4. Provide access to weekly Senate, National Assembly, County Assembly plenary and committee proceedings by leveraging on both traditional and new media.
- 5. Promote multistakeholder participation by having an open door policy on policy formulation process on Internet governance discussions at national and county levels.
- 6. Different government ministries such as on Education, Trade, Industrialisation, SMEs and NGOs should be encouraged to participate in policy making on ICT issues that affect on their work.
- Government delegations to treaty making conferences should have multistakeholder delegations comprising the government, industry, technical experts and civil society.
- 8. Parliament should consider leveraging social media for expanded public engagement.

Civil Society

- Conduct research and document data on all multistakeholder engagements to track participation, and monitor inclusion, diversity and stakeholder representation.
- Engage the national and county governments on ICT policy initiatives as well as find ways to collaborate or utilize the existing policy structures and processes to foster good governance.

- 3. Hold the government accountable to transparent and open multi-stakeholder participation to internet-related policy processes.
- Advocate for balanced and inclusive stakeholder representation at national internet governance forums and engagements especially internet governance forums.
- 5. Foster more inclusive participation on internet governance issues from underrepresented groups such as women, persons with disabilities and marginalized communities.

Private Sector

1. Private sector should collaborate with industry stakeholders in engaging the government on proposed legislation or proposing amendments on policies and laws, and initiating policies that allow for a conducive business environment.

Technical Community

- Cultivate interest and participate in policy making processes together with other stakeholders
- 2. Advocate for an enabling environment to operate in, including for innovation and favourable work conditions.

Academia

- 1. Conduct evidence-based research on emerging issues that touch on multistakeholderism.
- 2. Provide evidence-based recommendations on how multistakeholderism can be strengthened.
- 3. Disseminate research findings widely and on different platforms to ensure it reaches different stakeholders.
- 4. Champion for multistakeholderism curriculum on development and design in learning systems.

Media

- 1. Report and cover more news stories on internet governance and the multistakeholder nature of Internet governance.
- 2. Promote awareness to citizens on internet governance issues.
- 3. Engage in national, regional and global forums to understand and build knowledge in the area of internet governance.

Individual Users

1. Cultivate interest, and endeavor to participate in awareness creation programs on Internet governance and the meaning of multistakeholderism.

Chapter 7: Category X – Cross-cutting indicators

Theme A – Gender

A.1 Are the interests and needs of women and girls explicitly included in national strategies and policies for Internet development, and effectively monitored?

The Internet has experienced significant growth in Kenya, a situation characterized by the early adoption of the Internet, and an enabling regulatory and policy environment. These have contributed to the evolution of a dynamic technology ecosystem supported by the government, private sector, civil society, and citizenry actors, and founded on a robust infrastructure.

There are various laws and policies in Kenya which broadly promote equity on the Internet among genders namely: Vision 2030, the Constitution, the National Gender and Equality Act (2011), the Data Protection Act (2019), the Digital Economy Blueprint (2019), the Kenya National ICT Master Plan 2014 - 2017, and the National Information & Communications Technology (ICT) Policy 2016.

The Vision 2030 blueprint was launched in 2030 as a means to accelerate Kenya's transformation into an industrialized country by 2030. It emphasises the need for gender equity in the distribution of power and resources, improved livelihoods for vulnerable groups, and responsive, globally competitive youth.

Article 27 of the Constitution provides that all citizens are equal and entitled to freedom from discrimation. The National Gender and Equality Act (2011)³⁷³ provides for the promotion of gender equality and freedom from discrimination, and additionally to "establish, consistent with data protection legislation, databases on issues relating to equality and freedom from discrimination for different affected interest groups and produce periodic reports or natinoal, regional and international reporting on progress in the realization of equality and freedom from discrimination for these interest groups".³⁷⁴

The Kenya Digital Economy Blueprint³⁷⁵ has as its mission: "a nation where every citizen, enterprise and organization has digital access and the capability to participate and thrive in the digital economy." The blueprint articulates five core areas of emphasis as follows: Digital Government; Digital Business; Infrastructure; Innovation-Driven Entrepreneurship and Digital Skills and Values.

Additionally, the government has more specifically articulated gender equity in the ICT

³⁷³ The National Gender and Equality Act (http://extwprlegs1.fao.org/docs/pdf/ken128411.pdf)

³⁷⁵ Digital Economy Blueprint (https://ca.go.ke/wp-content/uploads/2019/05/Kenyas-Digital-Economy-Blueprint.pdf)

sector in the National ICT Master Plan³⁷⁶ and the National ICT Policy 2016.³⁷⁷ The former includes the provision of equitable, non-discriminatory access to ICTS to women, youth and disadvantaged communities; and the promotion of Kenyan ICT companies through local procurement and export promotion.

The draft National ICT Policy 2016³⁷⁸ is an updated version of policy developed a decade previously and has among its objectives the giving of "special attention to providing new learning and ICT access opportunities for women and youth, the disabled and disadvantaged, particularly disenfranchised and illiterate people, in order to address social inequities".³⁷⁹

To achieve the policy objectives, draft National ICT Policy 2016³⁸⁰ called for the creation of opportunities and assisting various groups, including women, to acquire ICT skills. Additionally, it called for "engaging of women, youth and children, communities in underserved areas, and other disadvantaged groups, including people with disabilities, through e-inclusion and e-accessibility activities and programmes".

Numbers of women and men in senior policymaking positions in government concerned with ICTs/Internet

The number of women and men in senior policy making positions in government bodies concerned with ICTs and the internet reflects global trends where the leadership and management in most organizations concerned with ICT policy in Kenya tends to be mostly male. As shown in the table below, the Communications Authority of Kenya has 13 members on the management team, 3 of whom are women. The 9-member Senate Committee on Information, Communication and Technology has 2 women and 7 men. However, there are policy-making initiatives, such as the Kenya ICT Authority, whose management team of five, women are the majority.

Table 1: Men to women ratios in leadership/management roles at ICT-related entities in Kenya

Organization	Leadership	Men:Women ratio	Top leadership post held by a woman
Communications Authority of Kenya ³⁸¹	13	10:3	Acting Director-General
Senate Committee on Information, Communication and Technology	9	7:2	Vice chair

³⁷⁶ National ICT Master Plan (http://icta.go.ke/national-ict-masterplan/)

³⁷⁷ National ICT Policy (http://icta.go.ke/national-ict-policy/)

³⁷⁸ National ICT Master Plan (http://icta.go.ke/national-ict-masterplan/)

Ndung'u, M.N., Lewis, C., & Mothobi, O. (2019). After access: The state of ICT in Kenya. Policy Paper No. 9, Series 5. Research ICT Africa (p. 37). https://researchictafrica.net/wp/wp-content/uploads/2019/06/After-Access The-state-of-ICT-in-Kenya.pdf

³⁸¹ Communications Authority of Kenya - About us https://ca.go.ke/about-us/

Kenya ICT Authority Board of Directors ³⁸²	10	6:4	Chief Executive Officer
Kenya ICT Authority Management ³⁸³	5	2:3	Chief Executive Officer
Konza Technopolis Development Authority Board of Directors ³⁸⁴	9	7:2	Member
Konza Technopolis Development Authority Board Management ³⁸⁵	11	6:5	Manager

Extent of disaggregation of available data on ICT access and use by sex

There are a variety of research studies and reports generated by academics, government, and civil society organizations concerning ICT use and access by gender in Kenya. However, a greater variety of studies would need to be done to gain a more widespread and consistent perspective.

A 2019 study³⁸⁶ established that most non-Internet users (84%) were based in the rural areas, and a majority (58%) were female. The National ICT survey³⁸⁷ indicated that the access to ICT equipment differed between women and men, with men having a higher proportion of their population having access to ICTs compared to the women. For men, 60.8% had access to mobile phones while 58.9% of women had access to mobile phones, a difference of 1.8 percentage points. The access to computers and to the Internet for both males and females in 2010 was each below 10% of the sampled population for each gender, with men having a marginally higher number compared to the women.

In terms of averages, the two genders differ in the average use of mobile phones to call. During the seven days before the survey was conducted as shown in the table below.

Table: Mobile phone use in seven days prior to survey (2010)

	Use of mobile phone in last 12 months (%)	Number of times used	Length of use (Mins)	Cost (KSh)
Men	53.6	24.5	67.1	272.3

³⁸² Kenya ICT Authority - Board of Directors http://icta.go.ke/board-of-directors/

³⁸³ Kenya ICT Authority - Management http://icta.go.ke/management-team/

³⁸⁴ Board of Directors - Konza Technopolis http://konza.go.ke/board-of-directors/

³⁸⁵ Management - Konza Technopolis (<u>https://www.konza.go.ke/management/</u>)

³⁸⁶ Ndung'u, M.N., Lewis, C., & Mothobi, O. (2019). After access: The state of ICT in Kenya. Policy Paper No. 9, Series 5. Research ICT Africa

³⁸⁷ National ICT Survey 2010 http://ca.go.ke/wp-content/uploads/2018/02/National-ICT-Survey.pdf

Women	51.4	17.5	42.0	173.8	

In terms of usage of computers within the previous 12 months before the study was conducted, the Communications Authority of Kenya (2010)³⁸⁸ observed the following:

Table: Reported use of computers by gender (2010)

		Used computers in (%)						
	Had used a compute r (%)	Own home	Friend's house	Work place	Cyber cafe	Communit y centre	Education al institution	Mobile phone
Men	9.5%	24.4	2.2	24.0	28.7	2.3	13.3	6.5
Women	7.3%	21.4	1.2	16.4	28.2	1.8	17.1	4.7

The data shows that the male respondents compared to the female respondents had greater access to computers and mobile phones, and to computers in the workplace. For both genders, more than a quarter of the women and men accessed computers in a cybercafe. A greater proportion of female respondents (17.1%) compared to the male respondents (13.3%) used computers in schools/educational settings.

More recently, a 2019 GSMA³⁸⁹ report indicated that women in Kenya were 6% less likely to own a mobile phone compared to men. Further, that there was a 29% difference in monthly expenditure on mobile services for men and women. The table below shows the continued disparities in ICT access between men and women.

Table: ICT versus gender statistics

	Women (%)	Men (%)
%age of adult population who own a mobile phone	82	86
%age of adult mobile Internet users	26	43

³⁸⁸ National ICT Survey 2010 http://ca.go.ke/wp-content/uploads/2018/02/National-ICT-Survey.pdf

³⁸⁹ GSMA - The mobile economy sub-Saharan Africa 2019 https://www.gsma.com/r/mobileeconomy/sub-saharan-africa/

Source: GSMA³⁹⁰

While the difference in mobile phone ownership between genders showed a 4% difference, the gap is larger with regards to gender access and awareness of mobile Internet. The GSMA³⁹¹ report indicated that just over a quarter of the women sampled used mobile Internet as compared to more than two fifths of men. Additionally, a greater proportion of men (78%) were aware of mobile Internet as compared to 62% of women.

A study of mobile telephony use in rural Kenya established that mobile phone sharing was the norm in some rural contexts, and offered both advantages and disadvantages. ³⁹² It could allow communal sharing of information such as news listened to dysonon mobile radio, gather people, and encourage interpersonal communication. But it could also expose one's information to others. In one instance, a woman's illiteracy made her dependent on other people, such as her husband or someone else to know the contents of messages sent to her. The study also noted that the situation introduced "limitations to social interactions, consequently affecting issues of gender roles, power differentiation and shifts in time and space. It is worth noting that even as there remain discrepancies in Internet/ICT access and use, there are illustrations of Kenyann women's achievements in the sector. There are a plethora of commercial, non-profit, and civil society technology organizations founded and/or run by women, some of which have received global recognition such as Ushahidi³⁹³ and Akirachix. ³⁹⁴

Existence of national mechanisms to monitor women's inclusion in strategies for Internet access and use

The National ICT Master Plan 2014 - 2017³⁹⁵ identified various activities and projects but did not have a structured monitoring and evaluation process to evaluate the project's implementation. This resulted in the absence of publicly available documentation to assess how well women had been included in strategies related to internet access and use.³⁹⁶ However, a Task Force has since been constituted to review the Master Plan 2014-2017 with digital inclusivity identified among the principles that will guide future implementation. Digital inclusivity is defined as "the equitable and non-discriminate availability of and access to ICTs across county governments, urban and rural areas, gender, women, youth, the marginalised and people living with disabilities".³⁹⁷

³⁹¹ ibid

³⁹⁰ ibid

³⁹² Komen, L. (2017). Mobile telephony and copresence in Marakwet, Kenya. *Journal of Development and Communication Studies*, 5 44. 10.4314/jdcs.v5i1.3.

³⁹³ Dyson, E. (2014, April 24). Ory Okolloh. Retrieved from https://time.com/70848/ory-okolloh-2014-time-100/

³⁹⁴ Lionesses of Africa (2015, Nov. 18). Judith Owigar: The startup story of a visionary Kenyan techpreneur working to make a huge impact by nurturing the talents of women in technology. Retrieved from http://www.lionessesofafrica.com/blog/2015/11/18/the-startup-story-of-judith-owigar; and Rotich, J. (2013, June 18). Meet BRCK, Internet access built for Africa. Retrieved from https://www.youtube.com/watch?v=qsJYrwzfd6w

³⁹⁵ National Master Plan 2014-2017

http://icta.go.ke/pdf/THE%20NATIONAL%20ICT%20MASTERPLAN%202017.pdf

Ndung'u, M.N., Lewis, C., & Mothobi, O. (2019). After access: The state of ICT in Kenya. Policy Paper
 No. 9, Series 5. Research ICT Africa
 ibid

A.2 Is there a gender digital divide in Internet access and use and, if so, is this gender divide growing, stable or diminishing?

Proportions of individuals using the Internet, disaggregated by sex, compared with gender gaps in income and educational attainment.

An International Telecommunication Union (ITU) report³⁹⁸ indicated that while many regions globally had experienced shrinkage in the gender digital divide, Africa had experienced an expansion. Also, that the proportion of women on the continent using the Internet was 25% lower than that of men.

There continues to be a gender divide in internet access and use in Kenya, particularly so in the rural areas.³⁹⁹ But it is not sufficiently clear what the nature of the gap is particularly given the limited research on rural communities, as a recent study⁴⁰⁰ revealed that "... statistics touting increases in mobile phone ownership (and Internet access) reveal little about spatial differences despite knowledge of the infrastructural differences that exist between rural and urban areas. Access statistics provided by the International Telecommunication Union (ITU) and Socialbakers.com make it abundantly clear that handset ownership and internet access are growing in Africa. However, they do not provide information about how poor mobile networks, limited electricity, and persistent poverty— common features of rural life—affect ownership and access".⁴⁰¹

A 2008 study⁴⁰² established that men were the first to have phones in rural Kenya. Other findings were that rural women often had second-hand phones which limited their access to information, and had other costs to maintain such as repair, including buying or recharging old batteries. The phones were used to send or receive texts, receive Mpesa monies, and to use a torch or radio. For many of the rural women studied, the Internet and using the phone to access it were new and time-consuming activities, and were not priorities in their busy day-to-day lives.⁴⁰³

Proportions of adult women and men with mobile broadband subscriptions disaggregated by sex, compared with gender gaps in income and educational attainment.

Mobile broadband has contributed greatly to ICT development and tends to be more

³⁹⁸ ITU (2017). ICT facts and figure 2017. Retrieved from https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf

³⁹⁹ Ndung'u, M.N., Lewis, C., & Mothobi, O. (2019). After access: The state of ICT in Kenya. Policy Paper No. 9, Series 5. Research ICT Africa

⁴⁰⁰ Komen, L. (2017). Mobile telephony and copresence in Marakwet, Kenya. *Journal of Development and Communication Studies*, 5 44. 10.4314/jdcs.v5i1.3.

⁴⁰¹ Wyche, S., & Olson, J. (2018). Kenyan women's rural realities, mobile Internet access, and "Africa Rising." Information Technologies & International Development (Special Section), 14, 33–47.
⁴⁰² ibid

⁴⁰³ ibid

affordable than fixed broadband in most developing countries.⁴⁰⁴ In Kenya, the number of mobile broadband subscriptions in Kenya rose from 20.5 million to 22.2 million between June 2018 and June 2019, accounting for 44.5% of the total data/Internet subscriptions. However, the CA, or the telecom providers do not provide data disaggregated by gender with which to assess against income and gender levels.

Survey data on Internet awareness and on patterns of Internet use, disaggregated by sex

The Communications Authority of Kenya (2019)⁴⁰⁵ releases quarterly sector statistics which are based on data provided by Internet and mobile phone service providers. In the April - June 2019 quarter, there were 52 million active mobile phone SIM cards with an estimated 96% mobile network coverage. There were also 50 million Internet subscriptions according to the report.

This is a steep rise compared to statistics from September 2015, which showed the number of Internet users in Kenya stood at 31.9 million, which was estimated at Internet access rate of 74 for every 100 people. There were 36.1 million mobile subscriptions while mobile phone penetration stood at 88.1 percent. Moreover, mobile data subscriptions contributed to 99 percent of total Internet subscriptions, which stood at 21.6 million. This is attributed to the entry of cheaper Internet-enabled phones into the market in recent years. The Communications Authority of Kenya does not typically disaggregate the quarterly statistics report by gender.

Perceptions of barriers to Internet access and use, and of the value of Internet access and use, disaggregated by sex

Multiple factors pose barriers to access and use of the Internet, including access to computers or mobile phones, the costs of purchasing Internet-enabled phones, of purchasing phones, the socio-cultural context such as in rural areas where a woman was more likely to have a second-hand phone which had limited features, and old batteries.⁴⁰⁶

As Jensen and Mahan point out: "Gendered indicators ostensibly continue to be at the top of everyone's agendas," 407 yet "none of the major ICT or science and technology frameworks disaggregate data and indicators based on gender, and the major gender equality indexes also do not incorporate ICT and science and technology."

⁴⁰⁵ Communications Authority of Kenya (2019). Fourth quarter sector statistics report for the financial year 2018/2019 (April – June 2019). Nairobi, Kenya: Communications Authority of Kenya.

https://www.researchgate.net/publication/323402205_Engendering_the_Knowledge_Society_Measuring_Women's Participation

⁴⁰⁴ ITU (2017). ICT facts and figure 2017. Retrieved from https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf

⁴⁰⁶ Komen, L. (2017). Mobile telephony and copresence in Marakwet, Kenya. *Journal of Development and Communication Studies*, *5* 44. 10.4314/jdcs.v5i1.3. And Wyche, S., & Olson, J. (2018). Kenyan women's rural realities, mobile Internet access, and "Africa Rising." Information Technologies & International Development (Special Section), 14, 33–47.

⁴⁰⁷ Huyer, Sophia & Hafkin, Nancy. (2018). Engendering the Knowledge Society: Measuring Women's Participation, 10.13140/RG.2.2.18752.64003.

A.5 Do the law, law enforcement and judicial processes protect women and girls against online gender-based harassment and violence?

Existence of a relevant legal framework and judicial processes

The Computer Misuse and Cybercrimes law⁴⁰⁸ criminalizes abuse on social media and cyberbullying. However, one study found that there were inadequate reporting mechanisms on social media, law officials were not adequately equipped or were they all aware of cyber crimes; bureaucracy in the law enforcement setting discouraged victims from reporting abuse.⁴⁰⁹ A variety of digital safety programs are run by a variety of organizations, targeting journalists, students, and bloggers. However, a greater variety of digital safety awareness and training sessions would be of value as a form of curbing online violations.

Incidence of online gender-based harassment and violence experienced by women and girls

Various studies have found that women have often been attacked online, mostly on social media. A 2014 Pew Research study⁴¹⁰ found that 40% of Internet users had experienced online harassment, with stalking and sexual harassment being more prevalent among young women compared to young men or to older counterparts.

Several studies undertaken in the Kenyan context established high levels of online harassment among women, many of them sexual in nature. Modes of attack include sexual harassment, surveillance, cyber stalking, and unauthorized use of images, videos or other personal information, fraud, cyber bullying, doxxing (which is the gathering information on a person to reveal it online), verbal abuse, revenge porn, hacking of accounts, and extra judicial threats.⁴¹¹

Further, two studies undertaken in 2010⁴¹² and 2013⁴¹³ explored cyber crime statistics in the Kenya context with an emphasis on women's experiences. The 2020 Kictanet⁴¹⁴ study defined cybercrime as "any activity on the Internet that offends human sensibilities," and further categorised cyber crime into three categories as follows: against a person, property, or government. Harassment and stalking were identified as

⁴⁰⁹ Ongoma, N. & Wandia, T. (2018). Women and online violence in Kenya. Nairobi, Kenya: Ford Foundation

https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2014/10/PI OnlineHarassment 72815.pdf

KE/Women and Cybercrime in Kenya Literature Review report working ver4.pdf

⁴⁰⁸ The Computer Misuse and Cybercrimes Act 2018 (http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/ComputerMisuseandCybercrimesActNo5of2018.pdf)

⁴¹⁰ Pew Research Center (2014). Online harassment. Retrieved from

⁴¹¹ Article 19 (2016). Women journalists' digital security. Nairobi, Kenya: Article 19 Eastern Africa and Ongoma, N. & Wandia, T. (2018). Women and online violence in Kenya. Nairobi, Kenya: Ford Foundation

⁴¹² Kictanet (2010). Women and cybercrime in Kenya: The dark side of ICTS (Working document Vol. 1). Retrieved from https://www.kictanet.or.ke/documents/Activities/Women-and-CyberCrime-in-

⁴¹³ KIctanet (2013). Women and cybercrime: The dark side of ICTs (2nd ed.). Retrieved from https://www.kictanet.or.ke/Activities/Women-and-CyberCrime-in-KE/Kenya_Study-Women-and-Cybercrime-2nd-Edition-2013.pdf

⁴¹⁴ Kictanet (2010). Women and cybercrime in Kenya: The dark side of ICTS (Working document Vol. 1). Retrieved from https://www.kictanet.or.ke/documents/Activities/Women-and-CyberCrime-in-KE/Women and Cybercrime in Kenya Literature Review report working ver4.pdf

leading crimes against women online.

The 2013 Kictanet⁴¹⁵ study identified various forms of technology-based violence against women as follows: digital manipulation of photos, circulation of intimate photos, harassment through cell phones, cyberstalking, gender stereotypical comments, and hate crimes. Tools used to perpetrate these crimes included mobile phones, social media, email, and mailing lists.

Moreover, a 2018 study⁴¹⁶ noted that even as the number of Internet users continued to grow, there were accompanying threats including limited digital illiteracy and lack of awareness of the threats. The respondents in this study noted that the outcome of the violations included self-censorship or limiting activities on social media, such as not uploading personal pictures, avoiding controversial conversations, muting notifications, or abandoning social media.

The study also found that older women were less vulnerable to online attackers due to greater access to legal support, having a network of personal support, and an ability to report attackers. Also, there was the possibility of online violence moving to offline violence such as with cyber stalking where the perpetrator used information posted online to find the women in their physical locations.⁴¹⁷

A 2016 Article 19418 study found that Kenyan women journalists were heavy users of various social media, and 75% of them had experienced online harassment in their professional work. Hacking, stalking and threats were reported to be the most common forms of digital harassment of the women journalists.

Evidence of government, law enforcement and judicial action to provide protection to women against online gender-based harassment and violence.

A 2010 Kictanet⁴¹⁹ report observed that Kenyan legislation and policy did not have specific provisions for cybercrimes such as stalking, chat room abuse, impersonation, identity theft and others. The report further noted that the existing legislation at the time, the Kenya Information and Communication (Amendment) Act⁴²⁰ phenomenon of cyber crime but focused on protecting crimes against property and information technology infrastructure rather than against the person. Infrastructure.

⁴¹⁵ KIctanet (2013). Women and cybercrime: The dark side of ICTs (2nd ed.). Retrieved from https://www.kictanet.or.ke/Activities/Women-and-CyberCrime-in-KE/Kenya Study-Women-and-Cybercrime-2nd-Edition-2013.pdf

⁴¹⁶ Ongoma, N. & Wandia, T. (2018). Women and online violence in Kenya. Nairobi, Kenya: Ford Foundation

⁴¹⁷ ibid

⁴¹⁸ Article 19 (2016). Women journalists' digital security. Nairobi, Kenya: Article 19 Eastern Africa.

⁴¹⁹ Kictanet (2010). Women and cybercrime in Kenya: The dark side of ICTS (Working document Vol. 1). Retrieved from https://www.kictanet.or.ke/documents/Activities/Women-and-CyberCrime-in-KE/Women and Cybercrime in Kenya Literature Review report working ver4.pdf

⁴²⁰ The Kenya Information and Communication (Amendment) Act 2013 (http://kenyalaw.org/kl/fileadmin/pdfdownloads/AmendmentActs/2013/KenyalnformationandCommunications Amendment Act2013.pdf)

Additionally, many victims of cyber crime tend to be unwilling to report to law enforcement authorities, which means that there is little empirical data on the type and extent of crime.

The 2013 Kictanet study observed that there was minimal reporting of cyber crimes against women "due to feelings of embarrassment, shame, and conviction that no action will be taken by the police or relevant authorities". More broadly, the Cabinet Secretary in charge of Internal Security observed that the government was focused on harmoning its policy and legal approaches to global standards, a challenge magnified by the different legal frameworks that government cyber security around the world.⁴²¹

Existence of online services which are intended to protect women against online genderbased harassment

The national Computer Incident Response Team (KE-CIRT) allows for the reporting of incidents or vulnerabilities in its website, through a telephone hotline and an email address (incidents@ke-cirt.go.ke). 422 Vulnerabilities it has identified include: identity theft, intrusion, malicious code outbreak, malware threat, phishing, request for forensics, spam, suspicious traffic, web defacement and other others. Incidents are also identified and they include: abusive content, malicious code, information gathering, intrusion attempts, intrusions, availability, information security, fraud, vulnerability, and others. 423

Theme B - Children

B.3 How do children perceive and use the Internet?

Perceptions of the Internet among children derived from surveys, including barriers to use, value of use and fears concerning use, aggregate and disaggregated

The National Council for Children's Services defines a child as "an individual who has not attained the age of eighteen years or any human being under the age of eighteen years. The National ICT survey⁴²⁴ of 2010 established that the access to and use of ICT equipment was more widespread among youth aged between 20 and 34.

According to a recent study, 425 children between the ages of 12 to 17 accessed the Internet as follows: 42% of the respondents accessed the Internet twice or thrice a week; A quarter of the respondents (25%) and 24% accessed the internet once a day or

⁴²¹ Kimanzi, D. & Toroitich, E. (2019, Oct. 24). Kenya's bid in enhancing cybersecurity in the country. The Standard. Retrieved from https://www.standardmedia.co.ke/

⁴²² Communications Authority of Kenya (n.d.b). (The national KE-CIRT/CC: Report an incident. Retrieved from https://www.ke-cirt.go.ke/index.php/report-an-incident/)

⁴²³ Communications Authority of Kenya (n.d.c). (The national KE-CIRT/CC: Report a vulnerability. Retrieved from https://www.ke-cirt.go.ke/index.php/report-a-vulnerability/)

⁴²⁴ National ICT Survey 2010 (http://ca.go.ke/wp-content/uploads/2018/02/National-ICT-Survey.pdf)

⁴²⁵ Murianki C. (2016). A status on child online safety in Kenya. Communications Authority of Kenya. Retrieved from https://www.itu.int/en/ITU-D/Documents/ChildOnlineSafetyInitiative Kenya.pdf

several times a day respectively. Nine percent accessed the Internet two to three times a month. The study also showed that Kenyans also preferred to use smartphones to access the Internet

The findings from a UNICEF (2013) study, as cited in Terre des Hommes⁴²⁶ shows the data in the table below:

Table: Use of Internet

Access to Internet	%
Once a day	25
Several times a day	24
Two to three times a week	42
Two to three times a month	9
Total	100

Children and youth were more likely to access the Internet from mobile phones - and through mobile phone bundles - rather than personal computers. Younger children (12-14 years) were more likely to share a phone with someone else while most of those aged 15-17 had their own phones⁴²⁷ (UNICEF, 2013, as cited in Terre des Hommes, 2018).

Data on the use of the Internet by children, aggregate and disaggregated, compared with other age groups (e.g. data on location, frequency and type of use)

There is no data on internet use by children. However, the number could be significant given the population demographics and internet usage data across the country.

B.4 Is there a legal and policy framework to promote and protect the interests of children online, and is this effectively implemented?

⁴²⁷ ibid

⁴²⁶ Terre des Hommes (2018). The dark side of the Internet for children: Online child sexual exploitation in Kenya- A rapid assessment report. Retrieved from https://www.terredeshommes.nl/sites/tdh/files/uploads/tdh-nl ocse in kenya research report feb 2018.pdf

Existence of a policy framework and legal protections consistent with the Convention on the Rights of the Child (CRC), and evidence that this is implemented by government and other competent authorities

Key policy areas in relation to children online include safety and education. Organizations involved in policy making related to children include the Department of Children's Services. The legal framework for children's rights include the Constitution; the Children's Act, 2001; the Kenya Information and Communications (Amendment) Act, 2013; Computer Misuse and Cybercrimes Act, and the Sexual Offences Act, 2006. 428

The government established a national child helpline in 2006 for children to report different forms of abuse. In a 2016 study no reference was made to digital abuses which suggests that offences against children were not reported, or people did not know how to report them. The helpline is telephone and Internet-based. The types of abuse reported included child neglect, sexual abuse, physical abuse, child labour, emotional abuse, and child trafficking/abduction.

However, the increased access to and use of ICTs in Kenya has led to children using mobile phones and other ICTs devices to access the Internet. This has exposed them to various risks including online and offline sexual exploitation. For instance, a 2018 study reveals that "Kenya has become a source of indecent images of minors, which are circulated online by UK offenders, who then choose Kenya as their designation for child sex tourism". 429

The objectives of the National Children's Services include protecting children against online sexual exploitation with proposed activities including the following: review information available on the extent of SEC in the online environment; create awareness on child online protection through theatre; hold regional dialogue circles with children and youth to advocate for child online protection and internet governance; train cyber business owners and operators on child online protection; review, adopt and implement community and school-based child online protection awareness programmes; lobby development partners to prioritize activities on child online protection; develop a framework on child online protection; lobby for budgetary allocation from the private sector towards child online protection.

The government established a national child helpline in 2006 for children to report different forms of abuse. However, a Childline report⁴³⁰ on child protection spanning 10 years (2006 - 2016) states that the types of abuse reported were: child neglect, sexual abuse, physical abuse, child labour, emotional abuse, and child trafficking/abduction. The report made no specific reference to digital space, which suggests that children do not report them, do not know to report them or the study did not seek the information out. The helpline is telephone and Internet-based.

Moreover, children are vulnerable online to sexual exploitation given the spread of

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⁴²⁸ Watoto Watch (n.d.). Law. Retrieved from http://watotowatchnetwork.org/law/

⁴²⁹ National Children's Services

⁴³⁰ Child Protection Report 2006 - 2016 (http://www.childlinekenya.co.ke/assets/files/Child-Protection-Report-2006-2016.pdf)

mobile phone penetration and internet access.⁴³¹ There are three categories that offer online risk for children: content, where a child may receive inappropriate content or messages; contact, where a child may engage in interactions that pose a risk; and conduct, where a child may engage in risky behavior.

Children who are particularly at risk of online child sexual exploitation include children living with disabilities, those in poverty or marginalized communities, and children with mental health challenges. The external conditions that make Kenyan children vulnerable to sexual exploitation include the children's relatively good grasp of English, easy access to the Internet and social media sites, and established payment systems such as M-Pesa⁴³²

Yet there remain barriers including areas of concern related to children online that are not clearly covered by policy. These areas include sexual exploitation, cyber bullying, and exposure to inappropriate content. The Terre des Hommes report notes that: "while Kenya has invested heavily in developing, implementing and expanding its digital environment, such progress does not seem to have been matched by increased social awareness or targeted child protection measures that effectively address and mitigate the risks that children face from the growing and widespread Internet use and mobile technology" Additionally, there remain challenges in arresting and prosecutors perpetrators of online crimes against children.

The Communications Authority of Kenya has partnered with various organizations to combat various types of child online crimes including cyber-bullying, solicitation of minors, identity theft, online fraud, child pornography and Internet addiction. In March 2019, the Child Protection Unit launched a cyber wing designed to combat online sexual abuse of children.⁴³⁴ This wing is designed to enable authorities to track child abuse through data from technology firms. This unit has been useful in enabling collaborations with local, regional and other authorities entities such as Interpol and social media companies to track perpetrators of online crimes against children and to protect children such as by pulling down harmful content. A new Children's Bill of 2019 that is yet to be enacted provides updated provisions in law and are expected to better protect children online.

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⁴³¹ Terre des Hommes (2018). The dark side of the Internet for children: Online child sexual exploitation in Kenya- A rapid assessment report. Retrieved from

https://www.terredeshommes.nl/sites/tdh/files/uploads/tdh-nl ocse in kenya research report feb 2018.pdf 432 Terre des Hommes (2018). The dark side of the Internet for children: Online child sexual exploitation in Kenya- A rapid assessment report. Retrieved from

https://www.terredeshommes.nl/sites/tdh/files/uploads/tdh-nl ocse in kenya research report feb 2018.pdf 433 Terre des Hommes (2018). The dark side of the Internet for children: Online child sexual exploitation in Kenya- A rapid assessment report. Retrieved from

https://www.terredeshommes.nl/sites/tdh/files/uploads/tdh-nl ocse in kenya research report feb 2018.pdf 434 Kenya gets first cyber unit to fight child sex abuse https://www.nation.co.ke/news/Kenya-gets-first-cyber-unit-to-fight-child-sex-abuse/1056-5041396-trw3ca/index.html

Theme C – Sustainable Development

C.1 Do national and sectoral development policies and strategies for sustainable development effectively incorporate ICTs, broadband and the Internet?

Existence of a recent, comprehensive policy for the development of ICTs, broadband and the Internet, which includes consideration of likely future developments in these fields

The government has developed several policy documents related to sustainable development that incorporates ICTs, broadband and the Internet. Vision 2030 (and its Medium Term Plan, the Big 4 Agenda) and the the Kenya Information and Communication Act 2013⁴³⁵ recognise ICT as an enabler of socio-economic development. Furthermore sector specific documents such as the National ICT Policy (2006) which has undergone revision, the National Broadband Strategy (2012) which has also been revised, and the National ICT Strategic Plan (2013-2017) outline in depth the role of ICTs in society.

Among these areas are e-commerce, which is growing in sub-Saharan Africa, disrupting business models, services, and products.

The National ICT survey (2016) established that 39% of private enterprises in Kenya were engaged in e-commerce. A 2019 GSMA436 report indicated that in the last two years, sub-Saharan African had emerged as among the 12 fastest growing financial technology hubs in the world. The report further indicated that more than 60% of adults in Kenya among other countries owned a mobile money account, with nearly 9 out of every 10 mobile money accounts being in East and West Africa. Interoperability among telecommunications firm (telcos) platforms is central to the growth of mobile money services, enabling the transfer of money among different players in the financial system, including banks and telcos. The range of payment options has also increased beyond credit cards to include mobile money payments.

Other than services and products such as ride-hailing applications and e-commerce platforms, new commercial opportunities are arising with the emergence of artificial intelligence and blockchain. In 2019, Google and Microsoft launched labs in Accra and Nairobi respectively to promote artificial intelligence and machine learning.⁴³⁷

In Kenya however, there is limited legislation governing this rapidly growing area which had reached the KSh. 1 trillion mark in 2018.438 The indicates that there is limited data in

⁴³⁵ The Kenya Information and Communication (Amendment) Act 2013 http://kenyalaw.org/kl/fileadmin/pdfdownloads/AmendmentActs/2013/KenyalnformationandCommunications Amendment Act2013.pdf

436 GSMA - The mobile economy sub-Saharan Africa 2019 (https://www.gsma.com/r/mobileeconomy/sub-

saharan-africa/)

⁴³⁷ Google has opened its first Africa Artificial Intelligence lab in Ghana https://edition.cnn.com/2019/04/14/africa/google-ai-center-accra-intl/index.html

⁴³⁸ Communications Authority of Kenya (n.d.a) The development of e-commerce in Kenya.

this area, including which factors challenge the growth of e-commerce. The report notes that it is "extremely difficult to try and develop policies on promoting e-commerce growth yet basic consumer data does not exist e.g. should the country's focus be on domestic e-commerce or should it be on international e-commerce, which could generate foreign exchange".

Consumer purchase rights and laws have also not been enacted in Kenya, while e-commerce platforms are not regulated which leaves consumers vulnerable to online harm. Additionally, there needs to be a reduction in the instability of Internet connectivity and the cost of communicating.⁴³⁹

C.7 What proportion of businesses, including small and medium sized businesses make use of the Internet and e-commerce?

Proportion of SMEs using the Internet, by type of access

Online commerce is a growing area in sub-Saharan Africa, disrupting business models, services, and products. However, there has been limited research on the adoption of ecommerce among small- and medium-sized enterprises in Kenya. The study of 35 travel and tour operators found 100% adoption of e-commerce, and additionally, ecommerce was influenced by infrastructure, broadband connections, availability, reliability, telecommunication costs, and the supply chain established. E-commerce also opened SMEs to new markets.

Another study in 2013⁴⁴¹ found that the majority of 163 SMEs in Nairobi had not adopted e-commerce nor did they have a functioning e-commerce strategy. Only 22% of the companies had active websites that had interactive engagement with their clients, 31% had static websites, while 43% did not have working websites. E-commerce was found to provide strategic value for the firms that had adopted it.

The 2016 National ICT survey⁴⁴² established that overall, 39% of private enterprises in Kenya were engaged in e-commerce. Further, a 2019 GSMA⁴⁴³ report indicated that in the last two years, sub-Saharan African had emerged as among the 12 fastest growing financial technology hubs in the world. However, as the Communications Authority⁴⁴⁴ observed, there is no data to show what barriers slow the growth of the e-commerce

 $Retrieved \ from \ \underline{https://ca.go.ke/industry/ecommerce-development/}$

⁴³⁹ Rotich, J. (2013, June 18). Meet BRCK, Internet access built for Africa. Retrieved from https://www.youtube.com/watch?v=qsJYrwzfd6w

⁴⁴⁰ Wanjau, K., Macharia, R.N., & Ayodo, E.M.A. (2012). Factors Affecting Adoption of Electronic Commerce among Small Medium Enterprises in Kenya: Survey of Tour and Travel Firms in Nairobi. International Journal of Business, Humanities and Technology, 2(4), 76 – 91.

⁴⁴¹ Mutua, J., Oteyo, I.N., & Njeru, A.W. (2013). The Extent of E-Commerce Adoption among Small and Medium Enterprises in Nairobi, Kenya. *International Journal of Business and Social Science*, *4*(9), 116 – 122.

⁴⁴² National ICT Survey (http://ca.go.ke/wp-content/uploads/2018/02/National-ICT-Survey.pdf)

⁴⁴³ GSMA - The mobile economy sub-Saharan Africa 2019 (https://www.gsma.com/r/mobileeconomy/sub-saharan-africa)

⁴⁴⁴ Communications Authority of Kenya (n.d.a) The development of e-commerce in Kenya. Retrieved from https://ca.go.ke/industry/ecommerce-development/

sector, and why Kenyans are not fully engaged in online purchasing.

Perceptions of the value of Internet use by SMEs

A 2019 GSMA⁴⁴⁵ report indicated that more than 60% of adults in Kenya among other countries owned a mobile money account, with nearly 9 out of every 10 mobile money accounts being in East and West Africa. Interoperability among telecommunications firm (telcos) platforms is central to the growth of mobile money services, enabling the transfer of money among different players in the financial system, including banks and telcos. The range of payment options has also increased beyond credit cards to include mobile money payments. While there are no statistics to assess perceptions of value, the increased adoption of mobile payments for example, shows a growing positing perception of the value of internet use by SMES.

Theme D – Trust and Security

D.1 Is there a national cybersecurity strategy, with multi stakeholder engagement and aligned with international human rights standards, including a national computer emergency response team (CERT) or equivalent?

Existence of cybersecurity strategy, with multistakeholder involvement, which is consistent with international rights and norms

Kenya's cybersecurity legal framework includes the Computer Misuse and Cybercrimes Act⁴⁴⁶ and the Kenya Information and Communications Act.⁴⁴⁷ The government also developed the National Cybersecurity Strategy 2014448 which has four strategic goals which are to: enhance the nation's cybersecurity posture in a manner that facilitates the country's growth, safety, and prosperity; build national capability by raising cybersecurity awareness and developing Kenya's workforce to address cybersecurity needs; foster information sharing and collaboration among relevant stakeholders to facilitate an information sharing environment focused on achieving the Strategy's goals and objectives; and, provide national leadership by defining the national cybersecurity vision, goals, and objectives and coordinating cybersecurity initiatives at the national level. 449

Undergirding the strategy is the need to "secure the online environment for citizens, industry, and foreign partners; increasing the Kenyan people's confidence in online

⁴⁴⁵ GSMA - The mobile economy sub-Saharan Africa 2019 (https://www.gsma.com/r/mobileeconomy/subsaharan-africa/)

⁴⁴⁶ The Computer Misuse and Cybercrimes Act 2018

⁽http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/ComputerMisuseandCybercrimesActNo5of2018.pdf)

⁴⁴⁷ The Kenya Information and Communication (Amendment) Act 2013

⁽http://kenyalaw.org/kl/fileadmin/pdfdownloads/AmendmentActs/2013/KenyaInformationandCommunications Amendment_Act2013.pdf)

448 National Cybersecurity Strategy 2014

⁽http://icta.go.ke/pdf/NATIONAL%20CYBERSECURITY%20STRATEGY.pdf)

⁴⁴⁹ National Cybersecurity Strategy 2014

⁽http://icta.go.ke/pdf/NATIONAL%20CYBERSECURITY%20STRATEGY.pdf)

transactions, data security, fraud protection, and privacy; encouraging greater foreign investment and enhancing trade opportunities; and enabling Kenya's broader economic and societal goals".

Among the action points contained in the strategy are to establish formal regional and multi-stakeholder partnerships. Partners in CIRT at national, regional and international levels include telecommunication companies, the ICT Authority, the Central Bank of Kenya, Internet Service Providers (ISPs), the Kenya Education Network (KENET), academia, the East African Communications Organization Cybersecurity Working Group, and the International Telecommunications Union.

Establishment of national CERT or equivalent, and evidence concerning its effectiveness

The Communications Authority of Kenya is mandated by the Kenya Information and Communications Act to establish a Computer Incident Response Team (CIRT) that serves as its national cyber security management framework. The CIRT is a multi-agency partnership that coordinates national cyber security, and runs telephone hotlines and an email address through which one can report an incident. It also issues advisories on scams and other cyber threats, including online bullying, and fraud. The team still has challenges in carrying out its functions, including budgets, capacity, effectiveness and so on.

D.4 Have there been significant breaches of cybersecurity in the country within the last three years?

Incidence and nature of breaches reported, and numbers of individuals and businesses affected

In 2019 the Communications Authority of Kenya ⁴⁵⁰ indicated there had been 26.6 million cyber threats during the April - June 2019 quarter, a 136.4% increase from the previous quarter's reported 11.3 million threats. These increase was linked to a global increase in malware including ransomware attacks during the quarter. Various forms of cybersecurity breaches have been experienced in the country, including the hacking and defacing of government websites in June 2019,⁴⁵¹ online bank theft,⁴⁵² actual and attempted data breaches.⁴⁵³

A report by cybersecurity firm Serianu shows the cost of cybercrime in Kenya in 2018 was KES 30 billion (USD #00 million), but organisations could lose more in the coming years. Moreover, there was an increase in organisational spend in cybersecurity from 2017 to 2018. The report indicated that 26 percent of respondents said they spend

⁴⁵⁰ Communications Authority of Kenya (2019). Fourth quarter sector statistics report for the financial year 2018/2019 (April – June 2019). Nairobi, Kenya: Communications Authority of Kenya.

⁴⁵¹ Otieno, B. (2019, June 3). NYS and IFMIS among government websites hacked. Retrieved from https://www.businessdailyafrica.com/

⁴⁵² Standard Team (2019). How big banks lost billions in one week to cyber criminals. *The Standard*. Retrieved from https://www.standardmedia.co.ke/

⁴⁵³ Privacy International (n.d.). State of privacy Kenya. Retrieved from https://privacyinternational.org/state-privacy/1005/state-privacy-kenya

above a million shillings on cybersecurity. 454

Perceptions of Internet security among users, businesses and other stakeholder groups

The level of cybersecurity awareness in Kenya is still low with 15% of organisations not having an established cyber security training programs. According to Serianu, most organisations (23%) are also still very reactive when it comes to cyber security training, these organisations train their staff only when there is an incident or problem. This is worrying considering 54% of all cyber attacks reported in the survey was through work. The report also notes that Kenyan companies are also reluctant to develop the skill sets of their security team through frequent training and certifications. This is due to the fact that information security is still seen as an expense rather than a return on investment.

Data concerning phishing, spam and bots in national level domains

According to Serianu, weak security infrastructure led to multiple attacks of various types including phishing, cyber pyramid schemes. These cost Kenyans an estimated KES 2 trillion. Further, the hacking of government sites led to weakened service delivery and election hacking.⁴⁵⁷ In one quarter of 2017, Kaspersky Labs blocked 51 million attempts at setting up phishing pages.

Theme E – Legal and Ethical Aspects of the Internet

E.3 How do individuals perceive the benefits, risks and impact of the Internet within the country?

Perceptions of the benefits, risks and impact of the Internet, derived from household or opinion surveys, disaggregated by sex

Women generally have less access to ICTs than men and this is expected to increase as the technologies and services become more sophisticated and expensive, requiring greater levels of income and education to access and to operate. The analysis demonstrates that gender disparities exist for mobile phone adoption in rural areas. In urban areas, differences in mobile phone adoption are a consequence of the differences in income and education. Internet adoption however, is affected by gender disparities in both urban and rural areas and women seem to be the last movers (or late adopters) of technology in this case.

E.4 Do Internet users report experiencing significant harassment or abuse at the hands of other Internet users which deters them from making full use of the

⁴⁵⁴Serianu (2018) Kenya ICT report 2017: Demystifying Africa's cyber security poverty line. Retrieved from https://www.serianu.com/downloads/KenyaCyberSecurityReport2017.pdf

⁴⁵⁵ ibid

⁴⁵⁶ ibid

⁴⁵⁷ ibid

Internet?

Availability of reporting mechanisms for online harassment or abuse, including reporting arrangements by online service providers

Social media platforms have become a fertile ground for the perpetration of sexual and gender based violence. These forms of violence are a clear manifestation of existing discrimination that exists offline, which are underpinned by unequal power relations and discriminatory social norms. According to research done by womankind organization, United Kingdom in 2018, women have limited and inadequate measures and redress when they experience online violence.⁴⁵⁸

The research further suggests that women do not feel that the social media platforms have given victims of violence satisfactory response. With many citing that the companies or platforms do not understand the nature of gender abuse. This indicates that the policies put in by the platforms appear to be inadequate. According to Ebele Okobi, Facebook's Head of Policy team in Africa, Facebook provides an extensive amount of tools for people to share The research also states that women from Kenya reported that the police do not have the right training to handle such cases and hence most of them prefer not to report this matter.

Data on the extent to which Internet users report harassment or abuse, with particular attention to specific demographic and social groups (including women, ethnic and other minorities, and civil activists)

According to a study by the Association of Media Women in Kenya and Article 19 Eastern Africa, the internet continues to be an enabling space for the realization of gender equality. However, the same space is being used to harass women through different forms of online violence the most common in Kenya being trolling, cyber harassment, cyberstalking, defamation, public shaming, identity theft, hacking amongst other offenses. The research notes that out of 10 women journalists 7, have experienced online gender based violence. Patriarchy, unequal power relations, and structural gender inequality underpin violence and abuse against women both offline and online.

There also exists challenges in the implementation of existing policy and legal frameworks. The police do not have sufficient capacity to understand the nature of online offences let alone the technology or requisite tools to unmask perpetrators, investigate such cases and deliver justice to victims of such offences. Also, the police do not keep statistics of complaints that are filed, making it difficult to establish trends. In addition, most of the perpetrators of online violence go unpunished because very few victims report the incidents. Lastly, resource constraints and a lack of knowledge and training of police, prosecution and judicial officers, on technology and cyber-crimes, presented serious challenges in investigating and collecting evidence in online violence.

⁴⁵⁸ Womankind (2018). Breaking the silence: Ending online violence and abuse against women's rights activists. Retrieved from https://www.womankind.org.uk/docs/default-source/default-document-<u>library/breaking-the-silence-policy-briefing.pdf?sfvrsn=0</u>

Policy Recommendations for Various Stakeholders

Government

- 1. There is a need for the implementation Data Protection Act 2019 that takes care of privacy concerns for individuals as well as accounts for good data collection, storage, use, and dissemination.
- 2. There should be more deliberate implementation of the two-thirds gender quota in ensuring that different genders are represented in key policy-making positions related to ICTs, to enable them to air their issues.
- 3. Government should also provide punitive measures against bad practices such as violence against women.
- 4. The government to reform the law to ensure it protects the rights of children online including in areas such as in the areas of sexual exploitation cyberbullying, and exposure to inappropriate content.
- 5. There should be a continued enabling of e-commerce ventures such as through infrastructure provision, friendly registration and licensing procedures, reasonable tax requirements, and access to financing.
- 6. Government should engage in offering digital literacy campaigns and offering digital e-commerce skills to all users across both urban and rural areas.
- 7. Law enforcement officials should be adequately trained and equipped and made aware of cyber crimes.

Technical Community

- 1. There should be robust regulation of software and mobile application development to enable ethical and legal protection of users as they provide data.
- 2. Developers of software, social media, and content should actively engage in developing products that promote positive and safe online spaces for all users.

Private Sector

- 1. Social media platforms should have clear mechanisms on how their users can protect their data.
- 2. The platforms should have clear recourse mechanisms when user rights and cyber security have been violated, including being able to get legal action in their local contexts.
- 3. The platforms should adopt privacy by design approach as a mandatory feature and not a choice.

Civil Society

1. Civil society should continue to play a role of being a watchdog over government to ensure that it does not violate citizens' rights online, but also that it puts in place measures to safeguard citizen rights online.

Media

1. Traditional, social and other digital media can be used as platforms to sensitise citizens about cyber-security and other data-related issues.

2. They should sensitize citizens about their digital rights and other emerging trends.

Academia

- 1. They should develop cyber-security literacy programs to be incorporated within curricula across primary, secondary and higher education levels.
- 2. There is need for research on children's access and usage of ICT across social economic, cultural and geographical areas.
- 3. There is need for research on usage and access on ICTs across genders to guide in policy making.
- 4. Research institutes and universities should engage in gathering and analysing cross-sectional and longitudinal Internet-related data aggregated by key areas including gender, age, geographical location, and cultural contents.

Public

- Children should be made aware of both the positive and negative aspects of the internet, from the family level, the education system and the wider society and this can be done through literacy campaigns done by the government, media and other interested parties.
- 2. As online users, women are more vulnerable than men to cyber-trolling and bullying. Creators of applications should provide clear policy measures to ensure users are responsible for criminal or bullying conduct against other users.
- 3. Citizens and other data-holding entities (such as private companies, non-governmental organizations, etc) should be made aware of their rights and responsibilities concerning the data they own.

Chapter 8: Conclusions and Key Priority Recommendations, by stakeholder groups. (setting out major findings, challenges and key recommendations for action).

Annex 1: List of Multi-stakeholder Advisory Board

Annex 2: List of Peer Reviewers

Annex 3: Meeting report of the national validation workshop

Annex 4: List of charts and tables