COMMUNICATIONS AUTHORITY OF KENYA

Public Consultative Paper No.1/2020

STRATEGIES FOR INCREASING UPTAKE OF ICT DEVICES IN KENYA

1.   EXECUTIVE SUMMARY

The Communications Authority of Kenya (CA) is Kenya's National Regulatory Agency (NRA) for the Information and Communications Technology (ICT) sector. CA was established under the Kenya Information and Communications Act, 1998 (as amended) and its primary mandate is to regulate and facilitate the overall development of the ICT sector in Kenya. Some of CA's functions include licensing and regulating players in the marketplace, managing ICT resources (frequency spectrum and numbering resources), monitoring and enforcing compliance, fostering fair competition, regulating equipment standards, promoting cyber security and administration of the Universal Service Fund (USF).

Over the last 2 decades, CA has facilitated the overall development of the ICT sector in Kenya resulting in significant achievements. Presently a great number of Kenyans (95% of the population) are able to access and utilize ICT services. The number of mobile subscriptions has grown 30-fold over the last 16 years to stand at 52.2 million as at June 2019 compared to the 1.6 million in 2003.

Meanwhile rapid advancements in technologies such as mobile broadband, Wi-Fi connectivity, smart phones and web-based applications have further enhanced demand for and rollout of broadband in the country. The rollout of higher capacity mobile broadband networks such as 3G and 4G has greatly boosted the uptake of broadband services in the country with about 99% of broadband subscriptions served through mobile broadband services.

The above notwithstanding and whereas the average cost of smartphones used to access mobile broadband services has been gradually declining over the years, the current cost remain beyond the reach of majority of Kenyan hence frustrating the attainment of the principle of universal access and also creating another form of digital divide among communities. Indeed according to Global Institute Survey 2018, one of the main causes of the digital divide is the low uptake of ICT Devices in most developing countries owing to the high cost of these Devices.

There is need therefore to consider and implement strategies aimed at accelerating the uptake of Devices in order to progressively bridge the digital divide and also to foster the use of ICTs in the attainment of the UN's Sustainable Development Goals (SDGs). The purpose for this consultation paper therefore is to invite contributions and comments from the public and all stakeholders on appropriate strategies aimed at increasing the uptake of ICT Devices with specific reference to smartphones and other broadband access consumer devices.

2. NATIONAL ASPIRATIONS AND POLICIES ON ICT ACCESS & USAGE

Information and Communication Technologies (ICTs) play a critical role in the overall social economic development of a nation, acting as a critical enabler in all facets of development. Consequently the pace of socio-economic development in the digital age is largely dependent on the adoption and implementation of appropriate national policies and strategies relating to the general growth, uptake and usage of ICTs in everyday life.

Among the critical areas that these policies should address include ease of access to ICT devices, broadband connectivity, and ICT literacy among the general population. Whereas there is been significant progress in the deployment of ICT networks, including broadband, in the recent times, uptake of broadband services remain low largely because of the cost of devices used in broadband connectivity and high level of ICT illiteracy among the population. According to Global Institute Survey 2018, one of the causes of the digital divide is the low uptake of ICT Devices in most developing countries owing to the high cost of these devices.

There is need therefore to accelerate the uptake of broadband enabled devices in order to bridge the digital divide among the Kenyan population and therefore ensure wider participation of the population in the digital economy and in the overall socio-economic development for all as articulated in the UN's Sustainable Development Goals (SDGs).

Below are some highlights on some of the relevant national aspirations, policies and strategies relating to ICT access and application in Kenya's socio-economic environment.

i.   The Constitution of Kenya, 2010, under the Bill of Rights (Chapter 4) provides for the right of every Kenyan to reasonably good quality services (including ICT) and the right to information access. It is recognized that in a modern digital economy most of these services are best provided through appropriate ICT platforms, networks and end-user devices.

ii.   Kenya's e-Government strategy of 2004 is geared towards transforming the Government's operations through provision of citizen services through digital platform in order to enhance effectiveness and efficiency in service delivery. The successful implementation of this strategy is largely

dependent on access by Kenyan citizens to appropriate devices key among them being smartphones, which will be used to access the e-government platform.

iii. Under Vision 2030, Kenya's long-term development blueprint, ICT is recognized as an enabler with knowledge playing a central role in boosting wealth creation, social welfare and international competitiveness.

iv. The application of ICTs for the achievement of the Big Four Agenda include acceleration of the manufacturing sector through adoption of ICTs, provision of Universal Health Care (UHC) vides e-health services, Food Security through adoption of ICT in the production and supply chain, Affordable Housing through adoption of technology in the construction eco system. In all these endeavors availability and accessibility of ICT networks and end user Devices particularly smartphones by the population are fundamental requirements.

v. The National ICT Policy 2019 envisions a situation where every citizen has access to devices that are affordable, secure, internet-enabled, uniquely identifiable and with mobility capabilities. Further since internet-enablement is a basic principle for Citizen participation in the digital environment, the National ICT Policy 2019 envisions connectivity of every citizen to the Internet and service delivery through sufficient bandwidth to enable reasonable online interaction.

vi. Similarly, the national Digital Blue Print is in tandem with the national aspirations as articulated in both the Kenya vision 2030 and the National ICT Policy, that envisage a comprehensive nation-wide ICT network connectivity, achieving universal and affordable access to broadband connectivity and delivery of cost-effective digital services.

vii. The National Broadband Strategy (NBS) 2019-2023 also recognizes the need to address the issue of ICT Devices alongside the need for every citizen to have a access to information, to communicate effectively, including through platforms that enable e-learning, e-health, and emergency/disaster management.

3. STATUS OF ICT GROWTH & ACCESS IN KENYA

We invite comments on:

i. *The sufficiency or otherwise of the national policies and strategies relating to access and application of ICT services by all citizens.*

ii. *Respondents are particularly encouraged to submit any specific proposals that will further boost easier access to Internet Enabled devices such as smartphones, tablets, laptops, etc. in both urban and rural/marginalized areas of Kenya.*

3.1. Uptake of ICTs in Kenya

The ICT sector in Kenya has over the past two decades witnessed tremendous growth resulting in a significant percentage of the Kenyan population (95%) in a position to access and utilize ICT services. The number of mobile subscriptions has grown 30-fold over the last 16 years to stand at 52.2 million by June 2019 compared to the 1.6 million in June 2003 as depicted in Figure 1.

Figure 1: Trends in Mobile Subscriptions
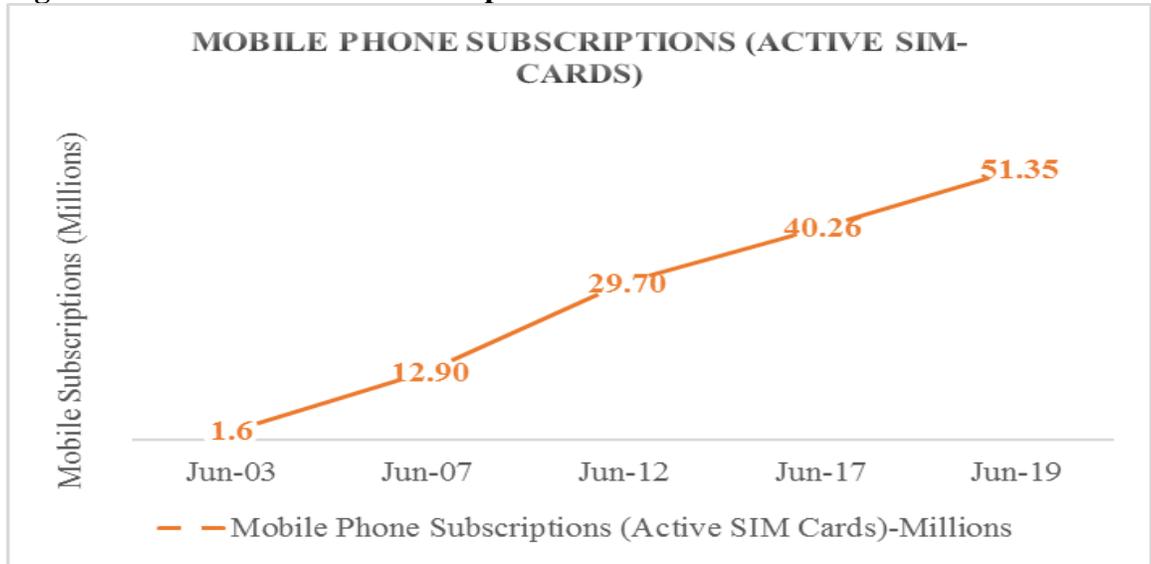
Source: CA Sector Statistics Report

The rapid advancements in technologies such as mobile broadband, Wi-Fi connectivity, smart phones and web-based applications have further enhanced demand for and rollout of mobile broadband networks such as 3G & 4G. Presently about 99% of mobile subscriptions are on mobile broadband networks.

Figure 2 below depicts the mobile coverage trends for 2G, 3G and 4G.
Figure 2: Trends in Mobile Networks Coverage
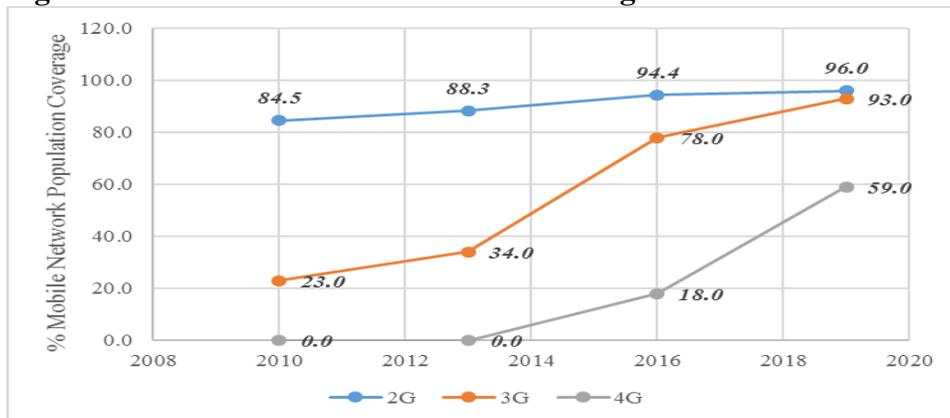
Source: CA Sector Statistics Report

According to the Kenya Integrated Household Budget Survey (KIHBS) conducted in 2016 by the national statistics agency, KNBS, ownership of ICT devises is more concentrated among the urban population as compared to the rural population as depicted in Table below.

Table 3: Population above 3 Years that Used an ICT device and Service

	2016	
Device/Service	**Rural**	**Urban**
Television	33.7	73.1
Radio	75.6	85.3
Mobile Phone	62.0	79.4
Computer	4.5	18.5
Internet	8.6	30.9

Source: KNBS 2017

According to the said KIHB survey, factors determining ownership of devices include affordability, privacy and cultural norms. Table 4 below presents statistics on ownership of devices in comparatives terms between the urban and rural population across the country as per.

Table 4: Ownership of ICT Devices

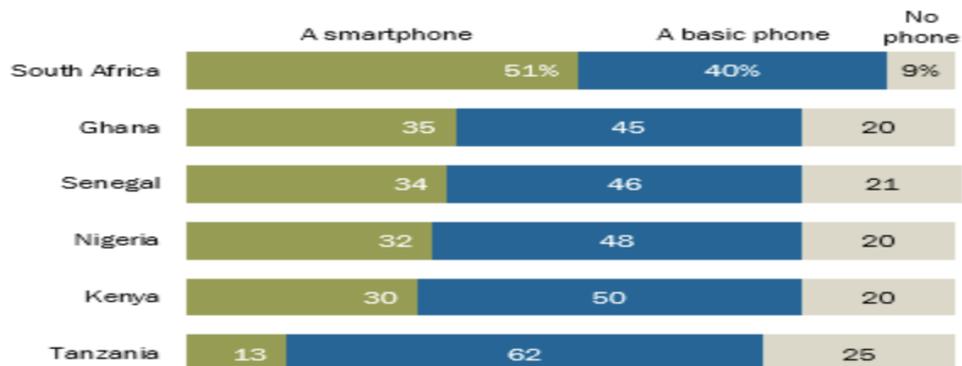| Residence	**Individual Level (Population > 18 Years)**	**Household Level**	
Device	Mobile Phone (Handset)	Television	Computers (Laptops/Desktops/Tablets)
Rural (%)	68.8	15.7	2.4
Urban (%)	88.2	53.1	12.0

Source: KNBS 2017

The cost of mobile handset and cost of maintenance were ranked as the highest barriers of access to devices followed by the lack of need for the device.

A report released by Pew Research Centre in 2017 shows that out of the total population of sub-Saharan Africa, 50% use basic handsets, 30% use smartphones and 20% do not own any. According to this report, Kenya was ranked third in Africa in ownership of handsets and fifth in ownership of smartphones. Table 3 below depicts these results. There may be need to identify strategies to address the causes of the comparatively lower ownership of smartphones in Kenya as compared to the four countries in the region that are ahead of her.

Figure 3: Results by Global Attitude Survey 2017 on Mobile Ownership

Majorities across sub-Saharan Africa own a mobile phone; basic phones are most common type

Adults who report owning ...

	A smartphone	A basic phone	No phone
South Africa	51%	40%	9%
Ghana	35	45	20
Senegal	34	46	21
Nigeria	32	48	20
Kenya	30	50	20
Tanzania	13	62	25

Note: Percentages based on total sample.
Source: Spring 2017 Global Attitudes Survey. Q64 & Q65.

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3.2. Strategic Areas for Promotion Uptake of ICT Devices

Invitation to Respondents:

Respondents are invited submit written general submissions on the matter and/or specific submissions on:

i. Potential Strategies to enhance individual ownership of and/or access to ICT Devices, and

ii. Potential Strategies to enhance individual ownership of and/or access to ICT Devices particularly in the rural and marginalized areas of the Country.

a) ICT Device Uptake Inhibitors

According to the Kenya Integrated Household Budget Survey (KIHBS) conducted in 2016 by the national statistics agency, KNBS, the key inhibitors in access to ICT devices are the cost of the handset; network coverage and lack of electricity as depicted in Table 5 below:

Table 5: Factors that inhibit Ownership of ICT Devices

Areas	Age >18 with No	Phone is costly*	Minors & Associated	No Network coverage	Lack of Electricity	Others

	Mobile Handset (%)	(%)	restrictions (%)	(%)	(%)	
National	23.2	50.3	12.6	1.7	0.5	30.8
Rural	31.2	50.1	12.6	2.1	0.5	31.8
Urban	11.6	50.7	12.6	0.1	0.3	32.3

*Note: *Cost of the mobile handset was established to be the biggest hindrance to access by majority of Kenyans - a total population of 50.3%.*

As clearly shown in Table 5 above, the cost of the devices stands out (over 50%) as the predominant reason for device access among the pollution in Kenya. This is followed by restrictions say to minors, lack of network coverage and lack of commercial power in descending order.

Other considered inhibitors include poor quality of handsets (counterfeits) leading to apathy, lack of digital skills, cost of services, cultural inhibitions, lack of devices that have appropriate accessibility features suitable for persons with disabilities (blind, deaf, etc.)

CA is therefore of the view that it may be appropriate to consider the development of policies and/or strategies geared towards promoting access to ICT devices that speak to the said inhibitors.

b)   **Possible Interventions to promote affordable ICT devices**

Considering the prominence of device cost in the inhibition of device uptake, some of the possible areas of intervention in this regard could include the following:

i.   Establishment of a special device subsidy scheme geared to subsidizing device costs particularly for the vulnerable groups of people such as those in remote rural, those with low incomes, PWDs, etc.

ii.   Consider provision of tax incentives for availing low-cost smart devices particularly those manufactured locally,

iii.   Consider establishment of a Public Private Partnership (PPPs) arrangement in setting up a local assembly plants for devices such as mobile handset and computers.

SUBMISSION OF CONTRIBUTIONS
All your responses will be carefully considered in further steps towards

We invite submissions/comments on:
   i.   Factors that inhibit ownership of ICT devices at the individual level
   ii. Strategies to increase ownership of ICT devices by individual
   iii. Strategies for lowering cost of devices

formulating appropriate strategies aimed at increasing the uptake of ICT Devices with specific reference to smartphones and other broadband access consumer devices.

The analysis of the responses and a consolidated paper will be posted on our website and may request for additional inputs.

Respondents are advised to submit their contributions through the contacts indicated below on or before the close of day 18th February 2020. Any request for clarifications may also be placed through the contacts indicated above during the consultation period.

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