

Online Discussions

Draft ICT Policy 2016

Validation Meeting 'Working Draft'

26th July 2016

Acknowledgments

We wish to thank the Ministry of Information and Communications Technology, Strathmore University Law School and KICTAnet (Kenya ICT Action Network) for supporting the Online Discussions on the draft national Information and Communications Technology (ICT) Policy. Special thanks to KICTAnet members who made this particular Online Discussion one of the most lively and informative in recent times. We are sure your contributions will inspire each Stakeholder in a special way and provoke them to action that that will strengthen the Information and Communications Technology Industry.

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Executive Summary

The Government of Kenya through the National Communications Secretariat embarked on a process to review the ICT policy that was developed in March 2006 through a multi stakeholder approach. The review of the policy is inspired by the need to align it with the new constitutional dispensation in Kenya and vision 2030 that seeks to transform the country into a leading Information and knowledge hub in the region.

The review is also meant to provide a proactive policy and regulatory framework that is not only in sync with contemporary technological realities and dynamics, but is also expected to guide the orderly development of the ICT sector so as to ensure maximum developmental impact for the benefit of all Kenyans.

This revised policy is expected to provide a clear and compelling roadmap to drive social, economic, cultural and political transformation through the effective use of Information and Communications technology in the years ahead. The policy complements and builds upon vision 2030 and provides many of the key strategies essential for achieving Kenya's national development targets.

It is against this background that the Kenya ICT Action Network (KICTANET) conducted an online discussion on two platforms that is the KICTANET List Serve and the Jadili platform courtesy of the Strathmore University Law School.

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Introduction

Background

The review of the ICT Policy 2006 has been necessitated by changes in ICT that have taken place since 2006. The current ICT policy was developed in 2006 when ICT's were at infant stages of development in Kenya. Since then the country has experienced new developments and convergence of ICT technologies hence the need to review the ICT policy 2006 to ensure it is in sync with current trends in Information and Communications Technology.

Program Setting & Description:

The Ministry of Information Communications and Technology initiated the review of the ICT policy 2006 through a process of public consultations. Consideration was given to the review of the current legislative framework within the context of convergence to identify any inadequacies that may hamper effective regulation.

The draft ICT policy was subjected to further scrutiny on the Kenya ICT Action Network List serve, Strathmore University Law Schools Jadili Platform through a ten day online discussion that gathered views from members of KICTANET.

Program Design (Data Collection, Data Processing)

Data Collection:

The Online Discussion was structured along the following themes that were discussed electronically over a period of 2 weeks according to the following schedule:

How to Develop ICT infrastructure (Day 1-Wed 22nd June 2016)

Telecoms, broadcast, broadband internet, postal)	

Investment incentives (FDI, Equity Shares) Open Access Infrastructure Sharing (masts, ducts, way leave etc) Spectrum management Postal/National Addressing System Data Centers, IXPs, CDN How to Develop ICT Info-Structure (Day 2-Thursday 23rd June 2016) Local content, Broadcast content, diversity, cultural identity Access to Information/Open Data Local Application Development How to Develop Skilled Human Capital (Day 3-Fri 24th June 2016) ICT integration in primary, secondary, tertiary levels, Specialized skills (Software /Engineering) Research & Development Capacity eLiteracy for citizens/public How to enhance Universal Service & Access (Day 4-Mon 27th June 2016) Universal Access (Infrastructure) Universal Service (PWD) Affordable Internet broadband Services Affordable User Devices How to Develop local ICT Industry (Day 5- Tue 28th June 2016) eCommerce, National Addressing System Local eBusiness,

Business process outsourcing
Investment incentives (Equity Shares)
ICTs in SME, (Small Medium Size Enterprises)
ICT regional export incentives
Local Device Manufacturing
How to Accelerate eGovt Services (Day 6- Wed 29th June 2016) eHealth, eAgriculture, eTransport, eGovt, eLearning
ICT regional (county) incentives)
ICTs in Society, Culture
How to enhance Cybersecurity (Day 7) - Thrs 30th June 2016) Online Citizen Safety,
Child Protection
Privacy issues
Security business transactions (Info-Security)
Security & Reliability of Critical ICT infrastructure
Emerging Issues (Day 8 -Fri 1st July 2016)
Internet of Things, M2M
Net Neutrality & OTT
Big Data
Virtual Money/BlockChains
Institutional, Legal & Regulatory Framework (Day 9-Mon 4th July 2016) Role of Regulator, USAC, CERTs, NCS, ICTA, PCK, CSO, Professional Bodies etc
Needed Legislation, Data Protection, eTransaction, Intermediary Liability etc
Needed Legislation, Data Protection, eTransaction, Intermediary Liability etc DAY 10, Tue 5th July -Wrap UP Closure

Data Processing:

The various contributions from the Participants were analyzed and collated into a report.

Aim: To present the draft ICT policy 2016 to KICTAnet members for further feedback as well as collection of input from the ICT community and other e-participants in Kenya. The ediscussion was also extended to the ISOC Kenya and Skunkworks mailing lists that have close to 1500 participants.

Objectives

The Objectives of the e-Discussion were:

- To share the draft ICT Policy 2016
- To obtain input from e-participants
- To begin to build consensus on the policy implications

Main Outcomes/Deliverables

The key outcomes of the exercise included:

- Summarized participants contributions
- Final report for subsequent dissemination to members and other stakeholders

Tools

Resources

Moderator (Online)
Participants (Online)

Web Resources

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Day 1 of 10, How to develop ICT Infrastructure

Focus was on the following issues:

Telecoms, broadcast, broadband internet, postal

Investment incentives (FDI, equity Shares)

Open Access

Infrastructure Sharing (masts, ducts, way leave etc)

Spectrum management

Postal/National Addressing System

Data Centers, IXPs, CDN

The moderator sought input from listers on actions required to ensure a robust Telco/ Internet, broadcast and postal environment from and infrastructure perspective.

The following feedback was received from list serve members:

The policy should provide for the review of the management, performance, utilization and optimization of the National Optic Fiber Backbone to ensure it is used beyond IFMIS and availed to the private sector as well.

The policy should provide for a periodical review of the impact of the Universal Service Access fund. A real time map can be used for this purpose.

The policy should provide a framework that will harmonize the management of way leaves at National and county level.

The policy should provide guidance for procuring and utilization of data centre services by government. Policy should promote use of local service providers to encourage growth of local content. Policy should promote Infrastructure sharing within government.

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Data protection laws are required to make Kenya an attractive data centre destination.

destination.
There is need to package, market and brand NOFBI to private sector players for provision of last mile connectivity.
The policy should recognize and promote community broadband initiatives.
The Policy should promote adoption of IPV6 in light of the fact that IPv4 is being exhausted.

Day 2 of 10: How to develop ICT Info-structure

The second day focused on the following issues: Local Content, Broadcast Content, Diversity, Cultural Identity Access to Information/Open Data **Local Application Development** The moderator enquired from participants the steps required to develop a vibrant local content industry. The following feedback was received from participants: The policy should promote creation and uptake of local content. The policy should recognize and provide guidance on the use of archived content. The policy should recognize and encourage collaboration between actors in the content industry. Policy should provide guidance on the fees required for non commercial and student films to encourage the local content industry. The policy should embed content creation in school curriculum. The policy should lower barriers of entry into the broadcast industry for community based information service providers. The policy should promote the growth and development of the local broadcasting industry by providing incentives for service providers. The policy should promote research and innovation through resource allocation. The policy should promote the content creation eco-system. The policy should promote affordable access to broadcast equipment and services. The policy should promote accessibility of broadcast content to underserved areas. The policy should promote the upgrading and enhancement of Infrastructure for the National Broadcaster. The policy should promote digitization of historical content of national and cultural value. The policy should encourage service providers to utilize local Internet exchange points thus promoting

The po	olicy should pr	omote usage	of local data	a centre's an	d local hosti	ng.	
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Day 3 of 10: How to develop skilled Human Capital

The third day focused on the following issue:

ICT integration in primary, secondary, tertiary levels,

Specialized Skills (Software /Engineering),

Research & Development Capacity,

ELiteracy for citizens/public.

The moderator enquired from discussants proposals for policy interventions that would ensure that the country churns out a constant supply of skilled manpower necessary to drive the digital society. The following feedback was received from discussants:

The policy should recognize and support local innovation hubs as centres of capacity building and innovation.

The policy should provide for the establishment of Kenya Institute of Technology.

The policy should encourage and support establishment of local Network Operator Groups or communities of ICT engineers across the counties to support continuous professional development and knowledge exchange.

The policy should recognize and promote the need for continuous professional development for ICT teachers.

The policy should recognize and encourage introduction of ICT education at pre-school levels.

The policy should encourage innovation at National level by supporting the National Technical
Conference focusing on ICT innovation.
The policy should promote public e-literacy initiatives to encourage uptake of online services.
The policy should provide avenues for regulating and promoting professionalism in the ICT sector.

Day 4 of 10: How to Enhance Universal Access and Service

The discussion focused on the following topics:
Universal Access (Infrastructure)
Universal Service (PWD)
Affordable Internet broadband Services
Affordable User Devices
Public e-Literacy
The moderator sought feedback from participants on ways of utilizing the Universal Access fund to serve underserved areas. The following feedback was received from the discussants:
The policy should provide for and promote the accountability of the Universal Access and Service Fund.
The policy should recognize and promote universal broadband connectivity.
The policy should provide for the use of the Universal Access Fund to create way leaves and build
infrastructure in areas that are underserved.
The policy should provide for public interest representation on the Universal Access Fund board.
The policy should provide for provision of ICT services for people with disability, this includes
broadcast content as well as access to electronic infrastructure for people with disabilities.
The policy should promote public e-literacy.
The policy should encourage and promote sharing of infrastructure.

Day 5 of 10 : How to develop the local ICT Industry

The following topics were discussed in day 5:
ecommerce, National Addressing System
Local eBusiness,
BPOs
Investment incentives (Equity Shares)
ICTs in SME, (Small Medium Size Enterprises)
ICT regional export incentives
Local Device Manufacturing
The moderator enquired from participants the policies and strategies needed build new ICT enterprises
whilst integrating ICT's in existing enterprises.
The following feedback was received from participants:
The policy should provide for establishment of a National Addressing System that is synchronized with the Building Code maintained by the National Construction Authority.
The policy should promote uptake of IT enabled services by encouraging local universities to set up BPO centre's.
The policy should encourage and promote the availability of online services to small and medium enterprises.
The policy should promote the development of local ICT service providers.
The policy should promote local manufacturing of ICT devices.
The policy should encourage the use of ICT's in local businesses by providing concessions on acquisition of equipment and Internet connectivity.
The policy should encourage and promote research and innovation as a way of promoting the local ICT industry.

The policy should promote the local ICT start up eco-system with particular emphasis on capacity building, regulation, access to markets and access to cheap capital.			
The policy should provide for the development of a National Skills Inventory.			
The policy should promote the development of TIVETS as centre's of excellence in ICT			
The policy should provide for awards for innovative solutions in the ICT sector which will promote research and innovation.			

Day 6 of 10: How to accelerate E-government services

Participants focused on the following topics on day six:

eHealth, eAgriculture, eTransport, eGovt, eLearning

ICT regional (county) incentives)

ICTs in Society, Culture

The moderator sought to understand the bottlenecks that prevented the public from utilizing electronic services offered by the government. The following feedback was received from participants:

The policy should encourage and promote the provision and use of government services on electronic platforms.

The policy framework should discourage duplication of government services.

The policy framework should recognize and provide for business continuity for government services.

The policy framework should promote freedom of expression and cultural diversity.

The policy framework should provide for the protection of Intellectual property rights in ICT's.

The policy should promote interoperability of government systems and access of government services from single dashboards.

The policy should provide guidance on government programming and coordination that can support egovernment.

The policy should provide for the inclusion of the ICT Authority on the Medium Term Plan Committee and Intergovernmental Institutions such as IEBC and Intergovernmental Technical Relations Committee.

The policy should promote Information sharing between government agencies.

The policy should encourage harmonization of ICT services between National and County

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Governments through the Council of Governors.	
The policy should promote e-learning and digitization of learning content.	

Day 7 of 10 : How to Enhance Cyber Security

The following topics were discussed in day 7:
Online Citizen Safety,
Child Protection
Privacy issues
Security business transactions (Info-Security)
Security & Reliability of Critical ICT infrastructure
The moderator sought to understand policy interventions that would assist in mitigating Cyber attacks
against digital national assets. The following feedback was received from participants:
The policy should harmonize the activities of various state and non state Cyber Security Actors.
The policy should promote public education and creation of awareness on Cyber Security.
The policy should encourage adoption of International Information Security Standards such as the ISO
27001 series
The policy should promote and uphold end user Privacy rights. Service providers should be obliged to
educate users of their products on their rights.
The policy should promote child online protection

Day 8 of 10 : Emerging Issues

Day 8 focused on the following issues:
Internet of Things, M2M
Net Neutrality & OTT
Big Data
Virtual Money/Block Chains
The moderator sought the opinion of discussants as to whether the new policy should recognize and
facilitate further development of emerging technologies. The following feedback was received from
participants:
The policy should recognize Net Neutrality and its implications on electronic commerce.
The policy should recognize and promote the adoption of block chain technologies through capacity
building and awareness creation.
The policy should recognize and promote convergence of technologies and the Internet of things
The policy should recognize and promote big data and cloud computing.
The policy should promote research and innovation into emerging technologies

Day 9 of 10 Institutional, Legal & Regulatory Framework

The following topics were discussed:

Role of Regulator, USAC, CERTs, NCS, ICTA, PCK, CSO, Professional Bodies etc

Needed Legislation, Data Protection, transaction, Intermediary Liability

The moderator sought to understand whether the various regulatory bodies were effective in discharging their mandate or if there is need to define and bring in specific roles for professional bodies and civil society organizations.

The following feedback was received from members:

The policy should clarify the mandate of all institutions that fall under the legal and regulatory framework within the ICT Sector to eliminate duplication of roles and functions.

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Day 10 of 10 :Vision, Mission, Objectives

Participants focused on the Vision, Mission and objectives of the draft ICT Policy.

The following feedback was received from participants:

Current Vision - A prosperous and competitive ICT-driven Kenyan society.

Current Mission - To improve the livelihoods of Kenyans by ensuring the availability of accessible, efficient, reliable, affordable and secure ICT services.

Proposed Vision: A country where ICTs are enabling prosperity through creativity and competitiveness in all sectors and levels of society

Proposed Mission - All ICT professionals, practitioners and relevant stakeholders will work together to improve the availability and accessibility of secure, efficient, reliable and affordable ICT services in/to all parts of the country.

Current Vision - A prosperous and competitive ICT-driven Kenyan society.

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The Vision should reflect not just consumption but also production and the same should be reflected in the overall strategies applied in the policy.

Example: Vision: "A Kenya that is an ICT Consumption and Production Powerhouse"

A little ambitious but we have to dream big if we are serious about becoming an ICT driven society.				

Other views

- 1) Evaluation of the 2006 ICT policy. No attempt was made to evaluate how useful the 2006 policy was in guiding the industry. What was achieved/not achieved? What did we learn? There was a section 4.2 on rationale but it is too weak. I propose a substantive section on this in the Introduction.
- 2) Reference to other policy documents. There are a number of documents that could be considered at policy level, e.g. the National ICT Master Plan and the National Broadband Strategy. No reference is made to these documents yet they have very key policy statements, outcomes and targets. For example, in the National ICT Master Plan, there is a recommendation to create ICT as a stand-alone sector with its own ISIC classification standards. This is something I would have expected the policy document to pick up because it is so important for growth of ICT in this country.
- 3) Section 6 is derived from the draft Science, Technology and Innovation (STI) policy. No reference is made to this document, which unfortunately was not formally adopted because it was presented just before the last election and everyone was in a hurry. At the same time, most of the material in this section 6 comes from the STI policy document without value addition. Given that the draft STI policy was developed in 2011/12, I propose we make amendments to the proposed Kenya National Innovation System (KNIS) given that a lot has changed since then and a lot is likely to change in the life of this document. The Ministry of ICT, ICT Authority, the various tech innovation hubs and KoTDA are key actors now or in the future and should be recognised in the KNIS.
- 4) Policy outcomes. The document contains policy objectives, which is fine. However, it is very difficult to evaluate the accomplishment of objectives. I propose that for each area, we develop policy outcomes. This way, we can measure the achievement of this new policy. We would also be providing direction to the various strategy documents that would need to be developed at a lower level.
- 5) Hurried. Reading through the document, one gets the impression that it was hurriedly put together. If it is going to serve us for > 10 years, we need to give it time and produce a good document. So let us

not be in a hurry to push it for approval when there are glaring problems. In any case, we have a policy that still continues to guide us, approximately.

We need to ensure we are writing a policy document that goes beyond "keeping abreast with current ICT the current ICT technology." For the ICT sector, things get obsolete the moment they are accepted as being "current". So let us go beyond that and plan for "emerging and futuristic" by facilitating innovation.

The Government will recognize and encourage the formation of national ICT professional bodies registered under the laws of Kenya to foster professional ethics, standards and human resource development in the sector.

Apart from the comments made elsewhere on the "ICT Practitioners Bill", the policy should make it clear that this section does not call for a single 'umbrella' body as ICTAK attempted to have enacted but rather the recognition of the roles of the various professional bodies and multi-stakeholder forums.

A similar approach applies to Broadcasting professionals especially the ones involved in "technical aspects of broadcasting" who have to deal with convergence but are always caught up in fixing the crisis created by the public broadcasting or media owners failing to adopt convergence, not just in terms of 'converged technology', but also convergence in their operations:

Encouraging national professional bodies for media practitioners to participate in setting standards in broadcasting. Also encourage media training institutions to provide structured specialized programmes that cater for people with talent for creative writing, film production, animation creative and technical aspects of broadcasting

There is no mention of Freedom of Information as a concept. Only "Access to Information" is covered and in reference to making government websites accessible and sharing government content with private sector for reuse.

private sector for reuse.			
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Evaluation & Feedback

Technical

There was excellent technical reliability of the listserver with no reported incidents of technical failure.

eParticipants

During the eDiscussions, the KICTANet listserver had around 926 (nine hundred and twenty six) subscribers with about twenty five of them contributing actively during the eDiscussions.

Moderation

The discussion was moderated by two people, there was lively interaction and sharing of information from the participants and it was not only easy but enjoyable to moderate such an audience. The Synthesis (short summaries) posted before each them may have helped and inform participants contributions.