

**Third East Africa Internet Governance Forum
(EAIGF 2010)**

**Strengthening East Africa's
Critical Internet Resources**



**Kampala - Uganda
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**East Africa Internet Governance Forum
www.eaigf.or.ke**



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ACRONYMS

APC - Association for Progressive Communication

CCK – Communications Commission of Kenya

CCTLD – Country Code Top Level Domain

CERTs – Computer Emergency Response Teams

CIPESA - Collaboration on International ICT Policy for Eastern and Southern Africa

CIRs - Critical Internet Resources

CIRTs – Computer Incident Response Teams

DNSSEC - Domain Name System Security Extensions

DOT - Digital Opportunity Trust

EACO - East Africa Communications Organisation

EAIGF - East African Internet Governance Forum

FOSS - Free and Open Source Software

GTLD – Generic Top Level Domain

ICANN - Internet Corporation for Assigned Names and Numbers

ICT - Information Communications Technology

IG - Internet Governance

IGF - Internet Governance Forum

I-NETWORK – Information Network Uganda

IP - Internet Protocol

IPv4 -Internet Protocol Version Four

IPv6 - Internet Protocol Version Four

ITU -International Telecommunications Union

IXP - Internet Exchange Point

JICA- Japan International Cooperation Agency

KENIC – Kenya National Information Centre

KICTANET - Kenya Information Communication Technology Action Network

KIST - Kigali Institute of Science and Technology



NITA-U - National Information Technology Association of Uganda

PPP – Public – Private Partnership

RICTA - Rwanda Information and Communication Technology Association

TCRA – Tanzania Communication Regulatory Authority

TLD – Top Level Domain

UCC - Uganda Communications Commission

UNCLOS - United Nations Convention on the Law of the Sea

UNECA – United Nations Economic Commission Africa

WOUGNET - Women of Uganda Network

WSIS - World Summit on the Information Society



SESSION 1: OFFICIAL OPENING AND LAUNCH

- Facilitator: Badru Ntege

"It is time to add the Internet to the other resources we cannot work without as human beings, which are fire, water and love."

"Is content the written word or multimedia, when you are dealing with local content for Africa?" These are some of the issues that we have to discuss over the next two days.

OPENING REMARKS: I-NETWORK COORDINATOR

- Elisha Wasukira

Honourable Minister Alintuma Nsambu; Executive Director Uganda Communications Commission; Honourable Members of Parliament present and distinguished participants; I am here to welcome you on behalf of the organisers for the East Africa Internet Governance Forum, who are I-Network, Ministry of ICT, Uganda Communications Commission (UCC), Women of Uganda Network (WOUGNET) and Collaboration on International ICT Policy for Eastern and Southern Africa (CIPESA).

SPEECH: EA-IGF CONVENER

- Alice Munyua

The first East African Internet Governance Forum (EA-IGF) took place in Nairobi Kenya in 2008. It was convened by the Kenya ICT Action Network (KICTANET) as a multi stakeholder process. The 2008 EA-IFG was convened after realisation that issues surrounding Internet Governance had not adequately caught the attention of policy makers and other stakeholders in the EA region. Enabling participation from our region in the IGF process has been challenging. With limited knowledge of the issues and discussion, we very too often underrepresented in the global arenas where these Internet policies are developed, and also unable to contribute fully and meaningfully to the dialogue at the Internet Governance Forum.

With this challenge in mind, KICTANet organised and convened the 2008 and 2009 regional East Africa IGF (EA-IGF) meetings. The EA-IGF has brought together stakeholders from Rwanda, Tanzania, Burundi, South Sudan, Uganda, and Kenya to identify, explore, and build consensus around common internet Governance priority issues. The EA-IGF model follows a bottom up multi-stakeholder approach, which begins at the national level with mailing list discussions in the five East African countries, followed by national face-to-face IGFs, to continue discussions and validate the issues identified as well as begin to explore recommendations and solutions.



The national IGFs then form the building block for the regional East African IGF. Outcomes of both the national and regional IGFs contribute to discussions at the annual global IGF. It is important to note that the EA-IGF does not attempt to mirror the global UN-IGF neither does it attempt to adopt any of the issues arising from it. It is also important to note that for the last two EA-IGFs, we have been discussing how best to get outcomes from our national and regional process despite the limitations placed on the global one. So as we discuss, this will be an important issue to continue debating and to consider.

The East Africa Internet Governance Forum is open to representatives from Government, civil society, academia, private sector, media, consumer groups and individuals interested in the Internet Governance Forum Process.

The Goal of the EA-IGF is to create a community of practice that will be a sustaining foundation for meaningful participation of East African stakeholders in internet public policy debates at the national, regional and international level.

Many thanks go to all the hosts, sponsors, participants with the hope that once again our discussions will be productive.

SPEECH: ACTING EXECUTIVE DIRECTOR UGANDA COMMUNICATIONS COMMISSION

- Patrick Mwesigwa

Our Guest of Honour, the Minister of State for the East African Community
The Minister for ICT, Hon. Aggrey Awori
Honourable Members of Parliament
Distinguished Delegates
Invited Guests
Ladies and Gentlemen

It gives me great pleasure to welcome you all and make remarks at the opening of the East African Internet Governance Forum (EAIGF-2010). We feel greatly honoured for Uganda to be hosting this important event.

On behalf of Uganda Communications Commission, I wish to especially welcome our colleagues who have come all the way from Kenya, Tanzania, Burundi, Rwanda and elsewhere to attend this Forum. It is, indeed, an honour for me to address you this morning.



As the regulatory agency charged with oversight of communications sector in Uganda, UCC is indeed glad to be associated with this important event. The Commission has been involved in the Internet Governance process since the World Summits on Information Society of Geneva in 2003 and that of Tunis in 2005, which resulted in the creation of the Internet Governance Forum. It is gratifying to note that the Uganda National Internet Governance Forum has continued to play an active role throughout the entire process.

Ladies and Gentlemen, the importance of the Internet cannot be overemphasized. The Internet is increasingly playing a critical role in all our socio-economic activities. Therefore, its governance cannot be left to a closed group of people. We must all be involved in the policy, legal and technical decision-making process in order for all of us to benefit from the enormous opportunities presented by the information society.

The growing significance of the opportunities and threats created by the development and use of the internet and related Information and Communication Technology (ICT), calls for a concerted effort to create a trusted, transparent and non-discriminatory legal, regulatory and policy environment at the global, regional and national levels.

Suffice to say, we need to take into account the need for a broad multi-stakeholder model of Internet governance, including significant civil society participation, when seeking to develop effective and equitable policies to meet our socio-economic development goals.

As a region we need to take maximum advantage of the Internet so as to develop our respective countries. We should ensure that the Internet is a resource that benefits all our people. This can best be done, if we have a strong and dynamic regional IGF. It is, I believe, for this reason that we are gathered here today.

I am sure you will agree with me, the formation of IGFs has been an important step in creating a flexible procedural structure for identifying, discussing and addressing key issues through a growing multi-stakeholder policy dialogue.

Ladies and Gentlemen, The fifth IGF is scheduled to be held in Lithuania, on 14-17 September 2010, which is just a month away. One of the important decisions the next IGF is expected to make is to agree on the future of the IGF. In view of the remarkable achievements of the previous IGFs, Uganda would support the continuation of the IGF in its current form organized with the participation of all stakeholders.

I would like to thank membership of EAIGF for having given us this opportunity to host this important event. I wish to reiterate the commitment of UCC in ensuring that the Internet remains a tool for socio-economic development of our region.



Ladies and Gentlemen, my remarks would be incomplete if I failed to acknowledge and appreciate the wonderful collaboration we have received from the various stakeholders – without mentioning specific names - who have contributed in one way or another to the convening of this event. I also wish to express my sincere appreciation to the organising committee which has worked tirelessly to ensure that this Forum is a success. Please, keep up this spirit.

I thank you for your kind attention.

SPEECH: UNITED NATIONS INTERNET GOVERNANCE FORUM (IGF) SECRETARIAT

– Chengetai Masango

Hon Ministry of state, the Permanent Secretary, Acting Executive Director –UCC, honourable members of Parliament, Distinguished delegates, Ladies and gentlemen. I am much honoured to be here at the EAIGF which has one of the most vibrant communities.

The issue in Africa has mainly been access to internet in the past. Delegates that attend the IGF have presented access as a major concern.

However, East Africa now has fibre optic cables coming into their countries, the IGF discussion is now being centred on effective management of the regional ISPs, security concerns such as computer hijacking and inter border crimes.

Internet accessibility by people from rural areas is very essential especially the access of government services via the internet.

One other challenge is the lowering of internet costs. Hopefully with more competition, the prices will go down.

I have noted that the EAIGF employs a multi stakeholder approach given the broad range of participants in attendance which is a good thing.

The International Governance Forum has just gone through a review process. One the key issue that has been noted is the low level of interaction by the African countries. Most of people who come to the International Governance Forum are rather quiet with the excuse that Africa is still on a learning process. After attending the East African Governance Forum in Kenya, I noticed that all issues that were discussed at the local level are the similar to those at the international level. I encourage all Africans to participate. Those who do not have a chance to attend can participate online.

Thank you very Much.



SPEECH: MINISTER OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, UGANDA

– Honourable Alintuma Nsambu

The Honourable 1st Deputy Prime minister of the Republic of Uganda, Honourable members of Parliament, Distinguished guests, Director of United Nations Internet Governance Forum, the directors and representatives of the East African states, my own Permanent secretary and all of you, Ladies and gentlemen,

On behalf of Ministry of Information Communication Technology and my own behalf, let me thank all of you for accepting the invitation thanks for participating at this year's EAIGF and especially the honourable 1st Deputy Prime minister for officiating this occasion.

The ministry of Information and Communication is pleased to work together with the private sector Technology to promote the ICT industry. It therefore gives me great pleasure to see the civil society, private sector and government coming together in this forum.

ICT is an increasingly powerful tool for participating in the global market, promoting political accountability, improving delivery of services and enhancing local and global development opportunities.

The 1st deputy prime minister has been successful at promoting Uganda in the past and I will do the same to promote internet usage.

KEYNOTE ADDRESS: PRIME MINISTER OF UGANDA

- Professor Apolo Nsibambi

As you have heard, I am both 1st deputy Prime Minister and minister for East African Affairs. My job is to read the speech of the prime minister who had to attend other duties.

Honourable Minister, director of UN IGF, directors, distinguished guest, ladies and gents.

I wish to welcome our guests to Uganda in general and this event in particular, it gives me great pleasure to address this IGF which is a spin off of the WSIS. I was delighted to meet the director at the Geneva summit in 2003. I am indeed aware of the effort that has gone into the WSIS process and the IGF. I am once again happy to participate in the WSIS process.



I understand the main objective is address Critical internet resources, ccTLD, transitioning from IPv4 to IPv6, importance and collaboration in relation to national and regional IXP.

Uganda is committed to WSIS implementation and follow-up. Uganda has noticed the potential of ICT as a tool for national development; ICT has been identified as one of the growth sectors in the National Development Plan recently launched by the president.

One of the plans is to provide affordable and equitable Internet resources countrywide. There cannot be integration of regions without quick communication and information exchange. When we breakdown the barriers, then countries can do business expeditiously.

Internet Governance was one of the key issues at the WSIS 2003; this is not surprising considering the internet's impact on the social and economic environment.

I am pleased to learn that the since 2008, Uganda has held an IGF with full participation of government, civil society etc, more importantly; Government has been spurred to address the issues raised at the forum. I understand that this multi stakeholder process undertaken is unique and other regions are striving to do the same.

The govt of Uganda continues to produce policy and regulation that are relevant to the ICT sector, based on issues raised.

Enactment of cyber laws to address electronic transactions, computer misuse and electronic signatures has been done. The Computer misuse bill was passed on 4th August 2010 by parliament.

Migration to IPv6 - ministry of ICT is developing a migration strategy with support of stakeholders and the ITU.

The government of Uganda appreciates the role played by these stakeholders in the Internet Governance Forum.



SESSION 2: NATIONAL IGF REPORTS

Facilitator: Dr. Waudu Siganga

The IGF process follows a bottom up approach. IG issues identified at the grass roots are taken on for discussions at the national level and further into the regional level and International levels. The purpose of the regional IGF forum is to crystallize those issues identified at the national level.

RWANDA REPORT

Presentation:- Emmanuel Hubemurenzi , Media High council

The 2010 Rwanda IGF was held on 3rd August 2009, officiated by the Minister of ICT and supported by Ministry of ICT and JICA. Participants ranged from the Public sector (regulator, policy maker), private (telecom companies, private sector federation), civil society (local government association, platform of national NGOs), media attended.

Objectives

- Strengthening cooperation between government and ICT sector stakeholders in their complementary role of promoting Internet usage as tool for spearheading Rwandan development;
- Create awareness on the existing issues in Internet Governance at the national level and propose solutions;
- Come up with a common understanding on issues to be discussed at the EA-IGF level;
- Setting up the Rwanda IGF Platform

IG issues: Thematic discussion

The history and role of IGF (at the global, regional and national level) was presented.

Issues discussed:

- Strengthening Critical Resources: ccTLD, IXP (RINEX).
- Access and affordability of the broadband
- Migration from IPv4 to IPv6
- Cyber Security

Rwandan IG priorities

- Human capacity development in ICT
- Content development
- ccTLD re-delegation and
- Management of the Rwanda Internet Exchange Point (IXP)



-
- IPv6 transition and migration
 - Access to broadband
 - Cyber security
 - Certification (services, organisation, human skills)
 - Affordable Internet access devices

Way forward

- Creation of sustainable National IGF working group that will address and follow-up on key IG priorities identified. The Rwanda IGF working group is made up of 8 people headed by Professor Zimulinda, a lecturer at Kigali Institute of Science and Technology (KIST); 2 members from private sector, 2 members from public sector (regulatory body and policy makers), 2 members from civil society (local government association, Platform of the National NGOs), and 2 members from academia/research
- Call for regular consultation/information sharing through virtual forums which will be complemented by face to face meetings. The results of these discussions and recommendations should be captured and codified for further dissemination
- Follow up the implementation of the national IGF recommendations;
- Make IGF a strong platform to determine a country position on IG issues at national, regional and global level.

KENYA REPORT

- Joe Kiragu, KENIC

Kenya IGF was held on 29 July 2010. The aim was to continue raising awareness of the global Internet Governance issues while reviewing corresponding country positions based on new developments.

Objectives of the discussions

- To raise awareness of global Internet Governances (IG) issues
- To review previous year country positions in light of new Policy, Legal, Technical and other developments.
- To build consensus and new positions regarding IG issues

Discussions were held online between 5th and 19th of July 2010. The discussions attracted over 15 of the 350 KICTANET mailing list participants. The online discussions were followed by face to face synthesis and validation meeting. The discussions covered the following issues; background to the Internet Governance; Infrastructure; Management of critical Internet resources; Cyber security and trust

National forum discussions centred on critical Internet resources that included;



the impact of the under sea cable;- impact of the unified licensing model, emerging policy and regulatory issues;

Management of dot ke model has benchmarked by other countries as the best model for re-delegation of ccTLDs in Africa. As such, KENIC hosted Botswana in case study on the .ke ccTLD whereas Mali has also expressed interest in adopting the model. To date, 14,000 domain names and 9 second level TLDs have been registered in Kenya; liberalisation of second level domains is going to be implemented very soon as well.

Adopting IPV6 challenges and milestones; KENIC has carried out training on IPV6 migration

Kenya IXP: The Mombasa exchange point is to be launched August 13th. A back up exchange point has been launched at chancery house and government of Kenya shall have its own IXP. Thus by 2011, there will be four IXPs in Kenya.

Cyber Security; - electronic crimes; privacy and data security. There are efforts to set up a national CERT.

Continuation of the IGF: The Kenya IGF shall continue even if the global IGF mandate is not continued.

BURUNDI REPORT

- *Victor Ciza, AfriRegister*

Burundi is yet to hold its 2nd Internet Governance Forum.

Developments, activities and issues

- A legal and infrastructure ICT framework is under preparation
- Preparation of the law on information society and electronic communication.
- Setting up of National chamber of ICT in Burundi

Construction of country optic fibre cable

Remarks by facilitator

- Efforts should be made to improve participation of the private sector, because it has a lot of contribution to make. In the next forums, telecommunication companies and Internet service providers should be invited.
- Formation of a national chamber of ICT is a model that can be emulated by the rest of the African Countries.

UGANDA REPORT

- *Lillian Nalwoga, CIPESA*

Objectives of the Uganda forum



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- Provide updates on outcomes on key issues identified in the previous years
 - Seek more awareness about Uganda's IGF issues
 - Redefine some issues that may not be clearly defined.

Uganda IGF starts with online discussions that provide input into the national forum. The discussions are run on the main ICT mailing lists in the country, I-Network and WSIS.

Uganda supports the IGF debate and will continue holding national forums even when the global IGF mandate is not extended.. However, in a bid to continue, . Uganda shall also support Kenya as the host of the global IGF forum in 2011.

Key issues arising from 2010 UGIF were:

1. Access and broadband affordability
 - Improve access from the rural and the youth perspective
 - Harmonisation of ICT project deployment in the rural areas
 - Ensure sustainability of ICT projects being set upUndertake capacity building for persons in the rural areas to be able to use the ICT projects being set up by government. UCC and the
2. Youth access to the Internet: Youth are the majority of Internet users of the internet; however, there is need to device means of providing affordable access to them. Thus there is need to engage the youth in Internet governance debates and discussions. Questions on how we empower the youth either through providing ICT trainings or improving access have to be addressed. Hence, the need to strike a balance between youth and rural access.
3. Local content: in order to improve access, local content is needed. Government needs to provide e-content for citizens to appreciate e-government projects. Case of Bukedde newspaper (Luganda) as an online version, where people can access news in luganda (local language). Governments further need to provide constant updates and content on their websites for citizens to be informed and aware of key undertakings in the country. Uganda currently does not have a budget designated to developing local e-content.
4. Call to strengthen the management of the UIXP by addressing infrastructure vulnerability i.e .redundancy of cables
5. Cyber security management: – Parliament of Uganda passed Interception of communications bill and Computer Misuse bill. Currently; the Ministry of Uganda are in the process of developing the National Information Security Strategy under NITA-U as well as establishment of a national CIRT – spearheaded by UCC/Ministry of ICT



6. Uganda identified key Critical Internet resources defined as: **Administration**:- Ug ccTLD; DNS, Root servers, Standards and policies governing them; **Applications**; E-government and E-transactions; **Environment**; -Electricity and funding; **Infrastructure**:- Connectivity, UETCL fiber; UIXP and National Backbone.

- Re-delegation of the dot Uganda ccTLD: UCC is proposing to establish a non-for-profit organisation Uganda National Information Centre (.ugNIC), which will have a Board with multi-stakeholder representation, two advisory committees i.e. Technical Advisory Committee and Policy Advisory Committee. UCC shall act as the sponsoring agent while the created company/organization shall act as the technical manager. The essence of this new arrangement seeks to introduce competition in the registering of domain names in Uganda. However, other proposals suggest that CFI (currently managing the .UG ccTLD) should be given a charter or rules to follow that shall allow transparency and accountability by publishing figures on usage and even finances (of domains). While others call for the need to benchmark what has been in other countries i.e. Kenya and Tanzania before creating the redelegation process takes off. The Ministry of ICT in consultation with key stakeholders are in the process of developing a national ccTLD policy that will govern how the domain name will be managed.

SESSION RECOMMENDATIONS

- There is a need to have harmonised ICT governance framework at the regional level. Concerned parties should take advantage of the established East African community to develop and achieve this aspiration.
- Call for multi-stakeholder involvement in IG debates; there was a call to devise means of engaging all stakeholders in IG debate especially governments and private sector. Participants called for the redefinition of the role of governments in Internet governance as policy makers. This should be done by creating an enabling environment where stakeholders should not feel coerced into IG debates but they feel that they are part of the process. Internet governance issues need to be addressed according to stakeholder preference by creating awareness of the IG issues that affect the different stakeholders. This may be achieved by creating dialogue among all sectors by using the bottom up approach. I.e. by undertaking informative interviews, addressing IG issues in magazines as well as taking advantage of business conventions to address IG issues.
- Local Content: Avail local content in indigenous languages while taking into consideration the protection of intellectual property rights.



SESSION 3: CYBER SECURITY MANAGEMENT IN EAST AFRICA

Facilitator – James Wire

This session sought to discuss Cyber crime and cyber security management in the region while seeking to address emerging issues

- *Mactar Seck, UNECA; Presentation:*

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INCREASING ONLINE SAFETY IN EAST AFRICA: UNECA SRO □ EA'S CYBER SECURITY INITIATIVES: CCTLD ATTACK, DISASTER AND RECOVERY

UNECA is currently working on improving ICT policy strategies, applications and capacity building. The UNECA African Initiative for Information Society Initiative it has a component on e-security even before WSIS (since 1994)

UNECA has a concept for an e-security policy for Africa. Its currently working with Kenya, Somalia, and Ethiopia..

The ECA survey on the implementation of the WSIS plan of action, this is how East Africa faired on information security and network security issues – 58% have policy in and plans but only 12% are implementing.

Effective enforcement against the misuse of ICTs in East Africa faired very low with only 1% prosecution of enforcement against misuse of ICT.

Initiatives to address these very low outcomes from the ECA survey that have been done are:

- Harmonised legal framework for the knowledge society
- Cooperate with the African Union for regional harmonized framework for knowledge society especially in Kenya, Rwanda, and Ethiopia; we are already doing a lot.
- UNECA now has Training courses in ccTLD, Attack disaster , cyber security and policy.
- UNECA is launching a Knowledge Management platform for Eastern Africa: November 2010
- Design and implement regional ICT cyber security project.



-
- AEGM outcomes WSIS + 5 for Eastern Africa countries in Djibouti in February 2011 and ICEICT meeting. These meetings shall give outcomes on the evaluation of the participation of Africa in the IGF and the new position of Africa in the continuation of the IGF.

The objectives training course in ccTLD, Attack disaster, cyber security and policy were to encourage the participating countries to more actively participate in the Cyber security process, to provide a platform for cyber security professionals to interact, share common interests and exchange ideas on cyber security matters and to help build their capacity in developing national e-security monitoring programmes and their understand contingency and attack response planning, today's threat environment.

The training covered:

- Understand the Internet and its protocols
- Useful methods and best practices for assessing operational risk to a ccTLD
- Preparing basic attack and contingency response plan
- Formulating a contingency communication plan for a ccTLD
- Experience building network systems



A harmonized cyber security framework is already in place with support from UNECA; however it is still under revision. The governments of Burundi and Kenya are re aligning their laws with reference to this framework.

MOBILE TELEPHONY AND INTERNET SECURITY; PROSPECTS AND CHALLENGES FOR EAST AFRICA

- *Reinier Battenberg, Mountbatten Ltd*

- There are minimal virus attacks on mobile phones. However, the increased bandwidth in East Africa exposes mobile users to more cyber threats.
- Mobile phones users are mostly vulnerable to privacy intrusions encountered mostly through social networking sites such as facebook
- Need for vigorous training in cyber security management i.e. trainings on how to back up data, encryption of data
- Advocate use of open source software like firefox, open office and Linux
- Call for law enforcement on cyber security violations

COUNTRY CASE STUDIES/REPORTS

EACO Report (East Africa Communications Organisation)

- *Michael Katundu, EACO*

East Africa Communications Organisation (EACO) is made up of the region's regulators from Uganda, Kenya, Tanzania, Rwanda and Burundi. Through the EACO banner, the region is making **making conscious and deliberate efforts** to enhance Cyber security management by; setting up an EACO cyber security taskforce chaired by Kenya. The task force formed in 2008 is responsible for ccoordinating the development of a Cyber security management framework for the EACO region.

- Establishing CERTs to facilitate internet wide responses to cyber security events and conduct research targeted at improving the security of the existing systems.



Cyber Security in Kenya:

- Kenya has enacted a law, which provides a framework for electronic transactions; established CERTs managed by the regulator but in consultation all stakeholders; established a National Certification Authority Framework for electronic signatures and digital signatures; provided a public oversight of the management of the dot KE

Cyber Security Management in Rwanda:

- Allan Kabutura, Rwanda Development Board

Government IT Security strategy

Government of Rwanda established a Cyber Security division under Rwanda Development Board with special focus on developing the necessary cyber security policy & implementation strategy.

The Cyber security division has an immediate focus to:

- Develop the Government IT security master plan
- Design the Government Enterprise Information Security Architecture
- Design and implement the National Public Key Infrastructure System (NPKI)
- Development of Information Security Management Systems (ISMS) – ISO27001

As part of the IT strategy, the government has zeroed its focus on;

- Establishment of the Rwanda Computer Emergency Response Team/Coordination Centre (rw CERT/CC)
- Development of Security Web Portal
- Human Resource development - Cyber Security Trainings and Public Awareness events (Capacity strengthening)
- Linkage with regional/international IT security organizations
- Partnership with existing CERT (SA CERT, Tuni CERT, JpCERT, etc)
- Joining the International CERT Collaboration: FIRST
- Support to information security regulatory and legal framework development (Relevant security laws such as Critical Information Infrastructure Protection Act, Information and Communications Network Protection Act, Security breach notification laws, etc)

Issues for consideration for National IGFs:

- Citizen Data Security, openness and privacy in the light of new social networks phenomenon as well as consumer protection on the Internet environments.
- Right balance between access to knowledge, freedom of expression, and intellectual property rights.
- Partnership between government, private sector, NGOs, education, academia, R&D in cyber security.
- Regional/Global partnership for Cyber security (EAC-CERT)



- Support to Regulatory framework development support (data protection, data privacy, laws on pornography, etc)
- Accession and harmonization to international conventions and instruments.

Cyber Security Management in Tanzania

Sunday Richard, Tanzania Communications Regulatory Authority (TCRA)

Regulatory Environment

- Tanzania has passed a new Electronic and Postal Communications Act (EPOCA Act), which became effective in 2010. The act provides for the establishment of a CERT that provides support in the prevention and handling of information security issues. The new act talks about electronic addresses and provides power to the regulator to manage and regulate these addresses. The act among many things emphasise the regulator powers in the area of electronic addresses and provides stiff penalties for computer misuse. However, the framework needs to be supported by other regulations to address emerging issues for spam handling, data protection and the CERT composition and duties.
- Tanzania is an active member of the EACO Cyber security taskforce and has participated in cyber security workshops and awareness activities in East Africa. Tanzania was also represented in the working fact finding mission to Hungary and Finland National CERTs on the establishment of the National CERT.

Policy environment:

- Tanzania has a national ICT policy in place but lacks a framework to facilitate the implementation of the policy. Hence, there is still a need to develop a strategy and framework for cyber security
- There are no new laws to provide a conducive atmosphere for cyber security. Thus new laws are needed like the Electronic Transaction Act and Data Protection Act that will address electronic signatures and certification of documents.

Uganda: Case of the Uganda Communications Commission

- Patrick Mwesigwa, UCC

Uganda Communications Commission has the mandate to regulate and promote the development of Uganda's communications industry given the fact that the telecommunication sector is Uganda's leading tax contributor

UCC is also charged with the responsibility of developing rural communications in the country. Under the new rural communications policy, UCC aims to;

- To expand coverage and hence increase access to ICT services;



- Provide broadband connectivity especially to educational institutions and health centres; and
- Support content development;
- Mandate of UCC in line with IGF which also aims to promote the secure and sustainable development of the Internet particularly in developing countries

The international governance forum mandate (Tunis agenda) is to;

- Help foster the sustainability, robustness, security, stability and development of the Internet;
- Facilitate exchange of information/best practices;
- Contribute to capacity building for Internet governance in developing countries;
- Help to find solutions to the issues arising from the use and misuse of the Internet, of particular concern to everyday users such as online safety.

Online Safety in East Africa

Online safety is a major issue in East Africa due to increasing threats to the reliable functioning of Critical Internet Resources (CIRs) and the integrity of the information therein.

Cyber incidents involve defacement of major government websites; disruption or destruction of ICTs such fibre cables; spread of malicious software e.g. viruses, spam and identity theft

Importance

Customers/subscribers need confidence in the network and the services offered, including availability of services in case of major catastrophes such as recent Kampala bombings and natural disasters;

The Government of Uganda demands security by directives and legislation such as through the recently passed “Regulation of Interception of Communications Bill”, “Computer Misuse Bill” and Electronic Transactions Bill”

Network operators/service providers need security to safeguard their operation and business interests, meet their obligations to customers and the public, at the national and international level;

UCC is aware that cyber threats are go beyond the borders and hence demand coordinated regional/global action

Coordinated response boosts regional security

National Computer Incident Response Team (CIRT)

World Telecommunication Standardisation Assembly, October 2008 (WTSA-08) Resolution 58 encourages the creation of national CIRTs particularly in developing countries;



Resolution 58 invites Member States:

- To consider the creation of a national CIRT as a high priority;
- To collaborate with other Member States and with Sector Members,

Building East Africa's Incident Management Capacity

Regional initiatives under EACO

The East African Communications Organisation (EACO) brings together communications operators and regulators in East Africa. EACO aims to define and harmonize cyber security policies and legislation in East Africa by considering ways to improve effective implementation of the WTSA-08

Recommendations and Resolutions;

- EACO resolved to form CIRTs to fight cyber crime
- EACO agreed to form a collaboration framework for the national CIRTs at regional and global levels

An Incident Management Framework help the countries/companies to plan and implement security incident management capability; secure and harden Internet infrastructure to prevent security incidents from occurring or to mitigate ongoing incidents ,detect ,triage, and respond to security incidents and events when they occur

SESSION DISCUSSIONS/RECOMMENDATIONS

- Need to form partnerships in establishing harmonised cyber security policies, legislation and management frameworks specifically the creation of Computer Incident Response Teams (CIRT) was recognized.
- Need to address internet Redundancy across the region. Currently regulators have formed a task force under EACO to ensure redundancy; installation of more under sea cables shall provide more redundancy. A management framework has been completed although it is yet to be implemented.
- Call for harmonization of resources from all stakeholders to address internet governance issues in the region



SESSION 4: STRENGTHENING CRITICAL INTERNET RESOURCES

Facilitator – Mwendu Njiraini, Communications Commission of Kenya (CCK)

The session sought to address ccTLD management in East Africa by presenting research findings on ccTLDs based on the five priority issues effecting ccTLDs identified by the 2008 and 2009 EA-IGFs; Cybercrime, Policy and Regulation of ccTLDs, ccTLDs and consumer rights, and key issues that affect access to Broadband and Internet and how these affect the management and coordination of ccTLDs. The challenges and effective strategies for transitioning to IPv6 will also be discussed.

PRESENTATIONS:

STRENGTHENING CCTLDS IN AFRICA RESEARCH FINDINGS

- Alice Munyua, KICTANet and Adam Peake, GLOCOM

GLOCOM and KICTANet undertook this research after the EAIGFs that took place in 2008 and 2009. It was an issue that had been discussed over the two EA-IGFs and it was decided during the 2009 EA-IGF to subject it to research that would inform an advocacy campaign thereafter. As East Africa, we all felt that our ccTLDs were inherently weak or needed strengthening especially in face of the fibre cables arriving in East Africa. They are also an identifier for our nations.

Method:

Questionnaires have been sent out to various stakeholders including registrars, government, consumer groups, ISPs and regulatory authorities. The questions covered a range of issues including:

- a. Structure and management of the ccTLDs and various issues around this.
- b. Cybercrime
- c. Policy and regulation
- d. ccTLDs and consumers, looking at consumer rights and effects of competition on price and consumer satisfaction.
- e. Access to broadband and Internet, what are the relations to the ccTLD operation and the change in access? Is there a correlation of access to the internet and CcTLD increases?



The objectives of the study are to learn good practice and share knowledge and information around ccTLD management in the region.as well as find out the operational models and the role of stakeholders.

Indicative responses

- a. There is sophisticated policy in place and advanced technical services are available as well as very manual processes.
- b. There is a lot of misunderstandings about terminology and roles of entities involved in the ccTLD and ICANN, which could contribute to the confusion that we see about what it means to do some things like re delegation of domains.
- c. Few responses on re-delegation, i.e. problems, process and participation; something that needs to be further explored.

There are some ccTLDs with well established policies as well as those running with ad hoc policies.

REACTIONS:

East Africa as a region needs to have its own domain. The issue of DOT EA / EAC was first discussed in 2004 to serve a unifier for the region. However, Dot EA is a reserved code element according to ISO 3166-1. It is reserved for the world customs organisations for the Spanish territories for Ceuta and Melilla. Therefore the region could explore options of creating a dot EAC or EAF (East Africa Federation). This however requires support from the relevant stakeholder community including, ccTLD managers, private sector, governments etc. Hence for the EA-IGF to further explore this option there is need to first strengthen the for individual country ccTLDs .

There is need to re-define the context of “strengthening” critical internet resources when setting up new TLDs. Currently, there are five TLDs in the region for the five respective East African countries. KENIC has the best multi stakeholder administration basis.

COUNTRY COMMENTS ON RESEARCH FINDINGS FROM A NATIONAL PERSPECTIVE

Countries presented their country ccTLDs status in relation to the research carried out.

Burundi Overview:

- Re-delegation of CCTLDs in Burundi was made in 2004.
- Limited involvement of stakeholders due to management restructuring exercise.
- ccTLD management is done by an internet service provider (ISP).
- The platform in Burundi is under modification to facilitate more competition and provide better services to clients.



- Burundi supports establishment of **.eac** domain because this will strengthen the CCTLDs in the region.
- Burundi calls for the establishment of a working group comprising of all ccTLDs managers and other interested stakeholders.

Kenya overview

- Joe Kiragu, KENIC

To strengthen the ccTLD, you need to know what the critical internet resources around the ccTLD , which are:

1. Root servers – Without these, the Internet would not work the way it works today. We need to know how the root servers are distributed. There are 12 organisations around the world that are responsible for managing these servers. In Africa, we have Egypt, Kenya and South Africa with root servers. With a local root server in the country, you have domain name resolution still takes place even with no link to the international internet. Better performance due to lower latency and lower costs. Local roots boost resilience during attacks if it is not attacked.

2. DNSSEC – DNSSEC was designed to protect the internet from certain attacks .TLDs have to sign their root servers and this has started around the world, hence East African countries need to do the same. Kenya is starting the process of this. In Africa, only one country has started DNSSEC operations. There are operational challenges in setting up DNSSEC, operators shall need to change firewalls for example or change configurations.

3. ccTLD – The Internet is part of the country's virtual real estate therefore issues of governance are paramount. Some of the challenges here are legacy issues including perception of **dot com** and **dot net** are more superior and more global. For ccTLDs to grow, we need to deal with these perception problems. Social political problems may hinder the growth of the TLD. The sustainability model is important they have to be sustainable. Domain up take is important.

4. New gTLDs – These are coming up to provide consumer choice, create competition etc. there have already been two round of gTLDs, which brought in new TLDs like dot biz and dot Asia. New gTLDs might relive the scarcity in domain names giving consumers more choice in picking meaningful names. This does not come without challenges like increased costs to register names under all the TLDs by organisations and bandwidth constraints dues to increased entries on root servers.



5. IXP – These help keep national and regional traffic local; reducing costs of delivery. They provide redundancy and give control of traffic flow. The actors in peering like government, private sector, civil society all have a role to play here. Governments are potentially the biggest beneficiaries since they have a lot of content. Government also provides policy. Private sector provides content and builds connections. Academia and civil society provide a lot of content especially in the area of blogging, wikis etc, which all create traffic.

Rwanda overview

- The Rwanda ccTLD is currently being hosted in Sweden and this poses a challenge since most communication is done using fax. A private company was hired in the past but there are challenges that arose out of this so the government opted for a private –government partnership to manage the DOT RW ccTLD re-delegation process. Documentation was completed in May, 2010 and ICANN as a regulating firm endorsed process. The government is setting in place infrastructure and all will be set in four months time.
- **ccTLD management and ownership: there is stakeholder** partnership involvement but more emphasis should be placed on engaging the legal fraternity. Government is fully involved in the ccTLD management.
- Policy redevelopment; A bottom up approach is being employed through open public forums, mailing lists, interactive media and registry /board proposals.

Challenges

- Lack of technical infrastructure & skills
- Limited buy-in from private sector
- Insufficient knowledge sharing
- Lack of DNS education & awareness

To address these challenges, there is need to increase internet development & uptake; enable participation in international policy & technical development fora; encourage ccTLD usage as part of national branding; facilitate ICT skills development



Uganda overview

CCTLD record was created with IANA on 8th March 1995 and was last updated on 26-April-2002. It is sponsored by Uganda Online Limited, a subsidiary of Computer Frontiers (CFI).

Current status

Primary name server migrated from USA in 1999 and the number of registered domains then was less than 200. However since 2000; an automated and robust web based registration has been established. The operation involves a shared registry, and offers several choices. The same terms and conditions apply for every one, except the pricing for **.ac** and **.sc** domains. Set up of local support was cumbersome initially but over the years there has been a support from sound team of engineers including a team from KENIC.

A diverse name space structure is available. i.e. 2nd level domain name space structure e.g. **co.ug**, **ac.ug**, **or.ug**, **org.ug**, **mil.ug**, **go.ug**,
Effective August 1st 2004 the space structure was opened up the 2nd Level domain name space for registrants to choose and register directly beneath the **[.ug]** TLD zone i.e. **your-own-name.ug**

Online registration is possible and the domain name gets activated within an hour of registration.

The .Ug registry and Registrar model is available by application i.e. send e-mail to registrar@cfi.co.ug and there are no restrictions on who can be become a registrar.

It does share and link up with central shared registry system [SRS] and is intended for individuals or companies (mostly ISPs) who have many domains to register. It facilitates easy management of many domain names, billing and creation of customized interface to SRS.

Potential disputes could result from transfer of names between registrars, automated capture of server names, and preservation of ownership rights even when domain names change registrars.

Domain disputes are minimal because achieving consensus is promoted as a dispute resolution tools. In instances where consensus has been unsuccessful the disputes are referred to ICANN's URDP available at: www.icann.org/uidrp. However this mechanism is usually expensive and complicated. The courts of Law could be employed to resolve disputes.

Questions on ownership can be solved in rfc1591 whose full text is available at: <http://www.isi.edu/in-notes/rfc1591.txt>.



The .ug ccTLD is sound and has a number of registered domain names (over 10,000) and is still growing. Uganda's CCTLD is being managed by a competent and knowledgeable team.

Tanzania overview

Tanzania Network Information Centre (tzNIC) is entrusted with the administrative and management of the Tanzania ccTLD. It is both the Administrative and technical contact for the .tz ccTLD. tzNIC is a not for profit organisation that became operational in 10th August 2009. Among its achievement is the smooth take over of the .tz domain from the previous registrars that led to the non contested .tz ccTLD redelegation on 30th April 2010. The management of tzNIC reports to the PAC (Policy Advisory Board) that has among its members the previous registrars of the .tz ccTLD.

On the security front tzNIC has already trained its technical personnel with the aim of securing the .tz registry. Plans are already underway to introduce DNSSec (DNS Security extension) so as to make .tz DNS secure.

Dot tz faces competition from gTLDs as they have been in the market long. The company is now doing a marketing campaign to convince old and newer companies and individuals to move from the gTLD to the .tz domain names.

If the dot EAC is to be established it may adversely affect the .tz as we share the same customers and hence the cost of maintaining both domains for the company would increase.

UPDATE ON NEW GTLD PROGRAM

- Katim Touray- ICANN

Generic top level domain names include .org, .net etc. However, the terminology varies e.g gTLDs, TLD or TLD labels.

There are 21 gTLDs in the root zone at present. Since 2004, 13 have been added to the original 8. ICANN is moving ahead with the new gTLD process based on the experience gathered over the previous rounds.

The new gTLD started as far back as 2005 with a policy process. ICANN board approval was got in 2008 and since then there has been development of the new gTLD program.



Why a new gTLD program?

Increased creativity; innovation; choice and competition in domain name space; address community needs; create new geographic TLDs; and provide new ways of branding corporate identities on the Internet.

How shall the new gTLD work?

1. Applicant guidebook shall guide the process of applications for gTLDs. It details the application requirements, timelines and processes.
2. There shall be evaluation panels that evaluate the various issues like string similarity
3. There shall be an objection process, i.e. various routes to handle objections e.g. string confusion.

Who can apply?

Not individuals, but entities can as long as they are legally registered and comply with the application requirements. They have to abide by the following:

- Specific industry technical and legal standards
- Contractual relations with ICANN and registrars
- Financial commitment. Applicants shall be required to pay a deposit of USD 5000, which is credited against the evaluation fee of USD 185,000.

Note: A joint working group was formed to look into how the issue of applicants who can not afford the fee indicated. 41961893

Next steps for the new program

- Address remaining issues
- Finalise and publish the applicant guidebook
- Finalise operational readiness'
- Global communications campaign

More information can be found at the ICANN website. (<http://www.icann.org>)

SESSION DISCUSSION AND RECOMMENDATIONS

gTLDs vs ccTLDs;-

- There is a need to determine who is driving and who wants the dot EAC. Participants felt that perhaps before talking about creating a regional gTLD, member countries should just strengthen their country ccTLDs.
- In contrast, others felt that we should focus on creating a DOT EAC. That is the concept is not taken up now, someone else may take it up.



- Participants further felt that there is a need to take a closer look at the business models for both gTLDs and ccTLD. Hence, calling for the proposed EA-IGF working group to further explore this option by first applying for the .EAC and getting approval from ICAAN.
- The proposed working group should further come up with a harmonisation process for the ccTLDs by creating a platform that helps share best practice to encourage harmonisation. This group should further work in complement with the African TLD working group.
- The Internet governance forums should discuss the various ccTLDs models as opposed to having one model running for all countries.
- Pricing for ccTLDs: need to revisit pricing of ccTLDs in order to draw more attention in the uptake of ccTLDs;
- Participants further called for the localisation of root servers by embracing the benefit of creating a distributive system to allow those countries that are interested to acquire more knowledge about this model.
- Call for more stakeholder involvement in ccTLD issues;- case of Uganda, with a stable operational and technical model but limited stakeholder involvement in key management issues.



SESSION 5: IPV6 CHALLENGES IN EAST AFRICA

Facilitator - Emmanuel Hubemuremyi, Rwanda

The session sought to discuss challenges and effective strategies for transitioning to IPv6 in East Africa.

Barriers of IPv6 Uptake (according to ITU assessment)

- Lack of strategies at national level as well as market demand to achieve a profitable business case to deploy IPv6.
- Lack of applications and services on IPv6.
- Equipment cost (hardware, software and configuration),
- Training costs for a domesticated capacity building program are high
- Risk of service interruption,
- Risk of early deployment related to immature equipment/supply chain.
- Lack of information, including unawareness of urgency, lack of knowledge regarding how to transition from IPv4 to IPv6.

TRANSITIONING TO IPV6: CHALLENGES AND STRATEGIES FOR EAST AFRICA

-Titi Akinsanmi, AfriNIC

AfriNIC arose as a need for a registry to address Internet Protocol Number resources needs of the region and provide “local” proximity for operators. It is the 5th internet registry and came into being in 2005 to manage the African region. AfriNIC is not only about techies although it is made up of operators. In the future, AfriNIC would like to include government as non paying members.

IPv4 allocation for Africa is 37% but the rest of the world is moving to IPv6 very soon due to the exhaustion of IPv4.

Cost of deployment: Cost is currently not too but now is the opportunity for organisations to integrate engineering charges that are too small to handle on their own. The biggest cost for most operators shall be training and retooling custom applications and scripts.

Africa is at a slow pace of IPv6 deployment but is aware about the current trends. Thus the need to push operators to take more action in IPv6 deployments; be more innovative; involve research and academia into the IPv6 transition process as well as encouraging to take the lead by being early adopters and ensuring their networks are complaint.



Currently, AfriNIC is facing Challenges of efficient coverage of 55 diverse economies in Africa; Getting business sector to understand the importance of IP addresses; the weaknesses of the region's internet infrastructure; inadequate human resource capacity; engaging all stakeholders; absence of IP policy development initiatives in the region.

AfriNIC has been actively addressing these since 2005 by:

- Creating an environment which allows exchange within IPv6 initiatives throughout the continent.
- Creating an IPv6 Forum for Africa (Next during AfriNIC 13 in Johannesburg)
- Conducting IPv6 Training across the Continent
- Providing Lab and Internships to Engineers to play live with IPv6
- Supporting research based on IPv6 and Mobile Infrastructure

COUNTRY CASE STUDIES:

Kenya

- Joe Kiragua- KENIC

In Kenya, there is 11% adoption of IPv6; Kenya comes second after South Africa in the adoption of IPv6.

Milestones for Kenya

- Creation of an IPv6 task force that will focus on awareness creation, capacity building and skills development, research and Policy development.
- Have acquired equipment for an IPv6 test bed.
- KENIC has provided hands on training to members of the the Kenya IPv6 taskforce
- Equipment has been configured to IPv6 and testing is ready to use.
- Some service providers are already using IPv6 – On core Network.

Rwanda

- *Geofrey Kayonga; RICTA*

- Set up National IPv6 task force
- IPv6 readiness for new imported equipment
- Requirement of transition plan for all ISPs by x date
- Dual stack at Rinex
- Software development considering dual stack environment (not immediate and to study context)
- IPv6 courses in Universities
- Short hands-on trainings on IPv6 for network administrator



Uganda

Currently, awareness activities started in 2008 with training of officials in government. A task force on IPv6 establishment comprising of policy makers, regulators, civil society, ISPs/Telecoms was established to benchmark initiatives of ITU study group on IPv6, and will have the assignment of carry out the migration process. Over eighty government technical officers have been trained.

Preliminary activities of task force include:

- Development of a IPV6 Migration strategy and work in parallel with assessment of the needs at national and regional level,
- While the government plays a key role in ensuring equitable access to critical internet resources, the coordination and collaboration with relevant stakeholders, is crucial to ensure sustainability.
- Approach is based on ITU model.

Capacity Building issues

- Establish and implement an effective information sharing using either knowledge sharing platforms
- A standard approach for the establishment of IPv6 test beds and laboratories to encourage training institutions to establish IPv6
- Building synergies and collaborations with existing initiatives at national, regional and international levels.

The government of Uganda has made a commitment to spearhead the transition to IPV6 and activities to achieve this are already under way.

ISSUES ARISING

There is need to set deadlines for IPv6 deployment and proper strategies for these deployments. AfriNIC is not keen on deadlines but each country should have feasible timelines as opposed to deadlines. sible for the nation as opposed to deadlines to work towards to.

There was a call to put in place mechanisms to handle post implementation of IPv6 especially how to handle the redundant equipment which creates e-waste.

In Rwanda, there is a law against e-waste and to protect people against these kinds of resources, whereas Uganda has a draft e-waste strategy that is in consultation phase.

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Participants felt that there is a need for ICANN to get more involved in strengthening ccTLDs in Africa as they are already facing stiff competition from gTLDs. Thus East Africa's stakeholders need to be more active and involved in ICANN activities.



SESSION 6: ACCESS AND AFFORDABILITY TO BROADBAND

Facilitator – Natasha Primo, APC

STATUS OF BROADBAND IN EAST AFRICA: ACHIEVEMENTS, CHALLENGES AND PLANS FOR THE IMMEDIATE FUTURE FOR EAST AFRICA

An analysis from World Bank revealed that for each ten percent increase in broadband penetration results into 1.21% increase in per capita GDP growth in developed countries and 1.38% in developing countries

Achievements for East Africa

- Availability of three operational fibre optic cables installed at the shores.
- Easy accessibility of fibre cables and competition has pushed internet service providers into cutting down their internet prices. The price reductions may not be commensurate to East African economy but are commendable.
- Operational internet exchange points. E.g. IXPs in Uganda, Kenya and Tanzania are running and transporting data on the loop.

Challenges

- **Last Mile challenges;** Expansion of infrastructure is still limited to the capitals, where the operators are guaranteed a steady market from tourists, entrepreneurs and other interested parties. The absence of infrastructure in the rural areas has hampered penetration of internet in these areas.
- **Peering at regional level;** Internet traffic from some countries in the region still traverses the globe before coming back to East Africa. There are cost implications attached to this.
- **Little support from governments:** Most fibre optic cables are owned by entities in the private sector whose main objective is to make money. This impacts proliferation of the technology negatively and the government is not being seen to take a keen interest in this.
- **Resilience of Infrastructure;** the occurrences of fibre cuts are quite frequent within the region. Many instances from fibre cuts and infrastructure break down, and challenges in fibre loops e.g. Recent bomb blasts in Uganda affected redundancy in neighbouring countries.
- **Priority;** All the five East African countries are in the World's poorest countries (World Bank, IMF – highest GDP - 1,800) whose priorities are mostly on basic necessities of which the Internet is not that moment. Even the recent price reductions in internet connectivity are not good enough.
- **Security;** many sites are still being targeted.



- **Relevance of content:** The available content is either not in the right language or is not suited to the local needs of the target population. Majority of traffic goes down to social networking and not development oriented activities.

Future Prospects (measures to ensure reliable access)

- Consolidation;** With the region poised for Business Process Outsourcing and other ICT intensive businesses, disruption on major communications infrastructure should be avoided. Consolidating available infrastructure will go along way in ensuring business continuity for businesses such as e.g. KPLC & UETCL and E.A Back haul.
- Setting up a mechanism to respond to emergencies in internet security;** since most of the hacks leverage old/known vulnerabilities. Free flow of information and incident resolution between governments is essential.
- Establishment of regional exchange points** in order to bring down both the time and cost of sending packets across the boarder
- Local content** development; Continuous development of content that is relevant to the target population.

COUNTRY REPORTS

Kenya

Kenya will employ vision 2030 which constitutes of economic, social and political pillars

E-government initiatives

- Installation of Local Area Networks in all government buildings
- Creation of a Government e-portal (www.information.go.ke) to mark the beginning of developing shared services platform to give a single window to government services.
- e-Health Community Information Systems (SMS solution)
- e-Land Registration Systems,
- E-Procurement,
- Online job adverts and application
- Capacity Building through e-Learning (Kenya e-Learning centre)

Online service channels available online from the Kenyan government include; police abstracts, issuance of ID cards, immigration visa forms, exam results, online job adverts and application, company registry; -commerce, new pension system and daily cause lists form the judiciary

Challenges

Inadequate Infrastructure; Access and Affordability; The cost of connecting to the internet is relatively high



- Human Capacity;
- Legal and Regulatory Framework;
- Funding and Sustainability;
- In case of e-Health – Ethical issues with regard to implications of having access to private information is an issue for consideration.

Interventions by the government to mitigate challenges

- Deployment of TEAMS, which has been connected from Port of Mombasa to the Port of Fujairah in United Arab Emirates.
- National optic fibre backhaul infrastructure. In order for the country to fully utilize the under sea cable, the Government also rolled out the terrestrial fibre optic cable through out the country connecting all the major towns under the National Optic Fibre Backhaul Infrastructure (NOFBI) project.
- Establishment of a digital nation comprising of connected digital villages (e-centres that provide a suite of services to the public via internet, digital cameras, printers, fax machines and other communication equipment). The project branded PASHA will see millions of Kenyans gain access to services, as e-government services online. This critical project will also see that there will be at least one digital village in every constituency (210).

ICT Innovations in Kenya

- Four mobile operators in the country, you, Zain orange and safaricom
- Mobile operation has gone to 84% penetration of mobile telephony
- Mobile applications e.g. M-Pesa and ZAP used to transmit money across individuals.
- Mobile internet which is useful for rural areas.
- Statistics indicate an increase in connectivity from the initial 3.4 %

Burundi

The government of Burundi adopted a strategy in 2006 based on 3 pillars. The ICT market is characterised by low density and fixed telephony. There has been a growth in mobile telephony. There are still challenges and this is because of the low per capita income.

High prices for international bandwidth are a big challenge. There have been efforts to bring telecom providers together to have network sharing to give more benefits to both operators and consumers.

5 operators have come together to connect Burundi through the development of a national backbone based on a PPP model. This model shall be extended to other countries if it shown to be a success. The network shall have a fibre ring with 4 exits, 2 through Rwanda and 2 through Tanzania.



There is also a need to strengthen the current legislation which shall strengthen the implementation of this backbone.

Opportunities for Burundi

- Nation wide access to the internet
- ICT policy legislation and regulation: The national plan for ICT was revised in 2006 to take into consideration the technological revolutions and to align it with the country's strategic plans.
- A national regulator has been created
- Licenses have been granted for cellular operations

Government ICT strategy

- Capacity building
- Improvement of the legal and regulatory environment
- Promoting good governance
- Infrastructure development
- Promoting and encouragement of private Investments
- Promoting local content and ICT applications

Challenges

- Lack of funding and competing priorities.
- Lack of proper ICT legislation The ICT laws and regulations are yet to be reviewed including the electronic communications bill and the information society law.

Rwanda

Rwanda ICT policy mission is to achieve a middle income status. A number of actions have been defined that are relevant to accessibility including improving network infrastructure, provide affordable infrastructure services and have universal access.

Current status of broadband in Rwanda

- Satellite, which has very high cost
- Submarine cable which with low cost but with higher uncertainty of service.
- There are 6 major broadband projects going on in Rwanda, Kigali Metropolitan fibre optic network,
- The national fibre backbone that is under construction connects all districts in the country. It shall be ready by December 2010.
- RURA is subsidising the cost of bandwidth especially for rural areas. The subsidy is about USD 120,000 US dollars each month.



Challenges:

- Lack of electricity especially in the rural areas
- Rwanda ccTLD is still not managed within Rwanda
- Development of content
- Missing affordable last mile solution in rural areas Internet connectivity mainly via expensive satellite service
- 3G network operators available only in towns _
- High Connectivity Cost: 1 Mbps/down \geq 2,000 USD/month (less than 100USD in many OECD Countries)

Way forward

- Call to ratify UNCLOS (the treaty of the sea) it gives the right of protection and the right of transit as a recommendation for other landlocked countries to have access to the submarine cable but also the legal protection.
- The construction of National Backbone throughout the country will finish by December 2010
- By March 2011, the National Backbone will be ready for use NICI III to focus on Content development, Human Resources Capacity Building

Uganda

History of National Broadband Infrastructure

During the exclusivity period, the infrastructure was rolled out by MTN, UTL and Celtel. Until recently, Uganda depended only on satellite for international access; however satellite is expensive and has limited capacity compared to optical fibre

Uganda's current broadband Infrastructure Rollout

- GOU is developing a high capacity National Backbone Infrastructure;
- Telecom operators have rolled out broadband infrastructure in most parts of the country;
- UETCL has rolled out optical fibre which is used for broadband transmission by Telecom operators
- Uganda no longer depends on satellite exclusively for international access;
- There is fibre connectivity for international access.

Status of National backbone Infrastructure

- All Ministries (28) are connected with 2.5Gbps connectivity;
- 2.5Gbps connectivity is available in the main towns (Kampala, Mukono, Bombo, Jinja and Entebbe)
- Optical fibre has been laid to the eastern and western regions of the country
- The Ministry is implementing Phase II (lighting the fibre)

Way forward



- The National Backbone Infrastructure is to be commercialised through PPP;
- Telecom operators are encouraged to rollout Broadband infrastructure to all parts of the country regardless of profitability;
- E-Government services are to be rolled out through National Backbone Infrastructure for use by central and local Governments;
- There is need for more optical fibre international links to reduce the cost of broadband

Recommendations

- The population needs to be sensitized on the benefits of broadband and how it can be used as tool to overcome poverty
- There is need to re-package the technical information into a language suitable for the target population.
- Despite the fact that connectivity prices are cheaper compared to the past, it is still essential that they are made affordable to the average Ugandan. . This can be achieved by the government partnering with the private sector in the set up of appropriate infrastructure.
- Concerted regional efforts will go along way in reducing inconveniences for cyber locked countries due to interruptions in the fibre cable in the neighbouring countries.

INTERCONNECTION OPPORTUNITIES AND CHALLENGES IN ESTABLISHING THE EAST AFRICAN REGIONAL INTERNET

- *Dawit Bekele, ISOC*

1.8 billion People are already accessing the internet and 80% of these are from developed countries. To reach the next billion of users, we need to connect the developing world. The next billion shall define what kind of content is available on the internet. The next billion also leaves in rural and remote areas therefore it is may not be interesting for private sector players to reach them.

How do we achieve interconnection?

Establishment of Internet Exchange Points as they lower costs both financially and time wise. Time wise a delay of 500 to 600 milliseconds means poor latency and for applications running VoIP, it can mean very poor experiences, it also means more bandwidth is needed therefore higher costs. IXPs are meeting points, they facilitate access to high speed connections. Africa has 19 IXPs out of the 53 nations as of 2010. The reasons for this are:

- Limited local content and traffic
- Limited political will and understanding, policy makers have not done anything to change this situation. In Nigeria, the president ordered the establishment of the IXP and this was done in a few months.



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- Limited understanding between ISPs who are competing amongst each other
 - Lack of enabling environment

Importance of interconnection

- It acts as transport network to access the back haul and the international link.
- Regional IXPs would help with the integration of regions like the EAC which also speak and understand a common language.
- IXPs lower cost of access and improve the internet experience. Regional IXPs have additional value but they do come with challenges like legislation.

SESSION DISCUSSIONS/RECOMMENDATIONS

- There is need to create a competitive environment for regulators to create more awareness in the target communities in order to reduce costs incurred in managing IXPs
- There is need to facilitate knowledge sharing among the various stakeholders. The possibility of the East Africa Internet Governance Forum to host a central point for information from various stakeholders should be taken into consideration.
- Develop strategies that go beyond providing mere access to broadband connectivity and include the development of the required skills, relevant content and applications as well as appropriate technologies to make effective use and derive benefits from ICTs



SESSION 7: EMERGING ISSUES

- Facilitator Milton Aineruhanga WOUGNET

Upcoming issues related to Internet Governance were discussed in this session. The issues emerging from this session were:

- **Creation of viable framework for ICT skills enhancement.** This would include regional mutual recognition of IT certification to foster acquisition of internationally compatible and competitive skills to take advantage of the regional integration and globalization.
- **Promotion of Youth and ICT:** Recognizing that the youth form over 50% of the population in East Africa, there is need to support youth in ICT entrepreneurship and facilitate their engagement in Internet-governance related policy making processes.
- **Dot Africa Initiative:** The dot Africa initiative aims to create a gTLD for Africa. This initiative should be taken as a compliment to existing ccTLDs and should have ccTLDs as stakeholders among others.
- **Code of Good Practice:** A Code of Good Practice, which aims to improve information, participation, transparency and inclusive engagement of Internet Governance related entities in their arrangements and practices. The code has been built over the last IGFs and shall be presented at the 2010 IGF in Lithuania.

CROSS-BORDER ICT CERTIFICATION TRAINING

The following opportunities are available for East Africa

- To competitively capture part of global market in the area of ICT/ICTES industries
- Producing right skilled ICT professionals to supply the growing needs of integrated community
- Capitalizing broadband and other infrastructure development in the region fully

In order for East Africa to capture the above opportunities there is need to:-

1. Create suitable environment for ICT/ICTES industries development (infrastructure, capital, policy, and other facilitators) and to establish skilled human resources with right ICT skills sets.
2. create a viable framework to foster internationally compatible and competitive ICT skills in the region is a pre requisite to capturing opportunities for development presented within East Africa and the global community.
3. Identify partners and foster buy-in and ownership for the initiative
4. Research current ICT skills development scheme in the region (vendor certifications, Educational institutions, etc.)
5. Start consortium to mutually recognize existing ICT skills in the region and create internationally compatible EA ICT skills standard (possibility of utilizing Regional ICT for excellence)



6. Create or utilize existing coordination mechanism to advance ICT certification scheme in the region
7. Forge partnership with other ICT certification scheme and mutually recognize the scheme

Way Forward

- Continue discussion about feasibility of the scheme among EA partners in private sectors and education communities (under IGF, education/business related forums, EAC forum, etc.)
- Start discussion with potential external partners (industry associations, donor communities, educational communities)
- Put the scheme under East African Community agenda to guarantee necessary support. First by calling for all East African countries carry out a SWOT analysis of ICT related development and take stock of existing certification situation in the respective countries. Secondly, East Africa develops a list of existing and popular ICT certifications in the respective countries.

YOUTH AND INTERNET GOVERNANCE IN EAST AFRICA

- *Tony Vetter*

Key strategies for youth engagement in Internet Governance

- There is a need to match ICT skills development that with policy strategies. ICT Policy makers should target Young entrepreneurs as early access to ICT leads to early adoption of ICT and IT related skills. Youth through their exposure to ICT are at the forefront of emerging economies.
- Encourage youth input into policy development.. Opportunities should be created for youth to participate in policy development through training in ICT policy. Thus the need to create policy environment that encourages youth entrepreneurship in East Africa.
- Develop human resource capability to take advantage of the opportunities. At the regional level, recognised ICT certifications should be adopted.
- Involve the youth in Internet Governance activities

DOTCONNECTAFRICA INITIATIVE

- *Sophia Bekele: DotconnectAfrica*

Justifications for .Africa –specific domain.

- Currently, Internet users in the Pan-Africa and African region only have the option of utilizing a generic TLD (gTLD) whose registrants are dominated by US and European individuals and businesses, or country-code TLDs (CCTLDs) that are intended for local use



- Current gTLDs also tend to focus on a vertical group (e.g. commercial entities, network providers, organizations, etc.) within the global Internet, “.Africa” will embrace a horizontal perspective with a clear brand to reach and enrich the broad global community.
- “.Africa” will allow the user to express membership in the larger Pan African and African community.
- “.Africa” domain will also allow Africa to take its rightful place alongside .EU, .ASIA and .LAC
- It complies with WSIS objectives on empowering undeveloped countries using ICT, and fits as an ICT4D project and also complies with AU, ECA and ADB policy of development for the continent.

Efforts by “.Africa” to strengthen CCTLDs include;

- Providing the user with an opportunity to express membership in the larger Pan African and African community.
- Offering of second level domain names by cross marketing of domain names such as : .co.ke.africa; ug.africa ; .ng.africa
- Cross marketing of product/services
- Supporting regional /continental integration

Way forward

- Host country Identification in progress
- Registry selection in progress
- Awaiting for ICANN to issue the application of TLDs, mid June (Expression of Interest)
- Assemble a Working group that will hold the on going policy discussion, develop Ideas/discuss issues and select champions in each of the six regions – (EAC, COMESA, IGAD, SADC, ECOWAS, CCAS)

CODE OF GOOD PRACTICE AND ITS APPLICATION TO INTERNET GOVERNANCE

- Natasha Primo: APC

The Code of good practice was built from the workshops at IGF in 2007, 2008 and 2009 to;

- Provide stakeholders who have an interest in Internet governance with guidelines that they can use in their efforts to improve information, participation and transparency
- maintain and enhance inclusive engagement with Internet governance as the Internet becomes increasingly important in society and increasingly interconnected with other public policy spheres



Pillars of the code constitute; principles of internet governance; guidelines concerning information; and guidelines concerning participation.

There is active engagement with international governance bodies in areas which intersect with internet governance and there is also regular monitoring and review of implementation of the code of practice with Internet governance entities.

There is increasing complexity of the internet governance concept with the proliferation of more issues and actors. It is essential that all current and potential stakeholders both are consulted and engaged in the discussions fully.

There is need to find ways on how the code can be adapted to new communities and how human rights institutions can be sensitized on the importance of internet governance.

Way Forward

- Presentation of the agreed Code of Good Practice at the 2010 IGF
- Review of current practice in partnership with specific Internet Governance at national, regional and global levels.
- Development of principles for national Internet governance spaces
- Development of approaches to improving knowledge and understanding of IG issues and debates
- Currently applying this code of practice to the SA broadband policy development

Recommendations

- Next IGF should look at how remote participation can be facilitated.
- The East African countries should review the performance of their current processes

SESSION DISCUSSIONS/RECOMMENDATIONS

- Call for a multi-stakeholder process in implementing the Code of Good Practice.
- Dot Africa Initiative: There is another initiative similar to dot Africa that is also applying for the dot Africa gTLD. Africa needs to have a unified process rather than different battles; hence both parties need to work together in implementing the dot Africa initiative.
- Need to undertake a comparative analysis on the uptake of dot Asia or dot EU and how this has impacted the ccTLD or gTLDs in Asia and Europe.
- Unify youth and ICT strategies instead of duplicating efforts
- Call for have one institution driving the mandate of internet governance i.e the EAIGF secretariat should take lead to doing so



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- Call for the EAC secretariat to create policies to provide for implementation of the key decisions made at the EA-IGF
 - Free and Open Source Software (FOSS) should be considered when looking at ICT certifications. Governments need to include implementing FOSS in ICT policies.



SESSION 8: WAY FORWARD

UNIGF REVIEW: INTRODUCTION AND QUESTIONS

History of IGF

The World Summit on the Information Society (WSIS) has included the internet as a new issue on the agenda of international cooperation: due to its importance as the backbone of globalization.

WSIS adopted a broader definition of Internet Governance that addresses a range of public policy issues and therefore proposed the IGF (Internet Governance Forum) as a new space for dialogue and further internationalization of Internet governance arrangements.

The IGF is a platform for multi stakeholder policy dialogue based on a soft governance approach. This implies that it has no power of re distribution but can identify issues of concern, draw them out for attention and then forward them to the agenda of international cooperation.

An enabling environment is a key factor for development and deployment of the Internet. There is need for policy coherence at national, regional and international levels:

IGF's lack of decision making power is regarded as weaknesses; however it creates a space for open dialogue which is beneficial.

Four IGF meetings have been held so far: (in Athens 2006; Rio de Janeiro 2007; Hyderabad 2008; Sharm El Sheikh 2009).

The upcoming fifth IGF meeting will be held in Vilnius, Lithuania from 14 to 17th September 2010.

Dynamic Coalitions emerging from the workshops include

- Stop Spam Alliance (ITU, OECD, APEC);
- Open Standards (Brazil, W3C, and Sun.);
- Privacy (France, World Bank, AI...);
- Internet Bill of Rights (Brazil, ISOC Italy, IP Justice...);
- A2K@IGF (Google, CoE, FSFE, EFF).
- FOE online (Freedom of Expression and the Media)
- Child online Safety (ECPAT, Save the Children, Child net International).



Way Forward

A final decision on whether or not to continue with the IGF will be taken by UN Member States.

Final decision will also be taken on whether or not multi stakeholder cooperation should be chosen as the best approach towards Internet governance.

The agenda for the upcoming IGF meeting in Vilnius will focus on managing critical Internet resources, Security, Openness and Privacy, Access and Diversity, Internet governance for development; Taking stock of Internet governance and the way forward. One of the emerging issues is cloud computing.

Participation in the next IGF meeting could be by attendance (funds are available for panellists), online participation through remote hubs or email, creating or joining a dynamic coalition and submitting a paper.

EAIGF: WAY FORWARD

Alice Munyua: Convenor EA-IGF

I wish to thank all participants for your energy, contribution and participation. I also wish to thank your sponsors and our Ugandan hosts for the very well organised and very productive forum.

I wish to also thank the Hon. Senator from Rwanda for offering to host the 4th EA-IGF in 2011. We look forward to seeing you all in Kigali.

As a way forward, the EA-IGF coordinating team will submit the first draft of the report by 25th August 2010. It will be uploaded on the website for comments and additional edits.

The final report will be available by 6th September 2010. The highlights of the EA-IGF will then be presented at the global IGF in Vilnius in September.

On some of the resolutions made at this third EA-IGF

The Research on strengthening ccTLD's will be presented at the 5th IGF at a workshop titled "strengthening ccTLDs in Africa" this workshop is in collaboration with IDRC, AfTLD, ICANN, GLOCOM, KICTANet, KENIC and CCK.

There has been a resolution to form a working group to work on possible implementation of the recommendations that will be coming out of this research. The working group is also expected to address the issue of a possible sub regional TLD.

I wish to request that the UNECA and ICANN assists with this process of both strengthen our ccTLDs and also considering an East African top Level Domain.



As suggested the working group will be made up of the five ccTLDs, regulatory authorities, individual users and other Internet stakeholders.

We accept to host the working group in Kenya as part of the EA-IGF secretariat.

On youth and IGF, it will be important for the EA-IGF secretariat to explore how this will be made part of the IGF process. Our region's youth need to be involved. Again we request DOT, JICA, AT&T, UNECA and others to work with the secretariat to make this possible. This could also be linked to the initiative on certification for ICT learning. The EA-IGF secretariat will follow up with JICA, DOT, UNECA, AT&T and others on this for 2011. Perhaps we may wish to have a youth and IGF agenda during the 2011 IGF.

UNECA announced that there would be an Africa meeting on the IGF to review our continental position.

We hope that the UNECA will create a space for the EA-IGF to articulate our issues and positions, and also contribute and participate. We thank UNECA for this opportunity.

This is the year that the mandate of the global UNIGF will be reviewed. Kenya supports the extension of the IGF and has offered to host the 6th forum in 2011. Our government has gone further to create a steering committee for the IGF and most of the members of that committee are present, Mr. Michael Katundu CCK, Joe Kiragu KENIC, Lois Bosire and Esther Wanjau from the Ministry of Information and Communication. We would like to request for your support in hosting this meeting, which is scheduled to take place in September 2011 if the mandate is extended in December by the general assembly.

CLOSING REMARKS

Dr. David Turahi; Ministry of ICT, Uganda

Honourable Senator from Rwanda, all distinguished participants

On behalf on the PS of the Ministry of ICT, Uganda; we would like to express our gratitude to all those that managed to travel here.

At the opening ceremony, the Honourable minister for East African affairs, he underlined the importance of internet in all partner states of the EAC. There is a need for close call for cooperation and coordination. We in the EA countries, we have had our own activities since 2008 and now we are ready to address these issues to ensure that our citizens are all internet ready.

In my view whether Vilnius resolves to continue or not, in EA we still need to continue because we all have issues that we are grappling with. So getting together helps us to get together share information and solve issues.



Since 2003, we have had about the EA IXP, so we hope something shall be done in the very near future. In Uganda, we carried out a broadband strategy and we looked at the issue of access and even issues of last mile.

We defined broadband as 256Kbs, you would have broadband. We projected that with the coming of the cables, if we double every year, and achieve 4-5 Mbps then we have done a good job. We had a lot of expectations from Seacom, we thought the prices would collapse; we were paying 4000 dollars per MB and now 700 MB. If we are going to do BPO We still need these prices to drop so that we can compete and get the prices lower. The dream is to connect everybody, by 2015, all schools and all health centres connected. Governments get blamed but we all have a role to play

There is work for everyone when you look at the resolutions that we have made. The challenge is to go back and do something so that when we meet again, we can report back on what we have achieved.

We should have an EAC position so that when we go there, we have a position to articulate and when you come back, you tell us what happened.

Rwanda has offered to host EA IGF, and Kenya has expressed interest to host the international IGF, we should all support it in the interest of East Africa.

EAIGF 2010 RESOLUTIONS

We, Members and participants of the East Africa Internet Governance Forum from five the East African countries of Burundi, Kenya, Rwanda Tanzania, and Uganda -- meeting in Kampala, 11-13 August 2010 and focusing on five main issues affecting East Africa; namely Cyber security management in East Africa, Strengthening critical Internet resources, IPv6 challenges in East Africa, Access and affordability to Broadband and Emerging issues, aspire to take on the following resolutions.

We emphasize the opportunities the Internet provides for our people and region; and make the following resolutions:



STRENGTHENING CRITICAL INTERNET RESOURCES

Appreciating the various models of ccTLD governance and management in operation across the region and the technical soundness of the region's ccTLDs; Noting the need to "strengthen" ccTLDs in areas of technical excellence, governance, policy structures, stakeholder involvement, quality of service and price; Noting the need for improved pricing strategies for domain names and increasing competition from gTLDs and Taking into consideration the final research findings from the KICTANet and GLOCOM;

We recommend:

The formation of a working group led by Kenya, constituting all the region's ccTLDs and other stakeholders identified by EA-IGF secretariat be set up to further explore and provide findings before the next EA-IGF on the following:

- a. **The strengthening of the ccTLDs in the region and criteria defining a strong ccTLD in East Africa.**
- b. **The business case for the dot EAC gTLD and how the process can be moved forward.**

The encouragement of all stakeholders to pay more attention to the strengthening of country code Top Level Domains (ccTLDs); we specifically encourage governments to give preference to country domain names when constructing websites.

ICANN to enlighten the forum on the provisions it has in place to ensure that ccTLDs remain strong in the face of stiff competition from gTLDs especially with the introduction of new gTLDs.

ACCESS AND AFFORDABILITY TO BROADBAND

Appreciating the investment made by the East African countries in infrastructure to increase internet access to citizens, through the set up of national backbones and connections to marine internet fibre cables;

Applauding the increased use of broadband and fibre cable for internet access within the region;

Noting the need to improve the redundancy and resilience of national, trans national and sub marine fibre optic;

Noting the lack of local content that is relevant to the rural populations;

Noting the lack of regional interconnection and the use of internet exchange points;



Noting the need to harmonize regulatory frameworks to facilitate cross border network operators;

We recommend:

East Africa Communications Organisation (EACO) takes the lead in the interconnection of national Internet Exchange Points to form a regional Exchange by the next EA-IGF in 2011.

That Burundi gets its national exchange point established so they are part of the East Africa regional IXP, which is to be established.

All East African countries ratify the United Nations Convention on the Law of the Sea (UNCLOS) that protects a country's right to access the sea and also provides legal protection in doing so. More specifically access to submarine fibre optic cables for the East African countries

That the EA-IGF website publishes information and knowledge that arises from national, regional and international forums.

EMERGING ISSUES

Appreciating the need to have regional mutual recognition of IT certification to foster acquisition of internationally compatible and competitive skills to take advantage of the regional integration and globalization;

Recognizing that youth form over 50% of the population in East Africa, d

We recommend:

All East African Countries coordinate and harmonize their ICT activities and have concrete frameworks to advance human capacity development in the region.

Call upon all East African countries to support youth in ICT entrepreneurship and facilitate their engagement in the Internet-governance related policy making processes in a collaborative and synergetic process;

HOSTING OF EAIGF 2011 AND HOME FOR EAIGF

Appreciating the nurturing and role played by KICTNet in setting up and implement past East Africa Internet Governance Forums;

Noting the need to have domain names that reflects all the countries of the East Africa Community;



We Recommend:

The fourth East African Internet Governance Forum takes place in Kigali, Rwanda in 2011.

Five (5) country domain names, one from each country are set up all pointing to the current EAIGF website.



ANNEX 1. PROGRAMME



Third East Africa Internet Governance Forum (2010 EAIGF)
Strengthening East Africa's Critical Internet Resources
"Thinking Globally; Acting Locally"

Imperial Royale Hotel, Kampala, Uganda

11th – 13th August 2010

Day 1: Wednesday , 11 TH August 2010		
08:30 - 09:00	Registration/Entertainment	
Session 1: Official Opening and Launch (09:00 – 10:30) – Facilitator: Badru Ntege; I-Network Uganda/NFT Consult		
		Elisha Wasukira; Coordinator I-Network Uganda
		Alice Munyua; Convener EAIGF
		Patrick Mwesigwa; Ag. Executive Director – UCC
		Chengetai Masango; United Nations Internet Governance Forum (IGF) Secretariat
		Hon. Igeme Nathan Nabeta; MP, Chairperson - Committee on Information and Communication Technology, Parliament of Uganda
		Hon. Aggrey Awori; Minister of Information and Communications Technology, Uganda
	Keynote Address	Rt. Hon. Apolo Nsibambi; Prime Minister of Uganda
<i>Morning Break</i>		
Session 2: National IGFs Reports – Facilitator: Dr. Waudo Siganga		
11:00 – 11:20	Rwanda	Emanuel Hubemuremyi, Media High Council
11:20 – 11:40	Kenya	Joe Kiragu, KENIC
11:40 – 12:20	Burundi	<i>Victor Ciza, AfriRegister</i>
12:20 – 12:40	Uganda	Lillian Nalwoga, CIPESA
12:40 – 13:00	Open Session	
<i>Lunch</i>		
Session 3: Cyber Security Management in East Africa – Facilitator: James Wire,		
14:00 – 14:20	Increasing online safety in East Africa: UNECA SRO-EA's cyber security initiatives: CCTLD Attack, Disaster and Recovery.	Mactar Seck, UNECA
14:20 – 14:35	Mobile telephony and Internet security; Prospects and challenges for East Africa	Reinier Battenberg, Mountbatten Ltd



14:35 – 14:50	Country case studies/reports:	Michael Katundu, <i>EACO</i>
14:50 – 15:05		Allan Kabutura, <i>Rwanda Development Board</i>
15:05 – 15:30	Evening Break	
15:30– 15:45		Sunday Richard, <i>Tanzania Communications Regulatory Authority(TCRA)</i>
15:45 – 15:00		Incident Management Capacity for East Africa, Patrick Mwesigwa Ag. Executive Director, UCC
15:00 – 16:15	LAVIT presentation	<i>Gal Hertz</i>
16:15 – 17:00	Open session	
19:00 - late	Welcome Dinner/cocktail	Sponsored by AfriNIC

Day 2: Thursday, 12TH August 2010

Session 4: Strengthening Critical Internet Resources – Facilitator: Mwendu Njirani, CCK

08:30 –09:30	Presentation of “Strengthening ccTLDs in Africa” research findings	Muruiki Mureithi, KICTANet Adam Peake , Glocom
09:30 – 09:40	Country comments on research findings from national perspective	Burundi; Victor Ciza, AfriRegister
09:40 – 09:50		Joe Kiragu, KENIC, Kenya
09:50 – 10:00		Geoffrey Kayonga, RICTA
10:10 – 10:30	<i>Morning Break</i>	
10:30 – 10:40		Uganda; Charles Musisi, CFI - Uganda
10:40 – 10:50	Update on New gTLDs Program	Katim Toury; <i>ICANN</i>
10:50 – 11:30	Open session	

Session 5: IPv6 Challenges in East Africa – Facilitator: Emanuel Hubemuremyi , Rwanda

11:30 – 11:50	Transitioning to IPv6: Challenges and strategies for East Africa	Titi Akinsanmi, AfriNIC
11:50 – 12:05	Country case studies:	Esther Wanjau, <i>Chair IPV6 Task-force/ Ministry of Information & Communication, Kenya</i>
12:05 – 12:15		Geoffrey Kayonga, <i>RICTA, Rwanda</i>
12:15 – 12:25		Ambrose Ruyooka, <i>Ministry of ICT, Uganda</i>
12:25 – 12:35		AT&T
12:35 – 13:00	Open Session	
13:00 – 14:00	<i>Lunch</i>	

Session 6: Access and affordability to Broadband – Facilitator: Natasha Primo, APC

14:00 – 14:20	Status of broadband in East Africa: Achievements, challenges and plans for the immediate future for East Africa	Douglas Onyango, Digi Clear East Africa Ltd
14:20 – 14:35	Country reports:	Hermenegilde Ntahomyukiye, Burundi Regulatory Authority
14:35 – 14:45		Kenya; ICT Board
14:45 – 15:00		Beata Mukangabo, RURA
15:00– 15:15		<i>Ministry of ICT, Uganda</i>
15:15 -15:30	Interconnection opportunities and challenges in establishing the East African	Dawit Bekele, <i>ISOC</i>



	regional Internet Exchange Point (IXP)	
15:30 – 16:00	Open session	
16:00 – 1	Evening refreshments, networking	
Day 3: Friday, 13TH August 2010		
Session 7: Emerging issues – Facilitator: Milton Aineruhanga, WOUNET		
08:30 – 09:30	Cross-border ICT Certification training	Atsushi, Yamanaka, JICA
09:30 – 09:45	Youth and Internet Governance in East Africa	Tony Vetter, Digital Opportunity Trust
09:45 – 10:00	DotConnectAfrica Initiative	Sofia Bekele
10:00 – 10:15	Code of Good Practice and its application to Internet Governance.	Natasha Primo, APC
10:15 – 10:30	Open session	
10:30 – 11:10	<i>Morning Break</i>	
Session 8: Way Forward – Facilitator: Victor Ciza, Burundi		
11:10 – 11:30	UNIGF Review: Introduction and Questions	Chengetai Masango, UNIGF Secretariat
11:30 – 12:00	2010 EAIGF Draft Report highlights	Rachael Kadama, I-Network Uganda
12:00 – 12:20	EAIGF: Way Forward	Alice Munyua; Convener EAIGF
12:20 – 12:30	Word from a sponsor	Nominet, UK
12:30 – 12:45	Closing Remarks	Jimmy Pat Saamanya, PS. Ministry of Information and Communications Technology, Uganda
12:45 – 13:00	Vote of Thanks	Participants
13:00 – 14:00	<i>Lunch</i>	

