Harnessing Internet Development in Uganda: Connecting the last mile

Kampala, Uganda,

18th September 2013
INTRODUCTION

This report presents the proceedings and key issues that emerged from the Uganda Internet Governance Forum (UIGF) held on September 18, 2013 at Hive Colab in Kampala. Organised by the Collaboration on International ICT Policy for East and Southern Africa (CIPESA) in partnership with the Internet Society Uganda Chapter and the ICT Association of Uganda, the main theme of the forum was “Harnessing Internet Development in Uganda: Connecting the last mile.”

UIGF is a multi-stakeholder event that involves representatives from government, civil society, academia, private sector, and individuals interested in Internet Governance (IG) issues. The objectives of the UIGF are to: Establish IG issues relevant to Uganda; Build a consensus on national and regional positions around relevant IG issues and create awareness about various IG issues especially among vulnerable users.

Since its inauguration in 2006, the UIGF has continued to discuss and address Internet Policy issues in Uganda and East Africa. The proceedings of this year’s Forum will be presented at the Second African Internet Governance Forum to be held in Nairobi September 24-26, 2013 and the global Internet Governance Forum in Bali, Indonesia, October 22-25, 2013.

In keeping with previous forums, the 2013 UIGF followed a consultative process that involved holding online IG discussions on the ISOC-Uganda and the I-Network mailing list serves. The online discussions addressed issues on Access – infrastructure and affordability; Privacy, data protection, surveillance and censorship; CcTLD management in Uganda; New gTLD programme and opportunities for Uganda.

The face to face meeting focused on two areas: 1) Access and infrastructural development in Uganda; 2) Online Freedoms - balancing privacy and data protection amidst emerging surveillance and censorship.

PROCEEDINGS

The keynote address was presented by Dr. David Turahi, Director for Information Technology and Information Management Services in the Ministry of ICT on behalf of Dr. Jimmy Pat Saamanya, he Permanent Secretary.

Dr. Turahi highlighted key developments on Uganda’s internet scene, including the development of the dotUG management policy, which aims to harmonise the management of the ccTLD. The main objective of the policy is to have the local internet community represented in the dotUG management to ensure transparency and innovation. The policy provides for establishment of a not-for-profit organisation to manage the dotUG resource. It will be set up with representation
from the local internet community, academia and private sector as well as those involved in the website and domain reseller business. The Ministry planned to hold a stakeholder meeting to discuss the policy.

Further, Government together with stakeholders has put in place a promotion strategy for IPv6 adoption in Uganda. It is expected that rapid growth for broadband and wireless technologies in the telecom sector, as well as the existence of a conducive policy environment that promotes widespread uptake and use of the internet, especially among the young population, and the need for IP addressing by the increasing number of IP enabled end user devices, will increase the demand for IP addresses in Uganda. Further IPv4 address space exhaustion will enable many new features needed to reduce cost of existing networks. IPv6 is of particular importance to internet users in developing countries as it offers great opportunities for business and the entire global population era for the global internet community.

The government acknowledged the importance of ICTs in increasing participation of citizens online and recognises the need to start addressing issues such as open data, secured transactions, child online protection and cyber security to ensure an effective online community. Accordingly, the Ministry has embarked on the developing a Data Protection and Privacy Act. The government sought input on emerging IG areas of Government Open Data, local content, privacy and data protection.

In regard to internet access and improving last mile connectivity, the Ministry under the National Information Technology Authority (NITA-U) has been building the National Backbone Infrastructure (NBI). However, to realise the full potential of an information society, there is need to look beyond network deployment to consider ways in which to leverage on ICT to enable citizen-centric services, as well as generate vital business opportunities.

**Panel Discussion 1: Achieving affordable internet access in Uganda – infrastructure and affordability**

This session addressed what has been achieved to-date and how existing infrastructure in Uganda can be more efficiently utilised. The session was based on the background that Uganda is experiencing an increase in internet user numbers but speeds are still low in rural areas and costs of access are high. The urban-rural digital divide is further being widened by limited infrastructure set up in rural areas due to a perceived lack of economic viability for many Internet Service Providers (ISPs). This, coupled with no/limited local content and low literacy levels, is hindering internet use in rural Uganda.

Infrastructure sharing was highlighted by Ms. Vivian Ddambya of NITA–U as key to lowering costs of connectivity. Many ISPs lay fibre optic cables independently without utilising other providers’ existing fibre. She also stressed that physical infrastructure providers for roads, electricity and rail should
be required to make provisions for future installation of ICT facilities such as fibre. “Currently, Uganda National Roads Authority pays for repair to any damaged optical fibre cables during road repairs and maintenance”, she said that this should not be the case.

While presenting on the Uganda Internet Exchange Point (UIXP), Mike Barnard, a Director at the UIXP said the UIXP has improved local traffic exchange in Uganda. Since its establishment in 2001, UIXP has seen recent upgrades including two Gigabit Switches donated by Google through the National Startup Resource Center (NSRC), an upstream connection and server, donated by Orange Uganda and a new power backup system funded by the Internet Society.

It was reported that the UIXP has acquired IPv6 assignment from and that an IPv6 addressing plan has been completed. IPv6 addresses have been issued to all member networks. However, they are waiting for member networks to implement the plan. More about the current connection speeds at the UIXP can be found at http://stats.uixp.co.ug.

Panel Discussion 2: Online freedoms - Privacy, data protection, surveillance and censorship
This session addressed the question of what needs to be balanced between privacy and data protection in the era of emerging government surveillance and censorship of the internet. The session was based on the background that the increasing internet penetration in Africa and adoption of social media tools like Facebook, YouTube, Twitter and blogs has seen an increase in the monitoring and surveillance of users’ activity on the internet. Numerous incidents that infringe on online freedoms have been reported in Africa yet the current legal and regulatory frameworks are vague and also contain extra-legal means that curtail online freedoms.

In addressing cyber security concerns in the country, Mr. Peter Kahiigi, Director of Information Security at NITA-U said the increased uptake of internet services in Uganda had also seen an increase in cases of child pornography, cyber bullying, identity theft, financial crimes, Distributed Denial of Service (DDoS) attacks and cyber terrorism in the country. He said government initiatives to address the vice were underway, among them setting up of an advisory group on information security to liaise between government and the private sector, developing a classification framework for information aimed at promoting open data and better e-governance, as well as improved information security management.

Mr. Kahiigi also stressed the importance of having a national information security framework to protect citizens online, pointing to the available cyber laws that are in force but need better enforcement. He said Uganda has set up a national Computer Emergency Response Team (CERT) under the Ministry of ICT, NITA-U and Uganda Communications Commission (UCC).

From civil society, Ashnah Kalemera, programmes officer at CIPESA, introduced the OpenNet Africa initiative. She urged ICT stakeholders to be advocates for online freedoms by seeking to educate citizens on responsible behaviour and promoting liberal regimes on rights to privacy, security, free
speech, free assembly and association as well as access to information online. Her remarks were echoed by Dr. Peter Mwesige from the African Centre for Media Excellence (ACME) who pointed at numerous legislations that provide for freedom of expression in Uganda through any media including the internet. He also pointed out that Uganda, as a signatory to the International Convention on Civil and Political Rights, should ensure adherence to freedoms of expressions both online and offline. He called for the independence of oversight bodies such as UCC and NITA-U in addressing issues related to press and online media freedoms.

REMOTE PARTICIPATION
Questions
1. What steps are being taken by the government to encourage adoption of IPv6 in Uganda?
2. What is the government doing to reduce the digital divide?
3. What kind of information has the Ugandan government requested about users from Facebook?
4. Uganda was listed among the African countries that requested for account information from Facebook. Why the surveillance? – Joshua Odongo (Facebook)
5. Why don’t government entities in rural areas have access to the Internet?
6. Is the Internet more affordable today than it was 5 years ago? - @tuhaiserobert

Comments
Sekimpi Emmanuel (Facebook)
“It was a fantastic event with different stakeholders deliberating in pertinent issues regarding Internet usage in Uganda. We need to seriously look at how Ugandans can be secure when using the Internet and how we can get access to the Internet to the last person in the village. Thank you all the presenters of today!”

Responding to this tweet from @ISOCUg: Internet penetration in Uganda is at 17% as of December 2012 from 9.6% in 2010

@whthome – Dr. Wolfgang H Thome - “Way below its true potential due to often extortionate tariffs... AND poor services.”

@arsenebaguma - Arsene Tungali, DRC - “Mobile phones are being used even in the Congo more widely than cyber cafes because they are cheaper and accessible for all. Congs for UIGF13!”

@omarl88 -“Only 9.6% of the population use the Internet in Uganda and 90% are in urban centres.”

@OutboxHub - “Great event #UIGF13. Thanks for putting this together @ISOCUg”

@iFreedomUganda - “If ISPs could share Internet infrastructure, costs to end users could actually
go down.” “Government has not played its role in developing Internet infrastructure.”

@ekisesta – Esther Patricia Akello - “ISPs charge end users 3 times the real cost of data bundles. Exploitation of consumer ignorance.”

@lilna – Lillian Nalwoga - “No statistics to show how much Africa loses in cybercrime.”

@oquidave – David Okwii - “But seriously, enough talk! @NITAUganda1 we need data costs cut by half by 2014.”

@arsenebaguma - Arsene Tungali, DRC - “Mobile phones are being used even in the Congo more widely than cyber cafes because they are cheaper and accessible for all. Congs for UIGF13!”

RECOMMENDATIONS AND WAY FORWARD
- Need to make legislations more supportive of online freedoms
- Need to raise awareness on the importance of protecting internet rights just like offline human rights. Much as government is working on increasing internet access in the country, internet freedoms should be at the top its agenda.
- A data protection and privacy law needs to be enacted
- Call for increased collaborations between civil society, private sector, academia and government in addressing internet matters in Uganda.
- Need to reduce cost of electricity, integrate ICT into education curriculum, provide Internet to schools and research institutions.
- ISPs should start sharing infrastructure as opposed to setting up their own so as to reduce end user costs.
- Organisers agreed on developing a dedicated website to host the UIGF reports and proceedings
- A steering committee will be setup to coordinate the UIGF proceedings as well as following up on key recommendations adopted

SPEAKER PRESENTATIONS
### ANNEX 1

Uganda National Internet Governance Forum 2013: September 18, 2013 Hive Colab, Kamyokya
Final Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker/moderator</th>
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<tbody>
<tr>
<td>08:00am – 08:30am</td>
<td>Arrival and registration of participants</td>
<td>ISOC Uganda</td>
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<tr>
<td>08:30am – 08:45am</td>
<td>Welcome Remarks</td>
<td>Lillian Nalwoga</td>
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<tr>
<td>08:45am – 09:00am</td>
<td>Keynote Address</td>
<td>Dr. David Turahi, Director for Information Technology and Information Management Services – Ministry of ICT</td>
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<tr>
<td>09:00am -09:30am</td>
<td>Presentation: Online discussions report</td>
<td>Daniel Nanghaka (ISOC Uganda)</td>
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<td>09:30am – 10:00am</td>
<td>Q&amp;A session</td>
<td>Sarah Kiden (ISOC Uganda)</td>
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<td>10:00 am – 10:15am</td>
<td>Morning break</td>
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<tr>
<td>10:15am – 11:15am</td>
<td>Panel discussion (15 mins each): Achieving affordable internet access in Uganda – infrastructure and affordability; what have we achieved so far and how can we utilise the existing infrastructure</td>
<td>Mr. Bob Lyazi, Director RCDF – UCC (TBD)</td>
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<td>Mr. Mike Barnard, Director – Uganda Internet Exchange Point (UIXP)</td>
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<td>Ms. Vivian Ddambya, Ag. Director Technical Services NITA-U</td>
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<td>Joseph Munuulo, Systems Administrator – Uganda Registration Services Bureau</td>
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<td>Hari Kurup - Roke Telecom</td>
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<tr>
<td>11:15 am – 11:45am</td>
<td>Q&amp;A session and discussion</td>
<td>Sarah Kiden</td>
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<tr>
<td>11:45am – 12:45pm</td>
<td>Panel Discussion (15 mins each): Online freedoms - Privacy, data protection, surveillance and censorship: what needs to be balanced?</td>
<td>Mr. Peter Kahiigi, Director Information Security – NITA-U</td>
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<td>Ms. Ashnah Kalemera- OpenNet Africa Initiative</td>
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<td>Mr. Peter G. Mwesige, Director Africa Center for Media Excellence</td>
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<tr>
<td>12:45pm – 01:15pm</td>
<td>Q&amp;A session and discussion</td>
<td>Mr. Albert Mucunguzi - ICTAU</td>
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<td>01:15pm – 02:00pm</td>
<td>Way forward, closure and Lunch</td>
<td>Lillian Nalwoga</td>
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