Global South-South Development Expo Mini Partnership Forum on Enhancing ICT Development and Connectivity for LLDCs

Presentation
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Minister of Information and Communications Technology

31st October 2013     Nairobi, Kenya
PRESEN TATION OUTLINE

Introduction

- Reforms in Uganda’s ICT sector since the 1990s
- Role of ICT in Uganda’s development philosophy (Vision & NDP)
  - Evolution of the ICT Sector governance structures

The pillars of ICT development for Uganda

Current status and achievements

Best Practices

Challenges & proposed mitigation measures

Conclusion.
Introduction

Uganda has had a long journey towards the development and growth of her ICT sector.

1996: The Telecommunications Policy Framework was developed that, among others, opened up the sector to liberalization and privatization.

1997: Uganda Communication Act 1997 was enacted, among others, establishing Uganda Communications Commission (UCC) as an independent regulator.

2001: Privatization of Uganda Telecom Ltd (UTL), the then national telecom monopoly.

2006: Review of the National Telecommunications Policy, opening the sector to full liberalization.

2006: Formation of the Ministry of Information and Communications Technology

2009: Creation of the National Information Technology Authority Uganda (NITA-U)
The National Vision, Uganda 2040 places Information and Communications Technology (ICT) among the Primary Growth Sectors to spur Uganda’s transformation into a modern & prosperous country.

ICT shall also play a major role in improving efficiency and effectiveness in service delivery, governance, regional integration and international cooperation.

This therefore, places ICT at the core of the National Development Plan and the national effort for socio-economic transformation.
A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years

NRM Manifesto
ICT to improve efficiency and effectiveness in service delivery

NDP
ICT industry to drive socio-economic transformation of Uganda.

ICT sector
A knowledge based Uganda where ICT is integrated in all spheres of life.

VISION 2040
Middle-Income Uganda
Contribution to GDP: from 2.5% in 2006, to 6.5% currently

Major source of tax revenue to government – collected USD 110 million - Dec. 2012

Leading source of employment - more than 1,000,000 direct and indirect jobs by December, 2012
UGANDA’S ICT EXPERIENCE
Pillars for ICT sector development

Uganda’s experience in developing the ICT sector has been through the implementation of seven principle sector pillars, namely:

- **Pillar 1:** ICT governance, Policy, Legal and Regulatory Framework
- **Pillar 2:** Infrastructure Development and Access
- **Pillar 3:** ICT Safety, Security and Standardisation
- **Pillar 4:** e-Services and Local Content development
- **Pillar 5:** ICT skills and Human Capital Development
- **Pillar 6:** Research, Innovation and Industrial Development
- **Pillar 7:** Regional and International Cooperation
Pillar 1: ICT Governance, Policy, Legal & Regulatory Framework

(A) Evolution of governance structures in the ICT sector

1. Formation of the Ministry of ICT in 2006

✓ Mandate: to provide strategic and technical leadership, overall coordination, support and advocacy on all matters of policy, laws, regulations and strategy for the ICT sector for sustainable, effective and efficient development, harnessing and utilization of ICT in all spheres of life to enable the country achieve its development goals.
2. Creation of Uganda Communications Commission (UCC) in 1997. The UCC Act, was reviewed in 2013, bringing communications and broadcasting under the same regulatory and institutional arrangement.

Mandate: the new mandate of UCC is regulate the telecommunications, postal and broadcasting subsectors

3. Creation of National Information Technology Authority (NITA-U) in 2009

✓ Mandate: to promote, coordinate and monitor IT development in the context of social and economic development of Uganda
Pillar 1: ICT Governance, Policy, Legal and Regulatory Framework cont...

B) Policies, laws and regulations

- National ICT Policy Framework was developed in 2003 and is currently being reviewed to cater for several developments both at the national and international scenes.

- Other key policies, laws and regulations in place include:
  1. National e-government Policy Framework
  2. Country Code Top Level Domain (.ug ccTLD) policy
  3. National Information Technology (IT) Policy
  4. Analogue to Digital Migration Policy
  5. National e-waste Management policy
Pillar 1: ICT Governance, Policy, Legal and Regulatory Framework cont...

c) Policies, Laws and Regulations being developed/reviewed include:

- National IMS Policy
- National Telecommunications Policy
- National ICT Policy
- National Broadband Strategy and Policy
- National Data Protection and Privacy Bill
- National Information Security Framework
- National Postcode & Addressing Bill
- National Broadcasting Policy
Pillar 2: Infrastructure development & access

a) Government infrastructure – NBI/EGI project

- 1536 km of fibre optic cables, connecting 22 district headquarters,
- one data centre and one Metropolitan Area Network (MAN).
- 30 MDAs connected for voice, video and data;

b) The private sector infrastructure

- over 3,700km of optic fibre cables laid by telecoms countrywide.
Private ICT infrastructure

MTN – Fibre optic Cable network

UETCL – Fibre Optic Cable network

<table>
<thead>
<tr>
<th>Red</th>
<th>Existing</th>
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<tbody>
<tr>
<td>Green</td>
<td>Under Construction</td>
</tr>
<tr>
<td>Blue</td>
<td>Proposed</td>
</tr>
</tbody>
</table>

Planned 2014
c) Telephone subscriber base is at 17.2 million, translating into a teledensity of 51.3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fixed &amp; Mobile Connections</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/06</td>
<td>2,116,958</td>
<td>7.7</td>
</tr>
<tr>
<td>2006/07</td>
<td>3,729,645</td>
<td>13.2</td>
</tr>
<tr>
<td>2007/08</td>
<td>6,301,590</td>
<td>21.2</td>
</tr>
<tr>
<td>2008/09</td>
<td>9,678,799</td>
<td>31.6</td>
</tr>
<tr>
<td>2009/10</td>
<td>10,641,110</td>
<td>33.5</td>
</tr>
<tr>
<td>2010/11</td>
<td>15,019,129</td>
<td>45.6</td>
</tr>
</tbody>
</table>

**Fixed & Mobile Subscriptions and Penetration - 2010/11**

- Fixed & Mobile Connections: 2,116,958 to 15,019,129
- Teledensity: 7.7 to 45.6
Infrastructure development & Access cont...

d) Internet service users - 6 million users of whom about 2.7 million have active accounts.
Infrastructure development & Access cont...

- 208 FM Radio stations are operational as opposed to 2 in the 1990s.
- 66% of households have access to a radio.
- 62 TV stations are operational.
- Through Rural Communications and Development Fund (RCDF), access to rural infrastructure has improved.

<table>
<thead>
<tr>
<th>Nature of facility</th>
<th>No. established</th>
</tr>
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<tbody>
<tr>
<td>1. ICT training centers</td>
<td>78</td>
</tr>
<tr>
<td>2. School ICT laboratories</td>
<td>931</td>
</tr>
<tr>
<td>3. Health ICT facilities</td>
<td>174</td>
</tr>
<tr>
<td>4. Public payphones</td>
<td>4,100</td>
</tr>
<tr>
<td>5. District web portals</td>
<td>110</td>
</tr>
<tr>
<td>6. Internet points of presence (PoPs)</td>
<td>76</td>
</tr>
<tr>
<td>7. Internet cafes</td>
<td>106</td>
</tr>
</tbody>
</table>
Internet Point of Presence (PoPs)

- Coverage of PoPs established under RCDF
Pillar 3: ICT Safety, Security and Standardisation

- National Information Security Strategy was developed
- National Information Security Framework is also being developed
- A Communications Computer Emergency Response Team (CERT) established and a National CERT is being developed
- National IT standards have been developed and gazetted of which 14 are in relation to information security
Pillar 4: E-services and local content development

- A national e-Government Master Plan was developed and being implemented
- 30 Ministries are equipped with video conferencing facilities
- 106 Content development projects supported under RCDF
Pillar 4: E-services and local content development Cont...

- The number of registered mobile money users was 8.8 million in December 2012 up from 2.87 million in December 2011.

- The value of transactions increased to Ushs. 3.9 trillion (USD 1.5 billion) as at December 2012, compared to Ushs. 1.2 trillion (USD 0.5 billion) in December 2011.

- Other related services launched include e-payments for utilities such as water and electricity.

- Increased use of Information systems in Government, e.g. Integrated Financial Management System (IFMS), Local Government Information Communication System (LoGICS), Automated System for Customs Data (ASYCUDA) and e-Tax of Uganda Revenue Authority.
Pillar 5: ICT Skills and Human Capital Development

- The National Curriculum has been reviewed to include ICT as a compulsory discipline

- Computing and IT has emerged as key discipline of study in Uganda’s Universities & Tertiary institutions

- Specialized training institute registered to develop core ICT skills – Uganda Institute of ICT (UICT)

- UICT is to be developed into a regional Centre of Excellence

- Skilled professionals in ICT infrastructure, networking, information security & applications.
Pillar 6: ICT Research, Innovation and Industry development

- Science, Technology and Innovation (STI) Policy 2009, adopted (UNCST)
- BPO/ITES Strategy and Model for Uganda developed
- A BPO incubation Centre has been set up
- Collaboration arrangements with private sector and other agencies established (E.g. Makarere University, Microsoft Innovation Centre).
- The process of developing National IT Research and Innovation Strategy and establishment of National IT Research and Innovation Fund has started
- ICT Innovation Competitions and Awards conducted to promote research & innovation

Youths at work at the BPO centre
Pillar 7: Regional and International Cooperation

Uganda is a signatory to international ICT protocols, Treaties and Conventions & is a member of international & regional ICT bodies, which include:

- International Telecommunications Union (ITU)
- Universal Postal Union (UPU)
- Pan African Postal Union (PAPU)
- International Telecommunications Satellite Organization (ITSO)
- Information Security Forum (ISF)
- East African Communications Organization (EACO)
- Common Market for East and Southern Africa (COMESA)
- Commonwealth Telecommunications Organisation (CTO)
Pillar 7: Regional and International Cooperation cont...

- Uganda has organized the international & regional ICT conferences;
  - The First Regional BPO Leadership Conference in September 2012
  - Common Wealth E-Government Conference 2013
  - EACO Conference on Broadband Access to all in East Africa – April 2013
  - East African Information Security Conference August 2013, organized in conjunction with Information Security Audit and Control Association (ISACA)
  - International Telecommunications Satellite Organization Conference (ITSO) – July 2012

- Uganda will be organizing ITU Study Group 13 Conference in November, 2013
Best Practices

- Liberalization of the sector.
- Creation of an enabling environment to attract investment.
- Set up of a Universal Service Fund (RCDF).
- Development of the Government National broadband Infrastructure to supplement the private sector broadband Infrastructure.
- Develop a cost effective digital bridge to the international coastline infrastructure.
- Promote ICT skills.
- Carry out public awareness and sensitization on ICT.
# ICT Sector Challenges & Mitigation Measures

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<thead>
<tr>
<th>Challenge</th>
<th>Mitigation Measures</th>
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<tbody>
<tr>
<td>1. Inadequate national broadband infrastructure</td>
<td>Private sector and the Government are expanding the national fibre optic networks including last mile connectivity.</td>
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<tr>
<td>2. The cost of connectivity to the international broadband infrastructure (satellite and under sea cables) is substantially high.</td>
<td>Plans are underway to develop a digital bridge to the under sea cables. In addition, Uganda is a member of the International Telecommunications Satellite Organization (ITSO).</td>
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<tr>
<td>3. Low affordability of ICT services</td>
<td>Tax waiver on ICT related products. There is a tax waiver on Computers.</td>
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</table>
| 4. Limited local and relevant content          | • 75% local content requirement for broadcasters  
• Analogue to digital TV broadcasting to contribute to this.                                                                 |
CONCLUSION

- The conducive environment in Uganda has led to a vibrant ICT sector.
- Nevertheless, there are still challenges majorly emanating from inadequate broadband infrastructure, nationally and regionally due to the geographical location.
- Government is developing a comprehensive ICT strategy and investment plan to address the current sector challenges and transform the country into a knowledge based society.
Thank You