



Introduction

This report assesses whether or not Uganda is on track to meet the information and communications technology (ICT) development objectives laid out in the World Summit on the Information Society (WSIS) Plan of Action. It provides an overview of the ICT status in the country, and presents some of the rapid changes that have happened within the country's ICT sector. The report highlights the steps taken by the government in realising the WSIS Plan of Action, but also summarises the challenges the country faces. It finds that although the policy and legislative framework is in place and the political will exists, ICT development is being constrained by a number of factors, including the rural/urban divide, a lack of awareness about the advantages of ICTs, and a low level of skills.

This report was compiled mainly through desk research, and included the review of civil society and government documents. The authors acknowledge I-Network, the Ministry of ICT, the National Planning Authority (NPA) and the Uganda Communications Commission (UCC) for their input in the preparation of this report.

Country situation

The Ugandan government recognises ICTs as a tool for social and economic development. This includes: reforming government service delivery; achieving transparency, accountability and credibility; providing effective access to information; broadening public participation and promoting democracy; facilitating research and development; and enhancing competitiveness in the global economy (NRM, 2006). The government has a strong belief that ICTs will improve its relationship with the country's business sector and citizens, and with its own employees (Uganda e-Government, 2006).

The political will behind ICT development in Uganda has been manifested through numerous ICT-related government policies, programmes and laws since the 1990s. Recent reforms in the sector include the licensing of mobile phone companies and the separation of postal from communication services. Telecom markets have been deregulated, ICT trade liberalised, and taxes on computers abolished. The setting up of the Rural Communications Development Fund (RCDF) under the UCC was another notable change. These measures have promoted the proliferation of ICT usage in the country.

In 2004 the cabinet directed all government ministries to create a budget line for ICTs. Although the amount being allocated by the ministries is not substantial, it is a step in the right direction. In addition, in the 2006 presidential elections, President Yoweri Museveni included ICTs as one of the key areas for consideration during his new term in office (NRM Manifesto, 2006).

Steps taken in the realisation of WSIS targets

The WSIS Plan of Action provides a good global reference point for setting targets to improve access to ICTs. The plan includes addressing the urban/rural divide, and connecting educational institutions, health facilities, public libraries and cultural centres, among other

objectives. It has basic e-government targets (such as providing government departments with websites), and encourages countries to adapt school and tertiary education curricula to meet the needs of the information society. It also states that people should have access to broadcast services and that content should be localised (WSIS, 2003).

Steps taken by the Ugandan government to promote access to ICTs and information include legal, regulatory and policy development; consolidating the political leadership of the country's ICT strategy; and developing infrastructure.

Legal, regulatory and policy environment for promoting ICT access

The national ICT policy development process was initiated in 1998 by the Uganda National Council of Science and Technology (UNCST). In May 2002, the UNCST submitted a draft National ICT Policy Framework to cabinet. It was approved in December 2003 (NPA, 2005). Other ICT-related policies in place include the Rural Communications Development Policy for Uganda (UCC, 2001), the National Broadcasting Policy (WOUNGNET, 2004), and the e-Government Strategy Framework (Uganda e-Government, 2006).

The legal and regulatory framework for promoting ICTs in Uganda includes the Electronic Media Act (Government of Uganda, 1996), the Uganda Communications Commission Act (UCC, 2000), the Access to Information Act (Government of Uganda, 2005), and the Copyright and Neighbouring Rights Act (2006). Bills that are ready for debate in parliament include the National Information Technology Authority-Uganda (NITA-U) Bill (MFEP, 2004), the Communications Act Amendment Bill (2005), the Electronic Transactions Bill (2004), the Electronic Signatures Bill (2004), and the Computer Misuse Bill (2004).²

A monopoly enjoyed by Uganda Telecom and MTN ended in July 2005. Opening up the telecoms market is expected to lead to increased investment in the sector, increased penetration of services, and innovation in the provision of services, such as the use of cost-effective technologies.

ICT institutional framework

In June 2006, the government consolidated the leadership of its ICT strategy to ensure that policy development, laws and regulations are harmonised. The newly created Ministry of ICT will spearhead the development of ICTs and address problems associated with the lack of a lead agency to take the country's ICT strategy forward. These included delays in passing ICT-related bills, duplication and wastage of scarce resources, and territorial silos, which result in uncoordinated sectoral policy development and fragmented, non-integrated ICT implementation. Agencies affiliated to the new ministry include the UCC and Uganda Computer Services/National IT Authority-Uganda (NITA-U). Plans are also underway to place broadcasting services under the same ministry.

² Other legal reforms are underway that could further provide a conducive legal framework for ICT development, such as amending national laws to make them compliant with the information era.

Implementation

The implementation of the National ICT Policy in Uganda involves various ministries, district and local authorities, development partners and non-governmental organisations (NGOs), as well as the private sector (UCC, 2003). Progress has been made in a number of areas, including developing a national backbone, rural access, education, systems integration, and stimulating private sector investment.

It is government policy to develop ICT infrastructure that enables connectivity in schools, health centres, agricultural extension units and administrative and commercial centres throughout the country. As part of this responsibility, the government is currently conducting an e-government and national backbone infrastructure study in partnership with the government of China. This will lead to the laying of a fibre optic backbone that will extend high-speed connectivity across the country. It is expected that the national backbone will enable the setup of an integrated e-government system and extend the current communications network to rural areas. Implementation is scheduled to start in 2007.

To facilitate rural access, subsidies have been granted to service providers by the RCDF since 2003. These subsidies contribute towards the provision of communications services in various parts of the country (RCDF, 2006), including:

- *ICT training centres and internet cafés.* More than 54 ICT training centres and 50 internet cafés have been set up countrywide through public-private partnerships. The target was to cover all the districts of Uganda by June 2006. New districts have since been created and will be catered for under the same arrangement, but implementation will be in the financial year 2006/2007.
- *Internet PoPs.* In order to facilitate local internet access and reduce usage cost in the country, the UCC subsidised the installation of internet points of presence (PoPs) in 32 districts (out of the then 56 districts – the number of districts has now been increased to over 80).
- *District information portals (DIPs).* The UCC also facilitated the development of information portals for all the districts to allow information to be shared with local communities, development partners and the outside world.
- *Public payphones.* The UCC has facilitated the installation of public payphones in 316 selected sub-counties across the country since 2004. The government plans to provide access to a public telephone for every 1,200 people in the rural areas by the year 2010.

ICTs are being integrated in educational institutions at all levels. Most universities and other tertiary institutions are currently offering ICT-related courses. In addition, there are several initiatives and organisations promoting ICTs for development in schools in both urban and rural areas. These include the Council for Economic Empowerment of Women in Africa (CEEWA-Uganda), I-Network, SchoolNet, Uganda Connect (uConnect), and WOUNGNET.

Some government departments are using ICTs to enhance service delivery. Information systems developed include the Integrated Financial Management System (IFMS), the Local Government Information Communication System (LoGICs), the Education Management Information System (EMIS), the Health Management Information System (HMIS), and the Parliamentary Communication and Management Information System (PMIS). The government has also developed an Automated System for Customs Data (or ASYCUDA) – a system developed in Geneva by UNCTAD, which is free for countries to use and customise.

Additional interventions planned by the government seek to address privacy and security issues as well as to encourage the private sector to invest in ICTs (NRM Manifesto, 2006). These include reviewing and adjusting public investment policies in so far as they relate to the promotion of ICTs by Ugandan firms and external investors.

There is also a move to resolve the cost and quality of connectivity within the existing licensing agreements in the telecommunications sector. For example, following the end of the duopoly agreement in 2005, the new licensing structure will allow for institutions to have their own gateways to allow them to access the internet directly instead of going through the national operators. Such a move should encourage the private sector to invest in outsourced services for data entry and call centre enterprises by lowering their costs of operation, and allowing them to improve the quality of their connectivity if they are not satisfied with what is available through the national operators.

Impact and challenges

While the prevailing policy and legislative environment in Uganda supports ICT development, actual implementation is being hampered by a number of challenges on the ground. A study conducted by Tusubira *et al* (2005) concerning telecommunications and e-usage in Uganda revealed that access to basic telephony services in rural areas is still unacceptably low. At the same time, however, mobile teledensity is improving at a very impressive rate. The study notes that mobile telephony has the potential for the rapid achievement of nationwide access if key barriers – such as the initial cost of the phones, the absence of convenient ways of recharging, as well as the high excise on airtime for prepaid phones – are addressed through public-private partnerships supported by the RCDF.

The same study also revealed that access to the internet across the entire country is far below what would be expected with the often-praised policy and regulatory environment in Uganda. Key issues such as supporting the generation and dissemination of relevant content; developing the national fibre optic backbone and connecting Uganda to the global network; encouraging the local assembly of computers to bring down costs; and integrating ICT skills training at all levels of education, must be addressed by both government and the regulator. In addition, the study found that the higher percentage of females in Uganda (the majority of citizens below fifteen years of age are female) provides a strategic opportunity for emphasising the role of women in developing ICT skills and the use of ICTs in the country.

These findings are confirmed by both the Telecommunications Sector Policy Review (MWHC, 2005) and the e-Government Strategy Framework. According to the Telecommunications Sector Policy Review, only about 25% of the population in rural areas utilises payphone services on a regular basis. Regular usage in urban areas is just over 60%, due to higher incomes, greater ease of access and awareness. There is also no access to voice over internet protocol (VoIP) in rural areas (it is still very limited in urban areas) and there is almost insignificant access to and utilisation of computers and the internet in areas outside the major urban centres.

The e-Government Strategy Framework shows that most government offices do not have an internet connection, that bandwidth is overpriced and concentrated in cities and a few major towns, and that there is a general lack of awareness of ICTs in both the urban and rural context. Furthermore, it says that Uganda has difficulty in attracting, recruiting and retaining skilled ICT personnel (Uganda e-Government, 2006).

Regarding gender, it is widely known that access to ICTs by women is constrained by inadequate technological infrastructure in rural areas, social and cultural bias, low levels of education and skills, and the lack of disposable income to purchase technology and e-services. The media's limited understanding of gender issues and a lack of data on gender and ICTs also play a role (WOUNNET, 2006).

Finally, the government has so far not developed adequate strategies to integrate ICTs into national development plans, including the Poverty Eradication Action Plan (PEAP), a comprehensive poverty eradication and development strategy. However, the National Planning Authority (NPA) has now taken the initiative to correct this.

Participation

Uganda is a democratic country and the development of national policies, laws and regulations are largely participatory. In the case of ICTs, the National ICT Policy Framework was developed through a consultative process involving civil society, students, government ministries, agencies, and so on. Numerous interviews, focus group discussions and stakeholder workshops were held. This process was coordinated by a steering committee under the UNCST.

While the ICT policy was criticised for not including an implementation master plan and budget, and for not being widely circulated and publicised upon completion, plans are now underway to review the document so that it matches current national development plans and systems.

Another area of participation that was promoted by the NPA is the setting up of a National ICT/e-Government Inter-Agency Planning Team. This team brings together personalities with different career backgrounds from central and local governments, civil society, academia, the private sector, and gender and other interest groups. Some of the key outputs from this effort have been the development of the draft of the e-Government Strategy Framework, advocacy for the creation of the new Ministry of ICT, and integration of ICTs into the PEAP.

Conclusions

From the above scenario, we can conclude that the required environment for the development of ICTs in Uganda is in place. This includes policies, legal and regulatory frameworks, political will, and public participation. However, implementation has been hampered by several challenges. What is important is that these challenges are being acknowledged.

Given the prevailing political will, a number of important projects are expected to be implemented in 2007. These include the development of the national fibre optic backbone and the expansion of rural access programmes. These are positive signs that suggest Uganda is keen to achieve the targets outlined in the WSIS Plan of Action (WSIS, 2003).

It is important and indeed incumbent upon government that civil society, the private sector and other stakeholders are able to fully participate in the planning and rolling out of ICT for development projects. In this way, the most effective and sustainable steps can be taken to ensure that basic communications services of acceptable quality are accessible at affordable prices and at reasonable distances by all people in Uganda. ■

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