

THE REPUBLIC OF UGANDA

Information and Communications Technology Sector

Annual Monitoring Report

Financial Year 2015/16

October 2015

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ABBREVIATIONS AND ACRONYMS

BMAU	Budget Monitoring and Accountability Unit
BPO	Business Process Outsourcing
CCTV	Closed Circuit Television
CERT	Computer Emergency Response Team
DIS	Directorate of Information Security
FY	Financial Year
GB	Giga Byte
GCIC	Government Citizen Interactive Centre
GDP	Gross Domestic Product
GIS	Geographical Information System
GoU	Government of Uganda
HDD	Hard Disc Space
IAC	Information Access Centre
ICT	Information, Communications Technologies
ICTAU	Information Communications Technology Association of Uganda
IFMS	Intergrated Financial Management System
IP	Internet Protocol
ISACA	Information Systems Audit and Control Association
ISF	Information Security Forum
ISP	Internet Service provider
IT	Information Technology
ITES	Information Technology Enabled Services
ITU	International Telecommunications Union
KCCA	Kampala Capital City Authority
KIBP	Kampala Industrial and Business Park
KOICA	Korea International Cooperation Agency
LG	Local Government
MAN	Metropolitan Area Network
MDA	Ministries, Departments and Agencies
MFPED	Ministry of Finance, Planning and Economic Development

MoES	Ministry of Education and Sport
MoH	Ministry of Health
MoICT	Ministry of Information and Communications Technology
MoU	Memorandum of Understanding
NBI/EGI	National Backbone Transmission Infrastructure/E-Government Infrastructure
NISAG	National Information Security Advisory Group
NISF	National Information Security Framework
NITA-U	National Information Technology Authority
NOC	Network Operating Centre
NSIS	National Security Information System
NSSF	National Social Security Fund
OFC	Optical Fibre Cable
ONA	One Network Area
OPM	Office of the Prime Minister
PKI	Public Key Infrastructure
RCDF	Rural Communication Development Fund
RCIP	Regional Communication Infrastructure Project
TV	Television
UCC	Uganda Communications Commission
Ug shs	Uganda Shillings
UMCS	Unified Messaging Communication System
UNBS	Uganda National Bureau of Standards
UPU	Universal Postal Union
US\$	United States Dollars
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FOREWORD

In the Financial Year 2014/15, the Government of Uganda disbursed Ug shs 23.8 billion to the Information and Communications Technology (ICT) sector to facilitate achievement of three core outcomes namely: Improved service delivery through ICTs, Improved access and utilisation of quality and affordable ICT resources and services in all spheres of life, and Improved contribution of ICT to employment, income and growth.

This monitoring report provides insights into achievements of selected programmes in the ICT sector during FY 2014/15. It highlights the financial and physical performance for selected programmes, challenges and proposes interventions that can enhance effectiveness.

As we pursue the goals and aspirations of the National Development Plan II and Vision 2040, I urge all stakeholders in the various projects/programmes to seriously review the proposed actions and act accordingly to foster improved service delivery in the country.

Keith Muhakaniz

Permanent Secretary and Secretary to the Treasury

EXECUTIVE SUMMARY

Background

The annual monitoring in the Information and Communications Technology (ICT) sector focused on both development and recurrent activities of the National Information Technology Authority (NITA-U) and Ministry of Information and Communications Technology (MoICT).

Data was collected using a number of methods including review of literature; interviewing project/programme implementers, and observation or physical verification of reported outputs. Physical performance was rated using average percentage achievement of set targets during FY 2014/15.

Findings

The approved GoU ICT sector budget for FY 2014/15 was Ug shs 24.657 billion of which Ug shs 6.789 was for Ministry of ICT and Ug shs 17.868 for NITA-U. A total of Ug shs 23.8 billion (96.7%) was released and Ug shs 16.343 (68.5%) expended. A total of USD 15 million was expected from EXIM Bank of China as a loan to finance the phase III of the National Transmission Backbone Infrastructure. However, this was not disbursed by June 2015.

The overall physical performance of the ICT sector by end of FY was rated as very good with 70% of targets achieved. The sector witnessed an increase in Internet speed and usage, increased telephone subscription rise in employment and enactment of laws and regulations as well as enforcement. The long anticipated digital migration was implemented in the 60Kms radius from Kampala whilst some technical glitches existed. The Business Processing Outsourcing (BPO) project achieved most of the targets and an Information Access Centre was established at the Ministry of ICT to facilitate among others business incubation.

Performance was however affected by delayed and later differed takeoff of the NBI, incomplete postcode and addressing system pilot project in Entebbe, poor performance of Non Tax Revenue, delayed approval of key policies and strategies including the sector strategic plan, and inadequate funding to the sector in spite of its overall contribution to the economy.

Conclusion

The recurrent budgets and planned outputs for both NITA-U and MoICT performed better than the development outputs. The sector witnessed an increase in internet speed and usage, increased telephone subscription, rise in employment, and enactment of laws and regulations. However, Phase III of the National Transmission Backbone Infrastructure, a key flagship project did not take off as had been planned.

Recommendations

- 1) The NITA-U should track the implementation of the NBI to avoid further delays.
- 2) The MoICT should track the execution of test mail and project evaluation of the national post code and addressing system to ensure that lessons from the pilot are used for the rollout of the program.
- 3) The MoICT should revive and strengthen the sector working group to improve on sector coordination.

CHAPTER 1: INTRODUCTION

1.1 Background

The Information and Communications Technology (ICT) sector is comprised of the telecommunications, broadcasting, postal, information technology, and library and information services sub sectors. It is structured into three functional levels namely: policy, regulatory and operational. The Ministry of Information and Communications Technology (MoICT) - Vote 020, heads and coordinates all the ICT sector activities in collaboration with other stakeholders.

The key regulatory bodies are Uganda Communications Commission (UCC) and the National Information Technology Authority (NITA-U) Vote 126, while the operational level is composed of: Telecommunications, Postal, Information Technology (IT) and broadcasting operators with Uganda Posts Limited (UPL) and Uganda ICT Training Institute as agencies affiliated to the Ministry¹.

According to the National Development Plan (2010/11-2014/15), ICT was placed among the primary growth sectors. Uganda's Vision 2040 emphasizes that ICT shall greatly contribute to the national Gross Domestic Product (GDP) and create new employment opportunities.

The overall sector strategic objectives are to:

- Enhance access to quality, affordable and equitable ICT services country wide;
- Enhance the use and application of ICT services in business and service delivery;
- Enhance access to quality, affordable and equitable broadcasting services country wide;
- Enhance access to quality, affordable and equitable library services country wide, and
- Rejuvenate the application of postal services country wide².

The Budget Framework Paper (FY 2014/15) listed three core outcomes for the ICT sector namely: Improved service delivery through ICTs, Improved access and utilisation of quality and affordable ICT resources and services in all spheres of life, and improved contribution of ICT to employment, income and growth.

1.2 Rationale/Purpose

The Budget Monitoring and Accountability Unit (BMAU) prepares semi-annual and annual monitoring reports of selected government programmes and projects. The monitoring is confined to levels of inputs, outputs and intermediate outcomes in the following areas: Agriculture, Infrastructure (Energy and Roads), Industrialization, Information and Communications Technology, Social Services (Education, Health and Water and Environment); Microfinance and Public Sector Management.

The purpose of the sector report is to bring to the attention of implementers and stakeholders the findings of the programmes/projects that have been monitored by the BMAU in terms of financial and physical performance, challenges, and recommendations.

¹ MoICT 2014

² National Development Plan (2010)

1.3 Report outline

This report has four chapters. The first chapter gives the background to the BMAU, and the purpose of the sector report; the second chapter provides the various methods that were used for data collection; the third chapter reviews the different sector programmes/projects monitored, focusing on their financial and physical performance, key challenges and recommendations related to programme implementation; the fourth chapter gives the overall conclusion and recommendations.

CHAPTER 2: METHODOLOGY

2.1 Scope

The report reviews progress of selected programmes, policies and projects implemented by the Ministry of ICT and NITA-U in FY2014/15. Under NITA-U seven programmes namely (Programme 1: Headquarters, Programme 2: Technical services, Programme 3: Information security, Programme 4: E-government, Programme 5: Regulation and Legal Services, Programme 6: Planning, Research and Innovations, and Programme 7: Finance and Administration) and two development projects were reviewed. The development projects were: i) Business Process Outsourcing, and ii) National Transmission Backbone Infrastructure (NBI).

Under the MoICT, all the five programmes (1: headquarters, 2: Information Technology, 3: Information Management Services, 4: Broadcasting Infrastructure and 5: Telecommunications and Posts) and one development project (Strengthening Ministry of ICT) were monitored.

Physical performance of projects and outputs was assessed through monitoring a range of indicators and linking the progress to reported expenditure. For completed projects, monitoring focused on value for money, intermediate outcomes and beneficiary satisfaction.

2.2 Methodology

Across all the projects and programmes monitored, the key variables assessed included: performance objectives and targets; inputs and outputs, implementation processes and the achievement of intermediate outcomes and beneficiary satisfaction, where feasible.

2.2.1 Sampling

A census of projects and programmes under both the MoICT and NITA-U was used. Priority was given to monitoring outputs that were physically verifiable.

2.2.2 Data Collection

Data was collected from various sources through a combination of approaches:

- Review of secondary data sources including: Ministerial Policy Statements for FY 2014/15; National and Sector Budget Framework Papers; Sector project documents and performance reports in the Output Budgeting Tool (OBT), Sector Quarterly Progress Reports and work plans, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, and data from the Budget Website.
- Review and analysis of data from the Integrated Financial Management System (IFMS) and Performance Reports.

- Consultations and key informant interviews with project managers in implementing entities.
- Field visits to project areas for observation and photography.
- In some cases call-backs were done to triangulate information.

2.2.3 Data Analysis

The data was analyzed using both qualitative and quantitative approaches. Comparative analyses were made using averages, and percentages. The extent of incorporation of gender and equity concerns in the programmes was assessed and analyzed, wherever relevant.

Project performance was rated in percentages according to level of achievement of the planned outputs and targets, and overall utilization of funds for multi-year projects. The performance was rated on the basis of the following criterion.

COMMENT
Excellent (All set targets achieved and funds well utilized)
Very good (Most of the set targets achieved and funds absorption is 70%-79%)
Good (Some core set targets achieved and funds absorbed to 60%-69%)
Fair (Few targets achieved and funds absorption is 50%-59%)
Below average (No targets achieved and funds absorption is less than 50%)

Table 2.1: Assessment guide to measure performance of project monitored

Source: BMAU

2.3 Limitations of the report

The preparation of this report was constrained by a number of factors namely:

- Assumption that warrants on the IFMS are equal to the release sometimes provides inconsistent information during financial analysis. The absorption rate of some projects/programmes might be overstated due to mischarging line items on the Chart of Accounts.
- There were cases of incomplete information especially instances where the responsible officers were new in office or relevant documents not being readily available.
- Data in some projects/programmes was not gender disaggregated to enable detailed analysis.
- Lack of clear performance indicators in some programmes, hence difficulty in rating overall performance.

CHAPTER 3: SECTOR PERFORMANCE

3.1 Overall Performance

The ICT sector is primarily financed by Government of Uganda (GoU). The approved ICT sector budget for FY 2014/15 was Ug shs 24.657 billion of which Ug shs 6.789 was for Ministry of ICT and Ug shs 17.868 for NITA-U. A total of Ug shs 23.8 billion (96.7%) was released and Ug shs 16.343 (68.5%) expended. A total of USD 15 million was expected from EXIM Bank of China as a loan to finance the phase III of the National Transmission Backbone Infrastructure. However, this was not disbursed by June 2015.

The overall ICT sector absorption was good, rated at 68%. By 30th June 2015, a total of Ug shs 6.462 billion (95.2%) was released to the MoICT and all was spent. Both release and expenditure performances for MoICT were excellent. On the other hand, a total of Ug shs17.4 billion (96%) was released to NITA-U and Ug shs 9.881 billion (57%) spent. Although the release performance for NITA-U was excellent, absorption of resources was fair. The low absorption of funds was attributed to delayed take off of the phase III of the National Backbone Infrastructure project.

The overall physical performance of the ICT sector by end of FY was rated as very good with 70% of targets achieved.

3.2 National Information Technology Authority (NITA- U): Vote 126

3.2.1 Introduction

The agency's mission is to "coordinate, promote and monitor the development of Information Technology (IT) in the context of social and economic development of Uganda".(MoICT Ministerial Policy Statement, 2014/15) The vote has two development projects that is, the National Transmission Backbone Infrastructure (NBI) and Business Process Outsourcing (BPO).

Objectives

The objectives of the agency are to:

- Establish a national backbone infrastructure (high bandwidth data connection) in major towns of Uganda.
- Connect all ministries in a single wide area network.
- Establish a government data centre.

Findings

Financial performance

Table 3.1 presents the budget performance of NITA-U. Although the release performance for NITA-U was excellent, absorption of resources was fair. Both budget and absorption of funds

was highest under the recurrent component, with Ug shs 8.653 billion (99.6%) of approved budget released, and 99.5% of the released funds spent (Table 3.1). However, only 17.3% of the released funds under the development component were utilized. The below average absorption of funds under this component was attributed to delayed take off of phase III of the National Backbone Infrastructure project. This was associated with the extended loan approval that were concluded in April 2015, and the renegotiation with the contractor to apply the latest technologies.

Category	GoU Approved Budget	Release	% Released	Expenditure	% Spent
Recurrent	8,972,874,614	8,693,626,284	96.8	8,653,192,187	99.5
Development	9,105,480,919	8,787,916,767	96.5	1,227,915,697	17.3
Total	18,078,355,533	17,481,543,051	96.7	9,881,107,884	56.5

 Table 3.1: NITA-U Annual budget performance by category, FY 2014/15 (Ug shs)

Source: NITA-U& IFMS

Monitoring covered the seven recurrent programmes and two projects.

3.2.2 NITA-U programmes

All the seven programmes (Table 3.2) were selected for the annual monitoring FY 2014/15.

Planned outputs for NITA-U programmes FY2014/15

Table 3.2: Annual planned outputs for NITA-U programmes

Programme	Planned output FY 2014/15
Programme 1 Headquarters	Preparatory activities of the Namanve ICT Hub (land acquisition, surveys and architectural design) completed; Staff remuneration (salaries, gratuity and NSSF); Internal operation procedures and processes documented; Good public image for NITA-U preserved.
Programme 2 Technical services	<i>Last mile connectivity</i> to 80 MDAs within the greater Kampala and Entebbe extended; bulk internet bandwidth procured and distributed to eighty (80) MDAs over the NBI; five (5) MDAs hosted and / or provided disaster recovery services at the data centre; Information Access Centre (IAC) established
Programme 3 Information security	At least three (3) information security sensitization sessions undertaken; two (2) sensitization sessions about components of the National Information Security Framework conducted; structures to provide national guidance on information security matters established; basic component of the Computer Emergency Response Team (CERT) operationalised (security alert and security incident alerts).
Programme 4 E-government	A government Citizen Interaction Centre (CIC) establish; technical support for promotion of e- Government helpdesk provided; maintain the e-Government web portal; arrangements for consolidation of software licences in government completed and at least 5 key users enrolled; open source applications promoted; M-services platform developed and integrated with existing e-government services; national databases integrated; design of IT parks completed and finance partner identified; awareness creation and sensitization activities for change management about

Programme	Planned output FY 2014/15
	ITES/e-Government services conducted; open data readiness assessment conducted and draft national action plan developed.
Programme 5: Regulation and Legal Services	Fifteen (15) awareness sessions about cyber laws and four (4) compliance assessments carried out, online forms for licence registrations prepared and made available to the public; support towards drafting of data protection and privacy law provided; national databank regulations completed and enacted; e-Government regulations completed and enacted; NITA-U (arbitration of disputes) regulations finalized; the first draft of the accreditation regulations reviewed a second draft prepared.
Programme 6: Planning, research and development	One impact assessment of at least one key IT initiatives is undertaken; standards implementation guidelines and manuals prepared for the already gazetted IT standards; at least five (5) new priority IT standards developed; government and government service providers sensitized about the IT certification and accreditation framework; certification authorities designated; certification and accreditation of IT piloted for government ICT service providers; IT Surveys conducted to inform development of IT strategies and an enterprise architecture framework/blueprint for government developed.
Programme 7: Finance and Administration	Financial and human resources management systems established, retain skilled staff and adequate and timely support services provided.

Source: NITA-U

Financial performance

Funding of the NITA-U budget was evenly distributed between GoU allocations and Non Tax Revenue (NTR). The GoU allocations performed by 96% while the NTR component performed by 25%. Both Headquarters and Finance and Administration programmes excellently performed in terms of releases and expenditures by over 96%. The Planning, Research and Innovation programme received the least amount of funding with only 1.3% of the budget realised. Table 3.3 shows the overall programmes budget performance.

Programme	Source	Budget	Receipts	Expenditure	% budget received	% rcpt spent
Headquarters	GoU	7,398,969,648	7,141,193,190	7,140,588,795	96.5	99.9
Technical Services	NTR	4,861,020,000	1,573,292,076	1,573,292,076	32.3	100
Information Security	NTR	1,616,443,000	227,163,647	227,163,647	14.0	100
E-Government	NTR	1,586,500,000	971,719,492	971,719,492	61.2	100
Legal Services	NTR	1,224,288,000	58,653,642	58,653,642	4.79	100
Planning, Research	NTR	1,165,000,000	15,388,920	15,388,920	1.32	100
Finance and Admin	GoU	1,573,904,966	1,552,433,095	1,512,603,391	98.6	97.4

Table 3.3: Financial performance for NITA-U programmes by 30th June 2015 (Ugshs)

Source: NITA-U

Physical performance

Programme 1: Headquarters

Acquisition of land for NITA-U headquarters and ICT hub

The five acre piece of land allocated to NITA-U for an ICT Hub in Kampala Business and Industrial Park - Namanve was secured through Uganda Investment Authority (UIA). The valuation of the land was undertaken in collaboration with Mukono District Local Government. NITA-U was expected to pay US\$80,000 per acre as per the lease agreement from UIA. However, the funds had not been provided for in the NITA-U budget FY 2014/15.

The **NITA-U Internal Operating Procedures** and standards were drafted - these include risk management, survey standards, and project management office standards among others.

Under **preservation of good public image**, the NITA-U stakeholder engagement plan was developed and was awaiting management approval by 30th June 2015. The agency registered over 65% growth in social media interaction. The increase was attributed to the tweets conducted for specific events. NITA-U premises were rebranded in a bid to raise awareness and the agency enjoyed over 90% positive media coverage. All **staff salaries, gratuity**, and **social security** deductions (NSSF) were reportedly paid.

Programme 2: Technical Services

Last mile connectivity: In FY2014/15, the agency identified 56 sites for connectivity including; 15 MDAs, seven (7) public universities, 16 Local Governments, 12 Police institutions and six(6) land offices. Cumulatively, by 30th June 2015, the NBI had been extended to a total of Eighty two (82) MDA of which Fifty (50) MDAs had been activated to the NBI services.

Delivery of bulk Internet to MDAs: A total of two Synchronous Transport Module level-1 STM1(310 Mbps) bulk internet was procured and distributed to the 48 signed up agencies over

the NBI. Alternative suppliers namely: SimbaNet, Seacom and Safari Com were procured to provide redundancy.

Provision of disaster recovery services: The contract for a firm to upgrade the data centre to facilitate hosting and provision of disaster recovery services was prepared and forwarded to the Solicitor General for approval.

Information Access Centre (IAC) established: The setup of the Information Access Centre was completed at the ground level of the Ministry of ICT headquarters. The IAC includes two ICT enabled rooms and one seminar room. The Centre was



Furnished Information Access Centre at ICT House

officially launched in June 2015 and will enable the citizens to interact with Government and also be utilized by IT innovators.

Technical support to MDAs: NITA-U provided IT support to the Ministry of Foreign Affairs (MoFA) on Unified Messaging Communication (UMCS), National Drug Authority on Human Resource System, and Office of the President on the proposed one stop centre.

Fully commercialize the Data Centre: The rate card (document showing prices for different services) for commercializing the Data Centre was developed and approved by the NITA-U Executive Committee (ExCo).

Programme 3: Information Security

Information security awareness creation: Twenty Six (26) information security awareness sessions were conducted in selected MDAs and institutions. The institutions included among others: Information Systems Audit and Control Association (ISACA) continuous professional development programme, Criminal Intelligence and Investigative Directorate (CIID), Makerere University Masters students, Capital Markets Authority (CMA), Uganda Media Centre (UMC) and Judicial Service Commission (JSC).

Rollout of National Information Security Framework (NISF) to MDAs: Three MDAs that include: National Social Security Fund (NSSF), Special Forces Command (SFC) and NITA-U were selected for piloting of the National Information Security Framework (NISF) that will inform the roll out. They were provided with a checklist for compliance.

The National Information Security Advisory Group (NISAG) was constituted and inaugurated on 30th October 2014 and the templates for the risk register developed.

The recruitment for the National Computer Emergency Response Team (CERT) Analyst and Forensic Manager was completed. The CERT analyst was deployed in March 2015 while deployment of the Forensic Manager and CERT administrator was differed to FY 2015/16 due to inadequate funds.

Public Key Infrastructure implementation: The strategy for implementing Public Key Infrastructure (PKI)³ through the outsourcing process was developed.

Programme 4: E-government

Government Citizen Interaction Centre (CIC) established: Procurement of a firm to provide the software component for the CIC was on-going by 30^{th} June 2015. The establishment of the interaction centre is awaiting finalization of the software procurement and installation.

Technical Support for promotion of e-Government provided: NITA-U provided e-Government support towards e-Procurement, e-health, NSIS, One Stop Centre, GCIC and e-Passport. The Prototype of the Northern Corridor web portal was developed. An evaluation of the Uganda Coffee Development Authority (UCDA) website was undertaken and a report prepared. The agency developed ToRs for website development for Kiryandongo town council.

³ A **public key infrastructure** (**PKI**) is a set of hardware, software, people, policies, and procedures needed to create, manage, distribute, use, store, and revoke digital certificates. In cryptography, a **PKI** is an arrangement that binds **public keys** with respective user identities by means of a certificate authority (CA).

Developed specifications and business process for the e-permit system and provided support towards maintenance of 10 MDA web sites.

e-Government web portal maintained: Analysis of the services for integrations onto the eservices portal were provided by the key sectors that were identified in the e-government board retreat. The design on the e-services portal was completed.

Arrangements for consolidation of Software licences in Government completed and at least 5 key users enrolled: The official launch of the Master Business Service Agreement (MBSA) took place on 20th May 2015. NITA-U conducted a focus group workshop with 20 MDAs to discuss the enrolment process and the draft Memorundum of Understanding (MoU). The contract negotiations for consolidation of Microsoft licences were concluded and due diligence undertaken. The implementation plans for consolidation of Microsoft licences were developed while negotiations for the Oracle licences were ongoing.

Open source applications promoted: An Open Source Strategy was developed and submitted to the Ministry of ICT for approval and adoption. In September 2014, NITA-U organised a workshop for IT innovation and Open source in Uganda in conjunction with Information Communication Technology Association of Uganda (ICTAU).

The purpose of the workshop was to build synergy between IT innovation stakeholders and deepen understanding of the frameworks, competencies and methodologies that improve innovation effectiveness. This will be achieved through understanding how innovation, innovative purposes and goals are defined, how innovation programmes are defined to achieve short and long term goals and how these programmes are structured to ensure maximum success.

The workshop brought together all IT Innovators in the country to share experiences, identify different initiatives and solutions, improve marketing of IT innovations, creation of a National Taskforce to spearhead IT Innovation and identify cost effective mechanisms to development of IT innovative solutions among others.

Design of IT Parks completed and finance partner identified: The procurement for the consultant to undertake the feasibility study was completed and a new site was identified in Katabi, Entebbe Municipality.

Awareness creation and sensitization activities for change management about Information Technology Enabled Services/e-Government services conducted: A total of twelve (12) MDAs were sensitized on the e-Government master plan.

Open data readiness assessment conducted and draft national action plan developed: In February 2015, NITA-U participated in consultations and gave input into the Open Data Readiness conducted by the World Bank. In conjunction with MFPED, UBOS and the World Bank, Government of Uganda will develop an Open Data policy that will enable MDAs to open up data sets that will be used by the public, notably, innovators and civil society. This will spur innovations, job creation and create positive impact on the country's economic growth. It will also create more openness of Government programmes.

Integration of National Data Bases: The contract for a feasibility study on integration of National Databases was awarded to M/s Ernest and Young at a contract sum of US\$196,076.27, for a period of six months with effect from February 2015. By 30th June 2015, the draft feasibility study report had been produced.

Programme 5: Regulation and Legal Services

Fifteen (15) awareness sessions about cyber laws carried out: By 30th June 2015, twelve sensitization sessions on Cyber Laws were held. The purpose of the sessions was to create awareness about the mandate and regulatory role of NITA-U, enhance its visibility and highlight the different laws and their application. The agencies sensitized included: Office of the Auditor General (OAG), Accountant General's Office (AGO); Capital Markets Authority (CMA), Judicial Service Commission (JSC), Uganda Media Centre (UMC), and National Environmental Management Authority (NEMA). The stakeholders appreciated the requirements under the laws.

Four (4) compliance assessments undertaken: Two Compliance assessments to the cyber laws were conducted at the Ministry of Public Services and NITA-U.

Support provided towards drafting of data protection and privacy law: With the advancement of technology, more organizations are using computers to store and process personal information. Databases maybe easily searched, accessed and edited than if records are paper-based. This has allowed for organization-wide access to databases and offered an easy way to share information with other organizations. However, this poses the danger of information being misused or getting in the wrong hands.

It is in this breath that the MoICT in conjunction with Ministry of Justice and Constitutional Affairs (MoJCA) and NITA-U developed a Draft Data Protection and Privacy Bill. The Bill aims to protect the privacy of the individual and personal data by regulating the collection and processing of personal information. In December 2014, the Data Protection and Privacy Bill was approved by Cabinet and forwarded to the First Parliamentary Counsel.

National Databank Regulations completed and enacted: By 30th June 2015, the National Data Bank Regulations were developed and circulated to stakeholders for comments.

e-Government Regulations completed and enacted: The e- Government Regulations were approved by the Minister of ICT and gazetted on the 29th May 2015.

The objectives of these Regulations are:- To promote e-government services and electronic communications and transactions with public and private bodies, institutions and citizens; promote the use of internet to provide increased opportunities for citizens participation in government; promote interagency collaboration in providing public services by consolidating, rationalising and integrating related functions and using internal e-government processes to improve the service to citizens, efficiency and effectiveness of the processes;

To promote the use of the internet and other appropriate technologies within and across government agencies in providing information and services; reduce the cost and burden for Government and business entities in the provision of public services; and to improve access and sharing of information and services.

The first draft of the accreditation regulations reviewed and a second draft prepared: By 30th June 2015, the first Draft of the Certification of Providers of IT Services and Products Regulations were completed and stakeholder comments incorporated. The regulations were awaiting final approval by the Minister and gazetting.

Program 6: Planning, Research and Innovation

Key reports produced and impact assessment of at least one key IT initiatives undertaken: All mandatory reports for the financial year were produced; they included; Quarterly performance reports (OBT), PIRT Status Report, NITA-U contribution to Ministerial Policy Statement and Government Annual Performance Report (GAPR) produced by the Office of the Prime Minister. By 30th June 2015, an Impact Assessment on the ban of used computers was finalized and was awaiting Cabinet approval.

Standards implementation guidelines and manuals prepared for the already gazetted IT standards: The agency developed ISO 20000 implementation guidelines and manuals. A standards catalogue was developed to facilitate easy access to the available standards.

At least two MDAs supported to go through standardisation processes (technical support, mentoring, among others): A compliance assessment for structured cabling standards was done for 15 MDAS and the non-compliant MDAs were given timelines within which to align the cabling. The Ministry of Ethics and Integrity was given technical assistance in structured cabling.

At least five (5) new priority IT standards developed: The development of IT standards follows two strategies namely; adoption of already existing international standards or standards are developed from scratch with support from UNBS. During the year under review, 17 international standards were adopted and two standards were reviewed by the Technical Committee. The reviewed standards are:

- i. DUS ISO/IEC 14763-2:2012 Information technology Implementation and operation of customer premises
- ii. DUS ISO/IEC 7816-1:2011- Identification cards, Integrated circuit cards, Part 1: Cards with contacts, physical characteristics.

A management paper for the formulation of the National IT Standards Forum was developed to promote the development, adoption and utilization of IT Standards in Uganda. Consultations with UNBS and the ICT Association of Uganda were made concerning the forum.

Government and government service providers were sensitized about the **IT Certification and Accreditation framework:** An Information Paper on Certification and Accreditation was developed and submitted to MFPED and PPDA. A validation workshop for the certification framework was conducted and comments from the stakeholders were incorporated in the Framework. Engagements with PPDA for pronouncement of the Certification and Accreditation initiative to MDAs were made.

Presentations on the initiative were made to the Ministry of Trade, Industry and Cooperatives (MTIC) for support and guidance in the successful roll out of the Framework. An interview on the Initiative was conducted by journalists and a newspaper supplement to create awareness was run in the newspapers.

Certification Authorities designated: By 30th June 2015, the procurement process for the certification bodies was on-going. Due diligence of the highest bidder was conducted and negotiations were on-going with five (5) Certification Authorities⁴. No Certification Authority was designated.

Certification and accreditation of IT piloted for Government ICT service providers: By 30th June 2015, registration of IT Service providers, professionals and training institutions was ongoing. A total of 486 entities registered including 326 IT professionals, 145 IT service providers and 15 IT training institutions.

The piloting of the framework is being implemented as a project; a Project Charter, and Project Implementation plan were developed and approved to guide the implementation. NITA-U was in advanced stages of contracting a Certification body to carry out certifications. The regulations for certification were being developed to ensure that all service providers adhere to minimum requirements.

IT Surveys conducted to inform development of IT strategies: The NBI Internet User Satisfaction survey was conducted to assess the MDA internet usage environment, user perception and recommendations for improvement in provision of Internet bandwidth services. Out of the 238 internet users interviewed, 47% observed that the speed of internet in Uganda was average. Most internet users were modestly less satisfied with internet services.

Some institutions highlighted that they were connected as spur sites and as such when the main site experiences power outage, the internet for the spur site goes off even if that institution had power. The survey report recommended that NITA-U should ensure that the bandwidth monitoring tool is implemented to curb internet misuse that impacts on the internet speed.

The network design should be reviewed to provide backup links to spur sites in order to minimize outages.

Board Remuneration Survey conducted: A survey report was developed which provided information for NITA-U board remuneration proposal.

The NITA-U Strategic Plan for Statistics was developed in line with the National Sector Strategic Plan for Statistics (NSSPS) issued by UBOS. This plan will guide the collection and dissemination of IT Statistical data.

⁴ In cryptography, a certification authority (CA) is an organization that is trusted to sign and issue digital certificates. A digital certificate certifies the ownership of a public key by the named subject of the certificate.

The agency organized and conducted a workshop for IT innovation and Open source in conjunction with ICTAU. Through the IT Innovation stakeholders, groups were identified and a database created.

An Enterprise Architecture Framework/Blueprint for Government developed: The Second draft of the Conceptual Enterprise Architecture Framework was developed and approved by NITA-U Management. A Taskforce to conduct preparatory work on the Enterprise Architecture Framework was appointed and two engagement meetings held. The agency acquired funding under the World Bank Regional Communication Infrastructure Project (RCIP) to develop the final framework. Procurement of a contractor was expected to start in FY 2015/16.

Stage two (2) of the interoperability framework developed: The conceptual interoperability framework developed in stage 1 was reviewed and recommendations implemented. The Second draft of the Conceptual Interoperability⁵ Framework was developed after review of the first stage. The NITA-U acquired funding under the RCIP World Bank Project to develop the final Framework (contracting was expected to start in FY 2015/16). An initiative (Integrated Driver's License) to demonstrate Interoperability was identified. A proposal was developed and engagement with Ministry of Internal Affairs and Ministry of Works commenced. The proposal was submitted for funding to the Republic of South Korea.

IT Project Management Methodology rolled out in Government: The National IT Project Management Methodology was disseminated to all MDAs via NITA-U website. Fifteen MDAs were sensitized about the methodology, namely; NEMA, NITA-U, UIA, Attorney General, KCCA, Office of Auditor General, Ministry of Health, URA, PPDA, Judiciary, Ministry of Agriculture, URSB, Ministry of Education, UWA, and Ministry of Trade, Industry and Cooperatives. The governance structure and guidelines of the methodology are widely used by the National ID Project.

IT project management support provided to MDAs: the NITA-U provided project management expertise during the planning and implementation of some Government projects like National ID, One-stop Centre, and Information Access Centre (IAC). The agency further provided project management expertise during the RCIP design phase activities that resulted into World Bank approval of the project worth US\$ 85 Million.

IT training for citizens and civil servants conducted: An e-learning tool was developed. The Training Needs Assessment Tool for IT personnel was developed. A total of 80 government staff covering Public Relations Officers (PROs) and IT Personnel were trained in Web Management; 50 PROs and 224 Resident District Commissioners (RDCs) and their Assistants were trained in Social Media.

Establishment of IT professional bodies and associations supported: A Taskforce to spearhead the IT Professionals initiative was put in place. The documents to facilitate

⁵ Interoperability is the ability of different information technology systems and software applications to communicate, exchange data, and use the information that has been exchanged.

establishment of the IT Professional Body was developed. These included; draft constitution; draft code of conduct; draft concept for IT Professionals Bill; a strategy for improving membership to the ICT Association of Uganda (ICTAU) and a consultative meeting with the Board of Directors ICTAU. Implementation of the strategy was expected to start in FY 2015/16.

NITA-U supported the ICT Association to develop a business case to facilitate acquiring premises for establishment of an ICT Hub and offices.

Program 7: Finance and Administration

The programme is responsible for human resources and capacity enhancement in NITA-U.

Staffing

During FY 2014/15, NITA-U had a total of 52 staff out of which 22 (42%) were female and 30 (58%) males. Table 9.4 shows the staff distribution by programme and gender. There was fair balance in employing both males and females. The agency emphasizes equal opportunity in staff recruitment and development in its human resource manual.

Programme	Female	Male
Headquarters	4	2
Technical Services	2	8
Information Security	1	3
E-Government Services	1	6
Legal and Regulatory services	3	0
Planning, Research & Innovations	4	3
Finance and Administration	7	8
Total	22	30

Table 3.4: Staff Distribution by programme and gender as 30th June 2015

Source: NITA-U

Financial and human resources management systems established: The NITA-U Human Resource Manual was reviewed to include health and safety policies. The Procurement manual was updated to incorporate amendments in the PPDA legislations.

Adequate and timely support services provided: All utilities and rent were supplied and the agency was up to date with the payments by 30^{th} June 2015.

Analysis

Link between physical and financial performance

There was a good link between the physical and financial performance. This was because most of the outputs were recurrent in nature and could be achieved despite a low NTR performance. The activities were mostly internally executed by the staff through regular duty assignment.

Achievement of set targets

The achievement of targets was very good as $70^{\%}$ of the planned recurrent outputs were achieved; 82 MDAs were reached out of the planned 80 for last mile connectivity. The Information Access Centre was furnished and launched. The NITA-U provided technical support to MDAs, conducted sensitization sessions on information security. The strategy for Public Key Infrastructure was developed and recruitment of staff for the Computer Emergency Response Team (CERT) completed.

Conclusion

The agency registered very good (70%) progress on the recurrent programme outputs. Several laws, regulations and policies were initiated and support given to other government agencies. The agency experienced low returns from the anticipated and budgeted Non Tax Revenue which affected execution of some of the planned outputs.

3.2.3 Business Process Outsourcing: Project 1055

Background

Business Process Outsourcing (BPO) is defined as the strategic use of third party service providers to perform activities traditionally handled by internal staff and resources. The BPO is categorized into back office outsourcing (which includes internal business functions such as human resources or finance and accounting) and front office outsourcing (which includes customer-related services such as call centre services).

In 2008, the Ministry of ICT developed a BPO strategy and model for Uganda. It proposes that for sustainability of the BPO industry, there was need for government to partner with the private sector and provide support in areas of: infrastructure, human resource and enterprise development, marketing and creating an enabling environment for BPO to flourish.⁶ The project commenced on 1st July 2008 with an extended end date of 30th June 2015. The project was fully funded by GoU.

Objectives

The objectives of the project are to:

- Setup infrastructure that can support the BPO industry.
- Market Uganda as a preferred BPO destination.
- Establish partnerships with the private sector to enable the sustainability of the industry.

The annual planned outputs for the project in FY 2014/15 were:

- i. BPO centre managed and maintained
- ii. TOT training (EDUganda programme) undertaken

⁶ Business Process Outsourcing Strategy

- iii. Uganda BPO Association supported
- iv. BPO framework disseminated (strategy, standards and incentives)
- v. BPO marketing strategy developed

Past performance

By June 2014, the BPO centre had been established, furnished and operational on the third and fourth floors of Statistic House. The BPO policy and framework had been developed. Three BPO companies had been recruited and providing the services at the centre. Over Ug shs 6 billion had been released and spent on the project.

Findings

Financial performance

The financial performance is presented in Table 3.5. Release and expenditure of funds were both excellent (100% and 82.4% respectively). Expenditures were largely on procurement of bandwidth under the line item for Information communication technology.

Item	Approved Budget	Release	Expenditure	% spent
Information and Communication Technology	180,000,000	180,000,000	156,492,991	87
Electricity	20,000,000	20,000,000	6,599,430	33
Fuel lubricants & oils	10,000,000	10,000,000	10,000,000	100
Total	210,000,000	21000000	173092421	82.4

Table 3.5: BPO financial performance by line item as of 30th June 2015 (Ug shs)

Source: IFMS

Physical performance

BPO Centre managed and maintained:

The BPO incubation centre at Statistics House was maintained with provision of bandwidth and



BPO executives working in the maintained Centre on 4th Floor of Statistics House

electricity to the three operators namely: Techno Brain, Dial -a- service and Cameo Techedge. The BPO centre staffing level fluctuated between 250-350 agents daily, however, at the end of June 2015, a total of 350 agents were fully engaged at the facility. On 18th June 2015, H.E the President commissioned the BPO operations. 100% of this output was achieved.

BPO training and capacity building undertaken: A BPO stakeholder workshop to assess the existing sector strategies and identification of export related priorities was conducted. NITA-U partnered with OXFAM to support the Internet Now Project at Gulu University by offering technical advise in the project setup. By June 2015, the centre was employing over 200 BPO agents in Northern Uganda.

Uganda BPO Association supported: The BPO Association website was re-designed and the content updated in accordance with the BPO strategy. The NITA-U established collaboration with the Netherlands Trust Fund Project (NFT), through which 30 BPO companies from the Association will be supported in diverse areas such as outsourcing marketing, business documentation and other BPO basics.

BPO frameworks disseminated (Strategy, Standards and incentives): The Information Technology Enabled Services (ITES)/BPO awareness sessions were conducted in ten (10) MDAs and private sector organizations viz: PSFU, UMEME, UBOS, UIA, PPDA, UICT, Uganda Martyrs University – Nkozi, Higher Education Student Financing Board (HESFB), National Drug Authority (NDA), and Uganda Business Process Outsourcing Association (UBPOA) Board. The purpose was to create domestic demand as well as build capacity of training institutions that BPO service providers can partner with.

Training of Trainers (TOT) EDUganda programme undertaken: A total of 50 BPO trainees were interviewed and 17 selected for the TOT. The EDUganda programme was however not undertaken because the Egyptian master trainer could not find time to conduct the training during the year. Therefore, the output was not achieved.

BPO marketing strategy developed: The Annual BPO Regional Conference and BPO marketing and branding were not held during the year due to inadequate funds.

Sustainability

The NITA-U shall require the companies operating at the BPO centre to contribute to payment of utilities such as bandwidth, water and electricity. In addition, strategic partnerships for technical support and public private partnership shall be used for sustainability.

Challenges

- Inadequate sensitization of the public on the availability of BPO services in Uganda:-The operators are yet to tap into the local market due to public ignorance about the potential of BPO services in Uganda.
- **Incomplete deliverables whilst project end**: The project was officially closed on 30th June 2015. It was however observed that some key deliverables had not been achieved for example, development of BPO marketing strategy and branding and marketing the country as BPO destination.
- **Double taxation:** Uganda revenue Authority (URA) levies a non claimable 18% Value Added Tax (VAT) on the importation of IT and BPO services into Uganda and another 18% VAT on sales income billed for IT and BPO services provided in Uganda. This makes the BPO sector uncompetitive as compared to neighboring countries (Kenya and Tanzania) where VAT charged on importation of the services is claimed back by the operators.

Analysis

Link between financial and physical progress

By 30th June 2015, 82% of the released funds were spent. The physical performance was commensurate to the expended funds. At least 85% of the BPO project budget focused on provision of ICT services including internet bandwidth.

Achievement of set targets

About 70% of the annual targets for the BPO project were achieved by 30th June 2015. This was very good performance. All planned outputs were achieved except the Training of Trainers and branding and marketing of the BPO. The centre was maintained, and marketing of the services was enhanced in conjunction with the Uganda BPO Association.

Conclusion

The overall annual performance of the BPO project was rated as very good (70%). By 30th June 2015, both release and expenditure performances were excellent. The BPO services experienced a slump in volume of work during the first half of the financial year, but this situation gradually improved by the end of the financial year. The BPO incubation centre was directly employing 320 youth. Cumulatively, the centre employed over 800 youth during the three years of operation. The Uganda BPO Association was formed, strengthened and supported. A total of six companies had been incubated in the Government BPO centre.

However, there was low uptake of BPO services by both private and government agencies within Uganda. Although the project had ended, it did not achieve all the outputs due to inadequate funds. The BPO marketing was not accomplished and therefore the slump in the volume of works will continue to be experienced.

Recommendations

- The NITA-U and the BPO association should popularize the availability of BPO services and market the country as a BPO destination. The agency should rationalize the programme resources to finalise the marketing strategy.
- The Office of the Prime Minister, URA and MFPED should address the issue of double taxation of BPO services.

3.2.4 National Transmission Backbone Infrastructure (NBI): Project 1014

Background

The National Data Transmission Backbone Infrastructure and e-Government Infrastructure Project (NBI/EGI) is aimed at connecting Ministries and Government Departments onto the e-Government Network. This is done to create an efficient government through simplifying procedures, bringing transparency, accountability and making timely information available to citizens.

The project is funded by a concession loan from EXIM Bank of China with counterpart funding from GoU. In 2006, a contract was signed between the Ministry of ICT and M/s Huawei Technologies Company Limited of the Peoples' Republic of China at a contract sum of US\$ 106,590,305.

The project commenced in July 2007 and was expected to be completed in July 2012. The project was divided into three phases and implementation was staggered in 27 months. However, the project completion date was revised to July 2015 due to suspension of the project by Parliament in 2011 to allow a Value for Money, and Forensic Audits.

The objectives of the project are: (i) to establish a National Backbone Infrastructure (NBI) with high bandwidth data connection in major towns of Uganda, (ii) connect all Government Ministries, Departments and Agencies (MDAs) in a single wide area network, (iii) establish a government data centre, and iv) establish district information centres.

The expected outputs at completion of the project include: all government ministries connected to a single wide area network; e-government implemented; an optic fiber backbone transmission cable set up across the country (2,294km); district information centres established to improve communication, improved service delivery by government ministries, and reduced cost of communications.

Past performance

Phase I and II of the National Backbone Infrastructure/e-Government Infrastructure (NBI/EGI) project were completed in FY 2012/13. A total of 1,536.39km of optic fiber cables had been laid and US\$91.2 million paid. These phases entailed laying of fibre optic cables (1,536.39km), setting up of the NBI primary data centre, installation of 22 transmission sites, and setting up a Metropolitan Area Network (MAN). The MAN network consists of the connectivity of 27 ministries and some departments through the laying of optical fiber cable onto the e-government network. Twenty two district headquarters across the country were connected and are benefiting directly from the project.

Annual Planned Outputs for FY 2014/15

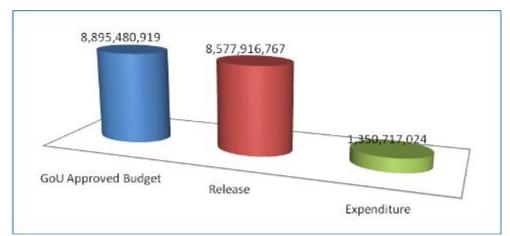
- (i) A total of 756kms of fibre optic cable laid to connect Kampala-Masaka, Masaka-Mutukula, Masaka-Mbarara-Katuna, and Masindi-Kyenjojo under Phase III of the NBI.
- (ii) Network Operations Centre (NOC) set up to monitor provision of services and ensure availability of the NBI.
- (iii) Closed Circuit Television (CCTV) installed at 25 NBI sites to enhance security
- (iv) Closed Circuit Television (CCTV) access control installed at the Metropolitan Area Network (MAN) centre to enhance security.

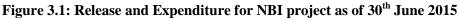
Findings

Financial performance

The approved (GoU) budget for the NBI project for FY 2014/15 was Ug shs 8.895 billion of which 96.4% was released, and only 15.7% of released funds spent by 30th June 2015. Although release performance was excellent, expenditures were below average. This was due to the delayed financing modalities of phase III of this project. The EXIM bank loan (US\$ 15 million) was approved; however, these funds were not received as the modalities were only finalized in

the fourth quarter (April 2015). Figure 3.1 shows the GoU release and absorption performance of the NBI project.





Source: IFMS

Although 96% of the project budget was released, only 16% was expended. The tax component which was taking 84% of the total project budget, performed at 2%. The release was excellent while the expenditures were below average. This was because the extended loan approval and the re-negotiation with the contractor to apply the latest technologies in phase III led to rescheduling of project implementation to FY 2015/16. Table 3.6 shows the detailed financial performance.

Account	Item	Approved Budget	Total Warrants	Total Payments	% of Budget released	% of Release spent	% of expenditure
211103	Allowances	45,000,000	45,000,000	45,000,000	100	100	3.33
221001	Advertising and PR	34,000,000	34,000,000	33,973,151	100	100	2.52
221002	Workshops and seminars	27,500,000	27,500,000	27,493,901	100	100	2.04
221008	Computer supplies and information technology	812,607,895	495,043,743	439,720,966	61	89	32.55
221011	Printing, stationary photocopying	18,057,000	18,057,000	12,877,020	100	71	0.95
221017	Software license Subscriptions	132,643,000	132,643,000	131,581,844	100	99	9.74
222001	Telecommunications	116,312,988	116,312,988	116,299,771	100	100	8.61
223004	Guard and Security services	108,318,240	108,318,240	107,443,759	100	99	7.95
225001	Consultancy services-short term	114,000,000	114,000,000	107,861,147	100	95	7.99
225001	Consultancy services-short term	0	0	-1,790,154			(0.13)
227001	Travel inland	82,800,000	82,800,000	82754192	100	99.9	6.13

Account	Item	Approved Budget	Total Warrants	Total Payments	% of Budget released	% of Release spent	% of expenditure
227002	Travel Abroad	40,000,000	40,000,000	38629816	100	96.5	2.86
227004	Fuels, lubricants and oils	10,000,000	10,000,000	10,000,000	100	100	0.74
228001	Maintenance-Civil	14,320,000	14,320,000	10,478,680	100	73	0.78
228002	Maintenance-vehicles	25,000,000	25,000,000	21,695,102	100	87	1.61
228003	Maintenance, Machinery, equipment and furniture	40,920,000	40,920,000	39,297,500	100	96	2.91
312204	Taxes on Machinery, Furniture and Vehicles	7,274,001,796	7,274,001,796	127,400,329	100	2	9.43
	Total	8,895,480,919	8,577,916,767	1,350,717,0 24	96.7	16	100

Source: IFMS

A total of Ug shs 1.226 billion was spent on: maintenance and upgrading of the existing network (payment of licenses for services running on the NBI (Unified Messaging Collaboration System), maintenance of the 14 IFMS sites running on the NBI and 5 MDAs hosted at the Data Centre, Extending the NBI to connect 28 sites bringing the total to 82 sites, conducting 26 Information Security awareness sessions and subscription to ISACA. A total of Ug shs 127 million was spent on clearing taxes for equipment procured for the Information Access Centre.

Physical performance

I) Implementation of Phase III of the NBI: The project governance structures for implementation was setup and the draft project implementation plan developed. Appointment of the Phase III supervisor was completed. The Loan for Phase III was approved and signed by H.E. the President in April 2015. The NBI project extension proposal was submitted to MFPED and approved by the Development Committee.

Re-negotiation of Phase III with M/s Huawei Technologies was undertaken to ensure that the latest technology is applied under this phase at the same project cost. To that effect a revised contract was drafted and submitted to the Solicitor General for approval. By 30th June 2015, the procurement of firms to provide clearing and forwarding services for Phase III equipment had been finalized.

However, the laying of optic fibre cables (757km) and transmission stations to connect Kampala-Masaka, Masaka-Mutukula, Masaka-Mbarara, Mbarara-Kabale-Katuna, and Masindi-Hoima-Kyenjojo did not commence. Physical performance on this output was therefore at 0%. Implementation of Phase III was postponed to FY2015/16 due to the delay in shipment and delivery of Phase III equipment arising from changes in technology.

II) The process of setting up a Network Operations Centre (NOC) to monitor provision of services and ensure availability of the NBI was not achieved.

III) Installation of the Closed Circuit Television (CCTV) at 25 NBI sites and at the Metropolitan Area Network (MAN) centre was not achieved.

All planned outputs for the year were not achieved.

Challenge

• Delayed conclusion of the financing modalities, changes in technology and re-negotiation of the project implementation contract affected the commencement of phase III of the NBI (laying of 757km of fiber optic cable and installation of associated transmission sites).

Analysis

Link between Financial and Physical performance

Although release of the NBI project funds was excellent (96%), absorption was below average at 16%. Little progress was achieved on the implementation of phase III. There was no link between financial and physical progress on the NBI project activities executed.

Achievement of set targets

The overall achievement of the NBI annual targets was below average estimated at 20%. Apart from undertaking preparatory activities prior to initiation of phase III, none of the four set targets for the year was achieved.

Conclusion

Overall, NITA-U under performed on the NBI project (estimated at 20%) during FY 2014/15. Clearance of taxes on project shipped equipment for phase III was expected to consume Ug shs 7.2 billion (84% of project budget for the period), however only 2% of the taxes was absorbed. This was because phase III (Laying of the 757 km of the optic fibre, a key component of the NBI and installation of the associated transmission sites) of the project did not take off as planned and the activities were differed to FY 2015/16. This affected the overall performance of the project and organization as a whole.

Recommendations

- The NITA-U should fast track the implementation of phase III of the NBI project.
- The NITA-U should stick to the approved work plan in executing project activities.

3.3 Ministry of Information and Communications Technology (MoICT): Vote 020

3.3.1 Background

The Government created the Ministry of ICT in 2006 to provide strategic and technical leadership and coordination in all matters of ICT. The National Development Plan (NDP) and Vision 2040 identified ICT as one of the primary growth sectors that will spur social economic

transformation. The sector is very dynamic and therefore needs to develop, equip, and retain skilled human resource.

The mandate of the ICT Ministry is "to provide strategic and technical leadership, overall coordination, support and advocacy on all matters of policy, laws, regulations, and strategy for the 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"⁷.

The mission is "to promote development and effective utilization of ICTs such that quantifiable impact is achieved throughout the country". The MoICT has three vote functions namely;

a) **Information technology and information management services** which is charged with developing enabling policies, laws and regulations as well as promoting, guiding and providing technical support, supervision, monitoring and evaluation to the development and use of IT;

b) **Communications and broadcasting infrastructure** which is charged with developing enabling polices, laws, regulations as well as quality assurance in infrastructure development for broadcasting and communications service delivery;

c) **Policy, planning and support services** which is responsible for ensuring that the sector complies with policy development guidelines and financial management standards in accordance with the Public Finance and management legislations.

The MoICT is organized into two technical Directorates (each subdivided into two departments) namely: i) Directorate of Communications and Broadcasting, ii) Directorate of Information Technology and Information Management Services. Support services are provided by the department of Finance and Administration.

MoICT planned outputs for FY 2014/15

The planned outputs for MoICT were:

- i. National ICT policy implementation plan developed and disseminated
- ii. Data protection and privacy bill developed
- iii. e-Government framework disseminated
- iv. Software innovation and development policy framework developed
- v. Implementation plan for the public sector information management policy developed
- vi. Implementation of the dot.ug Country Code Top Level Domain (ccTLD) policy coordinated
- vii. Implementation of the e-waste management policy coordinated
- viii. Awareness campaigns on cyber laws and regulations conducted
- ix. ICT Sector strategy and Investment plan disseminated
- x. Spectrum management policy developed
- xi. National postcode and addressing system draft bill developed

⁷ MoICT 2014

- xii. Project document for rollout of the National Postcode and Addressing System project developed
- xiii. Research, Innovation and local content strategy developed
- xiv. Implementation of ICT syllabus in education sector monitored
- xv. Capacity building for ICT human resource in government conducted
- xvi. Capacity building for staff undertaken
- xvii. Monitoring of pan African Network sites conducted
- xviii. Implementation of the national information Security Strategy coordinated
- xix. National broadband strategy developed
- xx. Digital terrestrial transmission and broadcasting bill developed
- xxi. Installation of signal distribution infrastructure for digital television broadcasting in greater Kampala completed
- xxii. Public awareness and sensitization campaigns on analogue to digital migration carried out
- xxiii. Communication infrastructure management policy developed
- xxiv. Technical support to MDAs and LGs provided
- xxv. Evaluation/survey study on ICT related projects and policies conducted
- xxvi. ICT sector activities monitored
- xxvii. ICT Ministry headquarters architectural designs developed

Findings

Financial performance

Table 3.7 shows the financial performance of MoICT. Both release and absorption of GoU funds was excellent. However, income from Non Tax Revenue was below average. This was due to changes in the policy to retain 2% of the levy on profits of Internet Service Providers (ISPs).

Category		GoU Approve Budget	ed Release	% budget Released	Expenditure	% Release Spent
Recurrent	Wage	0.944	0.926	98.1	0.911	98.4
	Non wage	4.291	4.215	98.2	4.198	99.6
Development		0.971	0.752	77.4	0.813	108.1
Arrears and taxes	Arrears	0.400	0.422	105.4	0.392	93
	Taxes	0.183	0.147	80.2	0.148	100.5
Total budget		6.789	6.462	91.2	6.462	100
Non Tax Revenue		3.250	1.500	46	N/A	N/A
Grand total		10.039	7.962	79.3	6.462	N/A

Table 3.7 MoICT financial performance by category, FY 2014/15 (Ug shs billion)

Source: MoICT& IFMS

Physical performance

3.3.2 Enabling policies, laws and regulations:

National Information and Communications Technology (ICT) Policy approved: During FY 2014/15, the National Information and Communications Technology (ICT) Policy was approved by cabinet in September 2014. Dissemination of the policy to guide public use was differed to FY 2015/16. The output was partially achieved.

The principles for the **Data Protection and Privacy Bill** were cleared by the Solicitor General in April 2015, and the bill was submitted to Cabinet; the public consultations on the bill were still ongoing. The output was achieved.

The **e-Government framework was disseminated** to stakeholders at different workshops across the country. The purpose of the framework is to guide communication between Government to Government (G2G), Government to Citizens (G2C) and Government to Business community (G2B). The output was achieved.

The draft software innovation and development strategy was developed. The output was achieved.

The **public sector information management policy** was put on hold as most of the concerns had been addressed by the National ICT policy. Further consultations were required to review the remaining salient issues for re-drafting of a policy. The output was not achieved.

The Ministry of ICT coordinated the creation of a company (Network Information Centre-Uganda) to manage the **Registry for the "dot.ug" Country Code Top Level Domain**⁸ (ccTLD). An interim Board of Directors was launched and the documents for company registration submitted to the Solicitor General for approval. The institutions represented on this board include: the MoICT, NITA-U, UCC, Internet Service Providers/Internet Exchange Point, Telecom Companies and Uganda Law Society. The ccTLD was therefore coordinated.

To increase the **consumption of local content** on Television, Radio and Internet, the MoICT set to develop a Local Content Strategy. By 30th June 2015, literature on the subject had been generated; however, the strategy had not been finalized. The output was partially achieved.

Four **awareness campaigns on Cyber laws and regulations** (computer misuse act, 2011 and regulations, electronic transactions act, 2011 and regulations and electronic signatures act, 2011 and regulations) were conducted in the districts of: Nebbi, Ntungamo, and Mbale; and at Hotel International Muyenga. The output was achieved.

A multi-institutional task team to develop the **National Spectrum Management⁹ Policy** was set up. It was noted that the policy formulation required a study to ascertain the level of spectrum usage in the country. The UCC commissioned a study and by 30th June 2015, the MoICT was waiting for the report to inform the process. Further still, the ongoing analogue to digital

⁸ A country code top-level domain is a two letter suffix generally used or reserved for a country, a sovereign state, or a dependent territory for internet addresses. Uganda's ccTLD is (dot).ug

⁹ Spectrum management is the overall process of regulating and administering access to and use of radio frequencies to promote efficient use and gain a net social benefit.

migration was expected to free up frequencies, and the process was to benefit from the execution of digital migration. The output was not achieved.

With guidance of the International Telecommunications Union (ITU), the National **Postcode addressing Bill** was stayed to allow the MoICT first come up with a policy. The plan to develop a legal framework was thus dropped until the policy is formulated. The output was not achieved.

A final draft of the **National Broadband Strategy** which is intended to ensure access to high speed Internet by all institutions and citizens in the country was developed and submitted to the Ministry's Top Management for approval. The output was substantially achieved.

The **Communication Infrastructure Management policy** which is intended to streamline the management and sharing of ICT infrastructure such as Masts, optic fibre cables and ICT service ducts was not developed. The output was not achieved.

3.3.3 e-Government services:

The **e-Government Transformation Policy** was implemented, with six MDAs and four LGs were provided with technical guidance on use of e-government equipment, facilities, and website management. They included; PPDA, Ministry of Gender, Labour and Social Development, NITA-U, Uganda Business and Technical Examination Board (UBTEB), Ministry of Water and Environment, Uganda Institute of Communication Technology (UICT), and Mitooma, Kanungu, and Lyantonde districts, as well as Luweero Town Council. The output was achieved.

Business process outsourcing industry promoted: The MoICT conducted four monitoring visits to both the government and selected private BPO operators in Uganda. The private BPOs visited are Cayman consults in Mukono, and Zundati BPO in Bugolobi. The gaps identified formed the advisory paper to BPOs. The output was achieved.

Hardware and software industry promoted: The Ministry organized two exploratory engagements with leading software and hardware manufacturers during the year. These included COSEKE on digitization of records, and the Alliance of hardware manufacturers namely: Dell, Hewlett Packard (HP), Phillips, Microsoft and East Africa Compliance Recycling on electronic waste management (e-waste). The output was achieved.

The e-waste management: A feasibility study to establish the status of e-waste in Uganda was commissioned and preliminary findings indicated that the country did not have adequate e-waste to support the establishment of an e-waste recycling facility. Discussions were ongoing on establishing a regional recycling hub in Kenya.

Human resource base for ICT development: The MoICT conducted four monitoring visits to the Pan African e-network (PAEN) sites in Makerere University, Mulago Hospital, Bugoloobi and Gulu. The PAEN project aims to create significant linkages for tele-education and telemedicine with internet, video-conferencing and Voice over Internet Protocol (VoIP) services, making available the facilities and expertise of some of the best universities and super-specialty hospitals in India to the people of Africa and Uganda in particular.

It was observed that although monitoring visits are made by the Ministry of ICT to these facilities, the medical personnel (Doctors, Clinical officers and Nurses) are not trained and lack the competencies to effectively utilize the telemedicine equipment supplied to Mulago Hospital

under the PAEN and those supplied to other health centres from UCC. There is no link between Mulago hospital and health centres in the country side. The output was achieved.

A capacity building workshop for ICT human resource was carried out in 11 Local governments of: Agago, Amolator, Amuru, Apac, Dokolo, Gulu, Kitgum, Kole, Lamwo, Lira and Oyam. The output was achieved.

Implementation of ICT syllabus in education sector monitored:

Between December 2014 and February 2015, the MoICT surveyed 26 secondary schools in the districts of: Gulu, Oyam, Mbale, Iganga, Namutumba, Mbarara, Sheema, Bushenyi, Masaka, Kalungu and Lwengo to assess the implementation of the ICT syllabus in the education sector. Findings indicated that most secondary schools had established ICT laboratories with support from UCC. The number of students offering ICT as a subject had more than doubled in 2014 as compared to 2009. However, the teaching of ICT in most schools was theoretical, computers were inadequate, the subject scope for A-level was too wide, most teachers/instructors were demotivated since they were not on government payroll, general lack of supporting infrastructure such as broadband internet and there was general lack of ICT text books. The output was achieved.

3.3.4 Communication and broadcasting infrastructure

Digital migration¹⁰: The MoICT provided technical support to Uganda Broadcasting Corporation (UBC) and UCC who are spearheading the digital migration process. The Ministry chairs the migration task team. Having named UBC as the sole signal distributor, the digital migration policy recommended the separation of the broadcasting industry into two. That is: (i) content services and infrastructure (ii) signal distributor provision.

UBC was therefore separated into two segments namely: The original UBC for content and M/s Signet for signal distribution. By 30th June 2015, M/s Signet had been registered as an autonomous company and a Board of Directors appointed to oversee its operations.

Key installations were made at Kololo mast to allow digital terrestrial broadcasting. With effect from 15th June 2015, areas within a radius of 60km from Kampala (Mityana, Wobulenzi, Lugazi, Mpigi) switched from analogue to digital broadcasting. The rest of the country was expected to migrate to digital broadcasting by 31st August 2015.

Public awareness and sensitization campaigns on uptake of Set Top Boxes (STB)¹¹ were ongoing and campaign materials were developed and disseminated country wide.

An assessment of the availability and status of digital broadcasting signal was carried out in Nakasongola, Gulu, Mbarara and Masaka districts.

The migration exercise was however experiencing challenges including poor signal distributed in several parts of the country, inadequate sensitization and limited access to set top boxes. The implementing agencies acknowledged the challenges and noted that they were due to financial constraints, since only one half of the budget was received from UCC for executing the

¹⁰ Digital broadcasting migration is a process in which broadcasting services offered on the traditional analog technology are replaced with digital based networks over a specific period.

¹¹ STB is an electronic device (normally placed on top of television sets) that converts a digital television signal to analogue and makes it possible to watch digital broadcasts on ordinary televisions.

activities. The other half was not realized since the regulations to retain 2% instead of 1% of the levy from ISPs were not approved. The output was partially achieved.

Implementation of the shift to Internet Protocol Version Six (IPv6):

The Internet Corporation for Assigned Names and Numbers (ICANN) is an entity that oversees the global IP Address allocation. They assign large blocks of IP addresses¹² to Regional Internet Registries (RIRs) that are responsible for their designated parts of the world. On February 3, 2011, ICANN assigned its last version four (v4) address ranges to the RIRs. When the RIRs exhaust their address pools, there will be few options left to obtain IPv4 address space. The solution is to switch from IPv4 to IPv6 that has extended address field from 32 bits (processor) to 128 bits, or 340 trillion addresses compared to the 4.3 billion addresses possible with IPv4.

The shift from IPv4 to IPv6 will be instrumental in connecting billions of people, devices and even objects to interface directly with each other or through the internet.

During the FY, the MoICT provided technical guidance to Uganda Institute of Information and Communication Technology (UICT) to set up a test bed for IPv6. The migration from IPV4 to IPV6 was ongoing and the two versions were running concomitantly. The output was achieved. The output was achieved.

National Postcode and Addressing System Pilot (NPASP) project:

By 30th June 2015, the pilot project was substantially complete and had been handed over to Entebbe Municipal Council. The Geographical Information System (GIS) server which contains geospatial data is maintained by the Ministry of ICT since the Municipality did not have the human resource to manage it and the project required remote access software to enable offsite update of the GIS.

Uganda Posts Limited (UPL) had not implemented the test mail output and the evaluation of the pilot was not undertaken since it hinged on execution of test mail activities.

A multi-institutional task team composed of MoICT, Ministry of Lands, Ministry of Internal Affairs, UCC, UPL, Uganda Registration Services Bureau, Judiciary, KCCA and Entebbe Municipal Council was setup to develop the National Post Code and Addressing System policy. The National Post Code and Addressing System Strategy and bill were not developed pending finalization of the policy.

The National Postal Policy (2012) was not disseminated due to inadequate funds. The National Telecommunications Policy was neither approved nor disseminated as planned.

3.3.5 Policy, Planning and Administration

Development of the ICT Sector Strategic and Investment Plan (SIP)

The ICT Strategic and Investment Plan (SIP) was finalized, however it was not implemented because the MFPED had not issued the Certificate of Financial Implication to the MoICT to facilitate submission to cabinet and approval. The ICT SIP intends to raise the role of ICT in spearheading national development and transforming the country in the next five years (2015/16-2020/21).

¹² An IP address is a unique string of binary number that identifies computers and other devices on a network.

The ICT SIP proposes funding worth Ug shs 1.1 trillion (Ug shs 224 billion per annum) for the five year duration, however, the sector had a funding gap of 34 billion per annum. The MFPED guided that the ICT sector should plan within the Medium Term Expenditure Framework (MTEF) projections.

Notwithstanding the reprioritization requirement, the National Development Plan II objective of ICT transforming the country may not be realized if the required funding is not identified.

Support to Northern corridor integration projects:

The One Network Area (ONA) for voice where by telephone calls between Uganda, Kenya and Rwanda are treated as local calls and billed at the same rate was launched on 30th May 2015. By 30th June 2015, telecom companies indicated an increase in voice traffic across the three countries. Arrangements to have ONA for data and SMS were in advanced stages. The ONA had reduced the cost of doing business in the region from US\$18 cents to US\$ 10 cents per call.

Ministry support services provided: The Ministry provides services to the clientele through the human resources.

Staffing

During the FY 2014/15, the ministry had a total of 83 staff out of which 32 (39%) were female and 51 (61%) males. Table 3.8 shows the staff distribution by programme and gender. It was observed that the MoICT top management was composed of males only.

Programme	Female	Male
Information Technology	3	4
Information Management Services	3	5
Broadcasting Infrastructure	3	6
Telecommunications	2	6
Headquarters	21	30
Total	32	51

Table 3.8: Staff distribution by gender as at 30th June 2015

Source: MoICT

The Ministry provided welfare services to staff, paid salaries and wages, appraised 68 out of the 83 staff, procured assorted goods and services (stationary, toner cartridges); maintained 22 vehicles; held six top management meetings out of the scheduled 12; prepared and submitted the sector Budget Framework Paper; participated in 15 international meetings out of the 12 scheduled; appointed the Board of Directors for UCC and UPL; prepared four quarterly audit reports, one annual internal audit report, and four value for money audit reports; and paid Ug shs 1.8 billion rent for ICT building covering 11 months out of 12, for FY 2014/15. The 12th month was not paid because of the appreciation of the dollar against the Uganda shillings which caused a short fall of Ug shs 290 million.

It was observed that on top of the current arrears of Ug shs 290 million to M/s Meera Investments, the Ministry had outstanding rent arrears worth Ug shs 314 million owed to the NSSF for Social Security House, where the Ministry operated before shifting to ICT House.

ICT sector monitored: The IT sub sectors were monitored including postal, telecom and broadcasting. The specific components monitored were the Rural Communication Development Fund (RCDF), telecommunication quality of service, readiness for national postcode and addressing system and postal coverage.

ICT Ministry headquarters architectural designs developed: The output is reported on under Project 0990: Strengthening Ministry of ICT.

Analysis

Link between financial and physical progress

There was a strong link between the physical and financial performance of the recurrent outputs planned and achieved.

Achievement of set targets

Overall, physical progress was estimated at 70%. Out of the 24 planned outputs under the recurrent component, 16 were achieved, three were partially achieved and five were not achieved. Several legislations, strategies and policies including data protection and privacy bill, national broadband strategy, software innovation and development policy framework were developed. However, the communication infrastructure management policy, the project document for rollout of the national postcode and addressing system and draft bill, and public sector information management policy were not developed.

3.3.6 Strengthening Ministry of ICT: Project 0990

Background

The objective of the project is to conduct ICT related research by creating an enabling environment to deliver ICT services to internal and external clients. The project started in July 2007 with a completion date of 30th June 2017.

Planned outputs for FY2014/15

- Architectural design for Ministry headquarters.
- Three vehicles procured.
- Three heavy duty photocopiers procured.
- 10 staff sponsored to undertake long-term training programmes.
- ICT strategy and Investment plan disseminated.
- Bandwidth, 3 desktop, 18 I-pads and 10 laptop computers and accessories procured.
- Office furniture and fittings for resource centre and board room procured.
- One research study on ICT related area conducted.

Financial performance

The project is fully funded by Government of Uganda. The revised budget for the project FY 2014/15 including taxes was Ug shs 1.153 billion of which Ug shs 999.8 million (87%) was released and Ug shs 957.6 million (96% of release) spent. Table 3.9 shows the financial performance by line item. Both release and expenditure performance was excellent.

Account	ltem	Approved Budget	Total Warrants	Total payments	%ge of budget released	%ge of funds absorbed
211103	Allowances	30,000,000	24,702,855	24,702,855	82	100
221003	Staff training	270,000,000	221,798,137	220,217,549	82	99
221007	Books periodical & newspapers	30,000,000	24,644,238	24,644,238	82	100
221008	Computer Supplies & IT	70,000,000	62,503,221	62,503,221	89	100
221009	Welfare & Entertainment	20,000,000	16,429,492	16,429,492	82	100
221011	Printing, Stationary, Photocopying	43,000,000	40,323,407	40,323,407	94	100
221012	Small office equipment	3,000,000	2,464,424	2,464,424	82	100
222001	Telecommunications	27,000,000	22,179,814	22,179,814	82	100
222003	Information & Comm. Tech	30,000,000	24,644,238	24,644,238	82	100
225002	Consultancy Services-Long Term	69,671,000	62,232,956	62,232,956	89	100
227001	Travel Inland	24,000,000	19,715,390	19,715,390	82	100
227002	Travel Abroad	22,000,000	18,072,441	18,072,441	82	100
227004	Fuel lubricants and oils	25,000,000	20,536,866	20,536,866	82	100
228002	Maintenance- vehicles	22,000,000	18,072,441	18,072,441	82	100
228003	Maintenance- Machinery, equipment	5,000,000	4,107,373	4,107,373	82	100
231005	Machinery and equipment	143,000,000	117,470,860	117,470,860	82	100
231006	Furniture and Fittings	137,000,000	116,793,949	111,661,203	85	96
312204	Taxes on Machinery & Vehicles	183,152,893	183,152,893	147,665,937	100	81
	Total	1,153,823,893	999,844,995	957,644,705	87	96

Table 3.9: Project 0990 financial performance by line item as at 30th June 2015 (Ug shs)

Source: IFMS

Physical performance

Architectural design for Ministry headquarters: The architectural designs for the Ministry headquarters were not developed because the ministry had not secured land and the available resources were inadequate for the related activities. The output was not achieved.

Three heavy duty photocopiers procured: One heavy duty network photocopier was procured and installed. The output was partially achieved.

10 staff sponsored to undertake long-term training programmes: Five members of staff undertook short term training and seven staff members on long term training were facilitated with tuition and other related costs. The output was achieved

Three vehicles procured: Two double cabin pick ups and one station wagon were procured. A total of Ug shs 480 million was spent from NTR and taxes paid from the project budget. The output was achieved

Bandwidth, 3 desktop, 18 I-pads and 10 laptop computers and accessories procured: Three desktop computers and accessories and four I-pads for senior management members and bandwidth were procured. The required number of equipment was not achieved due to inadequate funds. The output was substantially achieved.

Office furniture and fittings procured: An assorted office furniture including two office desks, six visitors' chairs, five office cabins were



The one station wagon and two double cabin pick-up vehicles procured at MoICT parking yard

procured. The furniture for the resource centre and board rooms was not procured due to inadequate funds. The output was partially achieved.

ICT Sector Strategy and Investment Plan disseminated: The ICT SIP was not disseminated because it was still awaiting cabinet approval. The output was not achieved.

Challenge

- Inadequate resources to implement planned activities.
- Poor planning; the MoICT planned to undertake architecture designs for her headquarters before they had secured land.

Analysis

Link between physical and financial performance

Although 87% of the project budget was released and 96% spent, two outputs of the planned eight were achieved, three outputs were partially achieved and three were not achieved. One of the achieved outputs (procurement of three vehicles) was substantially funded from NTR. There was no link between physical and financial performance under this project.

Achievement of set targets

Physical progress under this project was estimated at 55% as two outputs namely; three vehicles procured and 10 staff sponsored to undertake long term training were achieved. The outputs on bandwidth, 3 desktop, 18 I-pads and 10 laptop computers procured; and office furniture and fittings were partially achieved, while architectural designs for ministry headquarters, dissemination of ICT investment plan and a research study on ICT related area were not undertaken.

Conclusion

The project performance was rated as fair (55%), as half of the planned outputs were not achieved. The reasons for the average performance included lack of land for the proposed site for

the ministry headquarters, depreciation of the Uganda shilling against the dollar and delayed approval of the Sector Investment Plan to facilitate the dissemination process. It was however observed that in spite of the average physical progress, the financial performance was excellent.

Recommendations

- The MoICT should strengthen its planning mechanisms to ensure chronological flow of activities.
- The ministry should rationalize her resources to key deliverables.

3.4 Overall Sector Challenges

- Poor performance of NTR: Only 46% of the expected Ug shs 3.25 billion in NTR was realized by MoICT and only 25% of the Ug shs 17 billion NTR was realized by NITA-U. The UCC was not allowed to retain the 2% levy on profits of ISPs as had been planned. Therefore the remittance to the MoICT from UCC's was affected, and fewer resources were available to execute planned activities.
- Depreciation of the Uganda shillings against the dollar: The Ug shs lost value to the United States of America dollar by an estimated 38% between May 2014 and May 2015. This made imported ICT goods more expensive than planned. The depreciation of the shillings led to domestic arrears (Ug shs 290 million) on rent for the MoICT since the owners of the building charge rent in US dollars.
- Lack of a functional sector working group to coordinate ICT activities: The sector is not well coordinated and instances of duplication of effort were observed amongst the key players. For example, under the National Postcode and addressing system, test mail had not been executed by Uganda Posts limited due to lack of coordination.
- Delayed implementation of key projects such as phase III of the NBI, and test mail delivery under National Post Code and Addressing System pilot project in Entebbe.
- Inadequate ICT complimentary services such as electricity.

Box 3.1: Summary of ICT contribution to development under the three core sector outcomes

1: Improved service delivery through ICTs

By the end of 2014, the telephone subscriptions stood at 19.5 million, representing a tele-density of 53.3 lines per 100 people. The number of active internet subscriptions stood at 4.3 million in 2014 compared to 3.6 million in 2013. The number of internet users stood at 8.5 million in 2014 compared to 6.2 million in 2013.

2: Improved access and utilisation of quality and affordable ICT resources and services in all spheres of life: The number of licensed TV stations by December 2014 was 67 with 62 operational. There were 229 licensed FM radio stations, out of which 208 were operational. The volume of Expedited Mail Services (EMS) courier items stood at 181,000 and ordinary mail was 881,000 (2014). The number of registered mobile money subscribers was 17.64 million in 2014 up from 12.12 million in 2013. The value of transactions increased from Ug shs 11.6 trillion in 2013 to Ug shs 18.645 trillion in 2014.The operationalisation of the NBI had yielded results as over Ug shs 6.5 billion was saved as a result of several government agencies (80) opting for the network as a primary source of Internet services in 2014/15

3. Improved contribution of ICT to employment, income and growth:

The sector's share of GDP was 2.5%; employment in the ICT sector was estimated at over 1.3 million people. Revenue collection (VAT, PAYE and exercise duty) from telecom companies was Ug shs 416.7 billion in 2014, compared to Ugshs.332 billion in 2013. Therefore, Tax contribution grew from Ug shs 155billion in 2008/09 to Ug shs 416.7 billion in 2013/14.

Source: MoICT, UCC

3.5 Sector Analysis

Link between financial and physical performance

Generally, there was a link between physical and financial performance for most of the sector project/program outputs reviewed.

Achievement of set targets

The overall physical performance of the ICT sector by end of year was rated as very good with 70% of targets achieved. Most of the legal and regulatory targets were achieved; the BPO project met most of its targets. The overall sector performance was affected by the failure to implement the NBI project whose overall performance was below average.

Comparative analysis

The recurrent programmes under NITA-U and MoICT performed much better than the development projects during the year under review. Both MoICT and NITA-U NTR performed below average (46% and 25% respectively).

Gender and equity analysis

Both males and females have equal opportunities in the ICT sector however; the sector institutions are dominated by males as 60% of the staff at both MoICT and NITA-U were male.

It was observed that there was no female at the Top Management level of the Ministry of ICT. It was further observed that most ICT investments are concentrated in urban areas. This was explained by the demand driven approach employed by the private sector which drives the sector investments.

Chapter 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusion

The overall physical progress of the ICT sector was very good with 70% of the planned targets achieved. The recurrent outputs for both NITA-U and MoICT performed better than the development outputs. The sector witnessed an increase in Internet speed and usage, increased telephone subscription, rise in employment, and enactment of laws and regulations. The long anticipated digital migration was implemented in the 60kms radius from Kampala whilst the technical glitches. The BPO project achieved most of the targets and an Information Access Centre was established at the Ministry of ICT to facilitate among others business incubation.

However, Phase III of the National Transmission Backbone Infrastructure, a key flagship project did not take off as had been planned. The National Postcode and Addressing System Pilot project in Entebbe was not concluded awaiting mail testing and final evaluation, the sector strategic plan was yet to be approved and disseminated. The NTR for both NITA-U and MoICT poorly performed and the sector was not adequately funded in spite of its overall contribution to the economy.

Implementation was affected by the depreciation of the Uganda shillings against the dollar, lack of a functional sector working group to coordinate ICT activities and inadequate ICT complimentary services such as electricity.

4.2 Recommendations

- 1. The Ministry of ICT and NITA-U should review the planning figures for Non-Tax Revenue for proper planning.
- 2. The NITA-U should fast track the implementation of the NBI to avoid further delays.
- 3. The MoICT should fast track the execution of test mail and project evaluation of the National Post Code and Addressing System to ensure that lessons from the pilot are used for the rollout of the program.
- 4. The MoICT should revive and strengthen the sector working group to improve sector coordination.

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