INFORMATION AND COMMUNICATION TECHNOLOGY SECTOR

ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2019/20

NOVEMBER 2020

MOFPED
#DoingMore

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ACRONYMS

4IR	Fourth Industrial Revolution
AIA	Appropriation in Aid
AIMS	Academic Information Management System
BFP	Budget Framework Paper
BPO	Business Process Outsourcing
CERT	Computer Emergency Response Team
COVID 19	Corona Virus Disease, 2019
DC	Data Centre
DLG	District Local Government
DNS	Domain Name Server
DTT/DTH	Digital Terrestrial Television/Direct to Home
E-GP	Electronic Government Procurement
EOI	Expression of Interest
ERP	Enterprise Resource Planning
ESA	Enterprise Security Architecture
ETA	Electronic Transactions Act
FIA	Financial Intelligence Authority
FOSS	Free and Open Source Software
GB	Giga Byte
GCIC	Government Citizens Interaction Centre
GoU	Government of Uganda
IAC	Information Access Centre
ICT	Information, Communications Technology
ICTAU	Information Communications Technology Association of Uganda
IFMS	Integrated Financial Management System
IPPS	Integrated Payroll and Pension System
ISO	International Standards Organisation
ITES	Information Technology Enabled Services
ITU	International Telecommunication Union
JLOS	Justice, Law and Order Sector
LG	Local Government
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries
MBPS	Mega Byte per Second
MDAs	Ministries, Departments and Agencies
MoD	Ministry of Defence and Veterans Affairs
MoICT&NG	Ministry of Information, Communications Technology and National Guidance
MoU	Memorandum of Understanding
NBI	National Backbone Infrastructure
NEMA	National Environment Management Authority
NISF	National Information Security Framework

NITA-U	National Information and Technology Authority
NOC	Network Operating Centre
OFC	Optic Fiber Cable
PAD	Project Appraisal Document
RCIP	Regional Communication Infrastructure Programme
SLA	Service Level Agreement
UBC	Uganda Broadcasting Corporation
UCC	Uganda Communications Commission
UICT	Uganda Institute of Information Communication Technology
UMC	Uganda Media Centre
UMCS	Unified Messaging Collaboration System
UPL	Uganda Posts Limited
US$	United States Dollar
VAT	Value Added Tax
Wi-Fi	Wireless (Internet)

FOREWORD

The Financial Year 2019/20 strategy focused on stimulating import substitution and export promotion, and incentivising private sector development. The government prioritised agriculture and agro-industrialisation, manufacturing, and mineral development to ensure inclusive growth and the creation of jobs, while promoting development of other key primary growth sectors. The economy grew despite the challenges experienced during the year. The wellbeing of Ugandans, and infrastructure necessary for development also improved considerably.

The above achievements notwithstanding, majority of the second National Development Plan (NDPII) outcome indicators were not achieved. This report by the Budget Monitoring and Accountability Unit (BMAU) shows that majority of the sectors monitored posted a fair performance, despite receiving a substantial amount of their budgets.

I encourage all government institutions, the private sector, development partners, and other key players in the development of this country, to harness the strengths coming with Programme Based Budgeting (PBB), and take cognizant of the lessons learnt during the NDPII to improve service delivery during this NDPIII period.

Keith Muhakanizi

Permanent Secretary/Secretary to the Treasury

EXECUTIVE SUMMARY

Introduction

The Information and Communication Technology (ICT) sector is composed of two votes namely: Ministry of ICT and National Guidance (MoICT&NG) - Vote 020, and the National Information Technology Authority (NITA-U) - Vote 126. Execution of activities is through six programmes.

This report reviews selected key programmes and sub-programmes within the ICT Sector, based on approved plans and significance of budget allocations to the Votes. Attention is on large expenditure programmes including both development expenditure and recurrent costs.

Programmes selected for monitoring were based on planned annual outputs; regional representation; level of capital investment; and value of releases during Financial Year 2019/20; and programmes prioritised by Government as having major contribution to achievement of sector and national priorities.

The methodology adopted for monitoring included literature review of annual progress and performance reports; interviews with the respective responsible officers or representatives; and observations or physical verification of reported outputs. Physical performance was rated using weighted achievement of the set output and outcome targets by 30th June, 2020.

Overall Performance

The overall ICT sector performance by 30th June 2020 was good (82.2%). The overall budget for the ICT sector comprising of Wage, Non-Wage Recurrent, Development, and Gross Tax for FY2019/20 was Ug shs 152.225billion (bn), of which Ug shs 6bn was a supplementary for Vote 020 (Ministry of ICT&NG) to scale-up communication in the fight against COVID-19 pandemic.

The overall budget performance was very good with 92.9% of the annual budget received, and 95% of received funds spent. The programmes with more recurrent outputs performed better than those with development outputs. This was due to delays in concluding procurements and interruptions caused by the 2019 Coronavirus Disease (COVID -19) pandemic.

Highlights of sector programmes performance

Electronic Public Services Delivery (e-transformation) Programme

The programme developed and disseminated 57 cyber security advisories to Ministries, Departments and Agencies (MDAs), conducted 40 cyber security awareness promotion and training sessions. Two conferences for annual information security and risk management were organised, risk management trainings for 27 MDAs were carried out. Civil works for the National Computer Emergency Response Team (CERT) Forensics and Environment started in June and was expected to be completed by the end of July 2020. Equipment for the CERT was delivered. Sixteen National Information Security Framework (NISF) assessments were carried out for 16 MDAs. Risk management training was carried out for 27 MDAs and 1,208 tickets were logged in the Service Desk Tool.

Websites for Ministry of Local Government, Tax Appeals Tribunal and Uganda Development Corporation were revamped, while a website was developed for Bombo Army Secondary School. In addition, the programme conducted social media and content management training for 10 District Local Governments. A total of 14 MDAs were enrolled onto the SMS gateway and 10,078 Unified

Messaging Communication System (UMCS) active users. A total of 58 new applications were hosted on the government cloud.

The UMCS Phase II was at 46% progress and e-Government Procurement (e-GP) system completed. Expression of interest for the ISO: 27001 gap assessment was finalised and procurements for the NISF remediation and 500kva transformer for the National Data Centre were ongoing. Workshops and trainings scheduled for the second half of the financial year were postponed due to the COVID-19 pandemic.

Shared IT Infrastructure Programme

Under the Regional Communication Infrastructure Programme (RCIP), establishment of the missing links of the National Backbone Infrastructure (NBI) project was substantially completed at 92% progress. A total of 842km of optic fibre cable was laid to connect sub-regions of West Nile, Karamoja and Rwenzori to the NBI. The NBI was extended to 185 new government sites in 10 districts and four additional border points were connected to new 20G ring. A total of 79 MDAs /Local Governments were provided with internet bandwidth.

The supply and installation of equipment for the Last Mile Connectivity was at 15% progress and additional storage equipment for cloud computing at 85%. Delayed implementation of the Last Mile Connectivity is affecting utilisation of bandwidth over the NBI and access to electronic services. The programme signed memorandums of understanding (MoUs) with the Rural Electrification Agency (REA) and Uganda Communications Commission (UCC) to extend the NBI to broadband initiatives.

Streamlined IT Governance Programme

The NITA-U National Data Bank Regulations, 2019 was published in the Uganda Gazette on 20th December 2019. The consumer protection framework was developed and an e-portal development is underway. The programme developed three (3) priority standards that were reviewed and approved by the National Technical Standards committee. The programme also developed Terms of Reference for the ICT Sector Competitiveness and Innovation Strategy and submitted to the MoICT&NG for review and approval. The second draft of the Data Protection and Privacy Regulations 2019 was developed following input from internal stakeholders. The programme is engaging Uganda National Bureau of Standards (UNBS) and Uganda Revenue Authority (URA) to develop a framework for certification of ICT products.

Forty-six sensitisation activities on IT legislation to enhance awareness within Government, regulated entities and the public were conducted, and the agency certified 87 IT products and service providers. Certification of NITA-U to ISO 20000 standard was initiated. Five (5) MDAs were supported in the uptake of IT Standards. NITA-U land at Kampala Industrial and Business Park (KIBP) - Namanve was fenced off and an access gate constructed.

Enabling environment for ICT Development and Regulation Programme

Dissemination of the Data Protection and Cyber laws to some Local Governments (LGs) was done. Technical support was given to the Ministry of Public Service in the piloting of the electronic records system and the Human Capital System. Ten MDAs with e-services were assessed and IT officers from five LGs were trained in e-Services and emerging technologies. The programme developed the concept note for the survey, and designed the data collection tools for the digital eco-system and marketplace for local innovative ICT products. They carried out a market survey for Business Process Outsourcing

and IT Enabled Services (BPO/ITES), and held the National ICT innovations Expo at Uganda Institute of ICT -Nakawa. The programme also developed draft Fourth Industrial Revolution (4IR) strategy and Free and Open Source Software (FOSS) guidelines.

The *Issue's Paper* on the review of Uganda Communications Act, 2013 and NITA-U Act 2009 was drafted. In terms of developing the broadband infrastructure blue print, the Agency collected and documented the available ICT Infrastructure under Uganda Electricity Transmission Company Limited (UETCL) and Uganda Telecom Limited (UTL). Under the Posts and Telecommunications Sub-programme, data was collected to support the development of guidelines for use of Postal Networks/Service Centers for e-Government Services.

Effective Communication and National Guidance Programme

The programme received a supplementary of Ug shs 6bn to enhance effective communication in the fight against COVID-19.

Under the Media Centre, a total of 5,194 print and electronic media were monitored against an annual target of 20,000. A total of 269 print and electronic media were engaged. A total of 617 media coverage activities were coordinated. Under the National Guidance Sub-programme, radio talk show programs in Bugisu (Mbale) sub-region to publicise government programmes and policies, and increase the levels of awareness and change people's ideological consciousness were held. The sub-programme also conducted civic education awareness campaigns in Kamuli, and Karamoja sub-regions.

The Government Citizen's Interaction Centre (GCIC) received and handled 533 calls/queries from citizens and feedback was provided. The GCIC was operational with 1,962,000 and 781,876 twitter and Facebook views respectively and 15,000 website visits. Dissemination of guidelines for the Centralised Media Buying Initiative was done in 60 districts. The Ministry procured M/s QG Saatchi & Saatchi as the media clearing agency.

The programme conducted training on effective use of social and digital media to communicate government programs for 20 district communication and information officers, and 20 Deputy Resident District Commissioners in the Karamoja sub-region.

General Administration, Policy and Planning Programme

Under the Strengthening Ministry of ICT Sub-programme (retooling project); two consultative workshops were undertaken on budgeting, planning and sector performance. The ICT and National Guidance Sector development plans were reviewed and aligned to the third National Development Plan (NDPIII). Under the National ICT Initiatives Support Programme (NIISP), nine ICT hubs were supported namely: Resilient African Network, Tech Buzz Hub, MIIC, Innovation village, CAMTech, RAN Lab, Outbox Hub, Microsoft East Africa and Hive Collab. The NIISP partnered with UNCDF to develop a policy for the initiative. A total of Ug shs 9.073bn was disbursed to 60 Indigenous ICT Innovators and innovation hubs supported under the NIISP.

Construction of the National ICT Innovation Hub at Nakawa was substantially completed, and furnishing of the same was ongoing. Plans for the establishment of innovation spaces at Muni and Soroti universities were finalised. A total of Ug shs 14.9bn was transferred to Uganda Broadcasting Corporation (UBC) to undertake the next phase of its revamping. Implementation of the activities was ongoing by 30th June 2020. It was observed however that the UBC was still grappling with debts (Ug shs 75bn) arising out of

unpaid taxes, court awards, gratuity to restructured staff, unremitted NSSF contribution and penalties in the previous years compelled by uncompetitive programming, low advertising revenue and unmotivated staff.

The programme experienced a budget shortfall of Ug shs 7.02bn that constrained implementation of some activities such as equipping the ICT Innovation Hub at Nakawa, revamping UBC, completion of digital migration under SIGNET, and support to indigenous ICT innovators.

Conclusion

The overall sector performance was good. The programmes with more recurrent outputs performed better than those with development outputs. These included: Effective Communication and National Guidance; Streamlined IT Governance and Development; General Administration, Policy and Planning. On the other hand, the programme with development (capital investment) outputs suffered delays in initiating and completing the procurement. For example the Shared IT Infrastructure Programme posted relatively lower scores.

Good progress was observed on the key sector NDP II indicators of increased ratio of national budget allocated to ICT, increased access and usage of broadband internet bandwidth, increased internet users, increased telephone subscribers and reduction in prices of internet data. However, there was a decline in tele-density.

Performance during the period under review was hampered by delays in initiation of procurements, low ICT technical capacity within MDAs (human resource, hardware and software) to support the systems, under staffing at the MoICT&NG and NITA-U, inability to use the already paid for data over the NBI by public officials working from home thus increasing the costs of doing business, and resistance to integration of ICT systems and high debt burden and inadequate funding to Uganda Broadcasting Corporation.

Recommendations

- The NITA-U and MoICT&NG should initiate procurements in time to avoid implementation delays.

- The Ministry of ICT and NITA-U should enhance awareness and sensitisation campaigns on the benefits of IT systems to increase uptake and maximise the economies of scale.

- The NITA-U through the RCIP should prioritise provision of key hardware and software such as computers and structured cabling to agencies where the NBI was delivered but not in use in order to increase on uptake of e-enabled services. The UBC sites should be enrolled on the NBI and in the bulk software licensing modalities.

- The MoICT&NG, NITA-U and Ministry of Public Service should review the staff ceiling for the sector to increase on implementation efficiency.

- The MoICT&NG and NITA-U should develop a change management strategy to ensure that duplication is minimised on procurement and use of ICT installations as well increase clients on the existing NBI.

CHAPTER 1: BACKGROUND

The mission of the Ministry of Finance, Planning and Economic Development (MFPED) is, "*To formulate sound economic policies, maximize revenue mobilization, and ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development*". It is in this regard that the ministry gradually enhanced resource mobilization efforts and stepped up funds disbursement to Ministries, Departments, Agencies and Local Governments in the past years to improve service delivery.

Although some improvements have been registered in citizens' access to basic services, their quantity and quality remains unsatisfactory, particularly in the sectors of health, education, water and environment, agriculture, ICT and roads. The services being delivered are not commensurate to the resources that have been disbursed, signifying accountability and transparency problems in the user entities.

The Budget Monitoring and Accountability Unit (BMAU) was established in FY2008/09 in MFPED to provide comprehensive information for removing key implementation bottlenecks. The BMAU is charged with tracking implementation of selected government programmes or projects and observing how values of different financial and physical indicators change over time against stated goals and targets (how things are working). This is achieved through semi-annual and annual field monitoring exercises to verify receipt and application of funds by the user entities. Where applicable, beneficiaries are sampled to establish their level of satisfaction with the public service.

The BMAU prepares semi-annual and annual monitoring reports of selected government programmes and projects. The monitoring is confined to levels of inputs, outputs and outcomes in the following areas:

- Accountability

- Agriculture

- Infrastructure (Energy and Roads)

- Industrialization

- Information and Communication Technology (ICT)

- Social services (Education, Health, and Water and Environment)

- Public Sector Management; and

- Science, Technology and Innovation

1.2 Sector mandate

The mission of the Information, Communications Technology and National Guidance (ICT&NG) sector is to "*promote the development of ICT infrastructure and services throughout the country*". The mandate of the sector is to provide strategic and technical leadership, overall coordination, support and advocacy on all matters of policy, laws, regulations and strategy for sustainable, effective and efficient development, as well as harnessing and utilization of ICT in all spheres of life to enable the country achieve its development goals.

The sector is composed of the Ministry of Information, Communications Technology and National Guidance (MoICT&NG), National Information Technology Authority (NITA-U), Uganda

Communications Commission (UCC), Uganda Posts Limited (UPL- operating as Posta Uganda), Uganda Media Centre, Uganda Broadcasting Corporation (UBC), and Uganda Institute of Information and Communications Technology (UICT).

The annual monitoring for FY 2019/20 in the ICT sector covered the Ministry of ICT and National Guidance (MoICT&NG), Uganda Broadcasting Corporation (UBC), and National Information Technology Authority (NITA-U).

1.3 Sector objectives and priorities

The overall sector objectives as outlined in the National Development Plan II were:

- Increase access to ICT infrastructure to facilitate exploitation of the development priorities.

- Enhance the usage and application of ICT services in business and service delivery.

- Increase job creation through ICT research and development.

- Increase the stock of ICT skilled and industrial ready workforce.

- Improve the information security system to be secure, reliable, resilient, and capable of responding to cyber security threats.

- Improve the legal and regulatory frameworks to respond to the industry needs.

- Increase the stock and quality of strategic infrastructure to accelerate the country's competitiveness

CHAPTER 2: METHODOLOGY

2.1 Scope

This report is based on all programmes in the ICT Sector. The focus was on the sector programmes, policies and projects implemented by the Ministry of ICT&NG and NITA-U for the FY2019/20. Under NITA-U, all programmes and two development projects were monitored. The development projects are; Regional Communication Infrastructure Programme (RCIP), Institutional Support to NITA-U, and under the MoICT&NG, the project on Strengthening Ministry of ICT (re-tooling) was tracked.

The programmes monitored were: Enabling Environment for ICT Development and Regulation; Effective Communication and National Guidance; General Administration, Policy and Planning; Electronic Public Services Delivery (e-transformation); Shared IT infrastructure and Streamlined IT Governance and Capacity Development.

2.2 Methodology

Physical performance of projects and outputs was assessed through monitoring a range of indicators and linking the progress to reported expenditure. Across all the projects and programmes monitored, the key variables assessed included: performance objectives and targets; inputs and outputs.

2.2.1 Sampling

All programmes, and sub programmes were monitored. 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 FY2019/20; National and Sector Budget Framework Papers; Sector project documents and performance reports from the Programme Budgeting System (PBS), 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 Quarterly Performance Reports from implementing agencies.

- Consultations and key informant interviews with project managers in implementing agencies both at the Central and Local Government level.

- Field visits to project areas for primary data collection, observation and photography.

- Call-backs in some cases to triangulate information

2.2.3 Data Analysis

The data was analysed using both qualitative and quantitative approaches. Comparative analysis was done using the relative importance of the outputs and the overall weighted scores.

Relative importance (weight) of an output monitored was based on the amount of budget attached to it; thus the higher the budget the higher the contribution of the output to the sector performance. This was derived from the approved annual budget of each output divided by total annual budget of all outputs of a particular programme/project. The weight of the output and percentage achievement for each output were multiplied to derive the weighted physical performance. The overall programme/project performance is a summation of all weighted scores for its outputs. On the other hand, the overall sector performance is an average of individual programme performances that make up the sector.

The performance was rated on the basis of the criterion in Table 2.1.

Table 2.1: Assessment guide to measure performance of projects monitored in FY2019/20

SCORE	COMMENT
90% and above	Very Good (Most of the set targets achieved and funds absorbed)
70%-89%	Good (Some core set targets achieved and funds absorbed to 70%-89%)
50%- 69%	Fair (Few targets achieved and funds absorption is 50%-69%)
Less than 50%	Poor (No targets achieved and or funds absorption is less than 50%)

2.3 Limitations of the report

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

- Lack of detailed quarterly workplans and targets for some programmes/projects/outputs.

- Lack of disaggregated financial information for some outputs which might have affected the overall weighted scores and performance.

- Inadequate sampling of beneficiaries due to limited field time, given the large number of programmes monitored.

- Some of the beneficiaries had little information on scope of works, project costs, contract periods particularly on projects contracted and implemented by some Votes.

- Interactions with some key informants was not possible due to the COVID-19 pandemic.

CHAPTER 3: SECTOR PERFORMANCE

3.1 Overall Sector Performance

The overall sector performance was good estimated at 88.2%. The release performance was at 96%, with expenditure at 95%.

3.1.1 Overall Sector Financial Performance

The overall budget for the ICT sector comprising of Wage, Non-Wage Recurrent, Development, and Gross Tax for FY2019/20 was Ug shs 146.225billion (bn), of which Ug shs 63.195bn was for Vote 020 (Ministry of ICT&NG), and Ug shs 83.03bn is for Vote 126 (NITA-U).

The release and expenditure performance for the FY was very good. Table 3.1 shows the annual sector financial performance by vote.

Table 3.1: Sector budget allocation and outturn by 30ᵗʰJune 2020 (Ug shs billion)

Vote	Budget	Release	Expenditure	% Release	% Spent
MoICT&NG	63.195	62.175	61.795	98.4	99.4
NITA-U	83.03	79.274	72.548	95.5	91.5
Total	**146.225**	**141.449**	**134.343**	**96.7**	**95.0**

Source: MoICT, NITA-U and IFMS, June2020

At vote level, the absorption was higher under the MoICT&NG at 99.4% of the released funds, compared to 69% of funds released under the NITA-U. Low absorption was observed under the NITA-U development budget where Ug shs 34.5bn was released, and Ug shs 21.05bn spent representing 61% absorption of released funds (table 3.2).

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

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*". The vote has one development project namely: Regional Communication Infrastructure Programme (RCIP) which is co-funded by the World Bank and GoU (US$75 million and US$10 million respectively).

The objectives of the agency are to:

1. To provide high quality information technology services to Government;
2. To promote standardisation in the planning, acquisition, implementation, delivery, support and maintenance of information technology equipment and services, to ensure uniformity in quality, adequacy and reliability of information technology usage throughout Uganda;
3. To provide guidance and other assistance as may be required to other users and providers of information technology;
4. To promote cooperation, coordination and rationalization among users and providers of information technology at national and local level so as to avoid duplication of efforts and ensure optimal utilization of scarce resources;
5. To promote and be the focal point of co-operation for information technology users and providers at regional and international levels; and
6. To promote access to and utilization of information technology by the special interest groups

The agency is organised into six directorates namely: Technical Services; E-government Services; Information Security; Regulation and Legal Services; Planning Research and Development; Headquarters; and Finance and Administration. The directorates contribute to three programmes namely: i) Electronic Public Services Delivery (e-transformation), ii) Shared IT Infrastructure, and iii) Streamlined IT Governance and Capacity Development.

Performance

Financial performance

The approved budget for NITA-U, FY 2019/20 was Ug shs 83.029bn of which, Ug shs 79.274bn (95%) was released and Ug shs 72.548bn spent, giving a 92% budget absorption by 30th June 2020. Less absorption of funds was noted under the development component of the budget (89%) especially on the donor financed component, where over Ug shs 4bn was unspent. The agency explained that the outbreak of the 2019 Coronavirus Disease (COVID-19) halted execution of some activities, leading to failure to fully absorb released funds. Table 3.2 shows the approved budget, release and expenditure performance.

Table 3.2: Financial Performance of NITA-U by 30th June 2020 (Ug shs)

Item	Annual approved budget FY2019/20	Total release FY2019/20	Total budget spent FY2019/20	% Budgeted released	% Released spent
RECURRENT					
Wage	6,645,161,924	6,645,161,924	6,369,220,620	100	96
Non – Wage	26,723,661,634	26,723,661,634	25,597,605,476	100	96
Total Recurrent	33,368,823,558	33,368,823,558	31,966,826,096	100	96
DEVELOPMENT BUDGET					
RCIP - GOU Counterpart	1,623,542,000	1,623,542,000	1,146,144,716	100	71
Retooling	5,819,043,940	5,819,043,940	5,452,712,263	100	94
Total Development	7,442,585,940	7,442,585,940	6,598,856,979	100	89
TOTAL BUDGET (GoU)	40,811,409,498	40,811,409,498	38,565,683,075	100	94
Donor (RCIP Project)-IDA	42,218,297,606	38,462,627,409	33,983,026,989	91	88
GRAND TOTAL	83,029,707,104	79,274,036,907	72,548,710,064	95	92

Source: NITA-U

3.2.1 Programme 1: Electronic Public Services Delivery (e-Transformation)

The programme covers three sub-programmes namely: Regional Communication Infrastructure Programme (RCIP), Information Security, and e-Government Services.

The overall programme performance for the period under review was good (79.5%). It scored 100% on outcomes, and 68% on outputs. Table 3.4 shows the programme performance by sub-programmes.

3.2.2 Regional Communication Infrastructure Programme (RCIP)-Project 1400

Introduction

The Regional Communications Infrastructure Programme (RCIP) is a World Bank funded initiative that became effective in May 2016. The five-year project aims to transform public service delivery using Information and Communications Technologies (ICT) to improve the lives of Ugandans. It will

complement existing ICT initiatives in the country, including the National Backbone Transmission Infrastructure (NBI) and private sector investment by helping to bridge the financing and technical gaps. The RCIP intends to support the GoU in improving: (i) Coverage for IT infrastructure in the country; (ii) Delivery of public services by improving efficiency through government cloud infrastructure; (iii) Integration of Government IT systems; (iv) Building capacity in management of IT programs and projects; (v) Improving policy and regulatory environment for ICT in the country.

The objectives of the RCIP Uganda are to: (i) Lower prices for international capacity and extend the geographic reach of broadband networks (connectivity); and (ii) Improve Government's efficiency and transparency through e-Government applications.

The US$85m project is financed by credit from the World Bank (US$75m) and GoU (US$10m counterpart funding).

The project is executed through four components namely: Enabling environment, Connectivity, E-government services, and Project management.

Scope

During FY2019/20, NITA-U implemented the following: Missing Links Projects (US$15.88m), Supervision of the Missing Links Implementation (US$.349m), Supply, installation and implementation of Electronic Government Procurement System (US$0.998m), Provision of Quality Assurance services for the Implementation of the eGP System (US$0.32m), Last Mile solutions: Supply, installation, and commissioning of the Government Network [Equipment] (US$3.81m); UMCS phase II (US$1.168), Consultancy to develop Strategy for Institutionalization of ICT Function (US$0.194m); Additional equipment and Storage for Cloud (Addendum (US$2.12m).

The planned procurements included: Integration of National Databases; Supply, operation and maintenance of digital authentication service; Supply, installation and commissioning of National Computer Emergency Response Team (CERT) Digital Forensics Solution; Supply, installation and commissioning of National CERT Environment; Consultancy for Information Security review and NISF implementation in 15 MDAs; Consultancy for Interoperability and Enterprise Architecture Framework development; Consultancy for ICT skills gap assessment; Consultancy for Development and Implementation of the National Cyber Security Awareness Strategy; Consultancy Services for the Review of the NBI Management Model; Consultancy for ISO 27001 Information Security Management System Assessment and Certification of the National Information Technology Authority – Uganda; Consultancy for undertaking the National Broadband Baseline Survey and development of Blueprint; Supply, installation and commissioning of a service desk; Consultancy Services for eGP Change Management Expert; Consultancy for Development of Strategic Communication programme and tools.

Performance

The approved budget for the RCIP-Uganda for FY 2019/20 was Ug shs 43.8bn, of which Ug shs 40bn (91%) was released and Ug shs 35.1bn (87.6%) spent by 30th June 2020. The release performance was very good, while expenditure was good. The GoU contribution recorded the lowest absorption (71%) compared to the IDA (88%). Table 3.3 shows the RCIP budget performance.

3.3: Performance of RCIP Budget FY 2019/20

Source	Annual Budget	Cumulative releases	Cumulative Expenditure	% release	% Absorption against release
GoU Financing	1.623	1.623	1.146	100	71
IDA Financing	42.218	38.462	33.983	91	88
Total	43.841	40.085	35.129	91	88

Source: NITA-U

The overall multiyear financial performance was at 47% of the project budget, with accumulative expenditure at US$39.062 million. Table 3.4 summarises the overall financial performance since inception.

## 3.4: Summary of the Multiyear Financial Performance for RCIP by 30th June 2020

Index		IDA ($)	GOU ($)	TOTAL ($)
A	Total Project Funding	75,000,000	10,000,000	85,000,000
B	Cumulative Expenditure up to end FY 2018/19	23,971,118	874,401	24,845,519
C	Approved Budget - FY 2019/20	11,120,496	427,649	11,548,145
D	Cumulative Expenditure FY 2019/20	14,895,580	322,335	15,217,916
E	Remaining Budget Provision - FY 2019/20	(3,775,084)	105,313	(3,669,771)
F	Remaining Project Budget Provision	39,908,386	8,697,950	48,606,336
	% Overall project budget performance	52%	12%	47%

Source: NITA-U

Construction of Missing Links of NBI (Phase IV): Implementation of the Missing Links of the NBI in the districts of Kiryandongo, Pakwach, Nebbi, Arua, Koboko, Yumbe, Moyo, Adjumani, Katakwi, and Moroto was completed by 30th June 2020. An additional 750Km of the NBI optical fibre cable was laid bringing the total distance covered under this Phase to 842Km. The NBI is currently covering forty-nine (49) districts. The NBI, connectivity was also extended to four (4) additional border posts of Uganda with its neighbouring countries; Uganda with South Sudan at Oraba, Uganda with DR

MAP SHOWING THE DIFFERENT PHASES OF THE NBI AS OF 30TH JUNE 2020
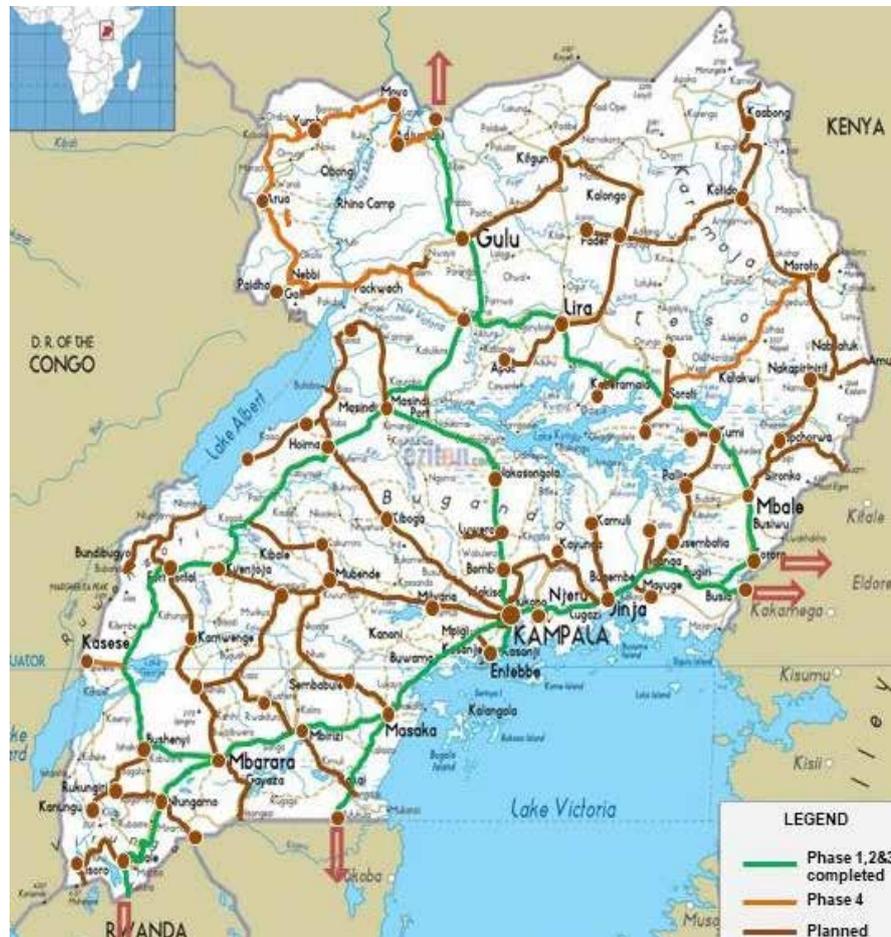
Congo at Vurra, Goli and Mpondwe respectively. To date, all the nine (9) major border post of Uganda with its neighboring countries; Kenya at Busia and Malaba, Rwanda at Katuna, Tanzania at Mutukula, South Sudan at Elegu and Oraba, and DRC at Mpondwe, Goli and Vurra were connected to the NBI.

Seven (7) NBI transmission stations were constructed in Nebbi, Koboko, Karuma, Arua, Moyo, Moroto and Mpondwe bringing the total number of NBI transmission sites to thirty-two (32).

The NBI was upgraded to 100G on the Eastern Ring (100G Optical Transmission Network equipment was installed, and commissioned on the Eastern ring), the West Nile ring and the Western ring were upgraded to 20G and 40G respectively and protected. Transmission equipment at Elegu were also upgraded from Synchronous Digital Hierarchy (SDH) to Optical Transmission Network (OTN) equipment to enable the West Nile ring to provide network protection and minimise service disruptions.

By 30th June 2020, the total GoU Optical Fibre Cable based Network was 3,394Km across the country.

Last Mile Connectivity: NITA-U extended the NBI connectivity to an additional one hundred and eighty-five (185) Government MDA/DLG sites and other target user groups bringing the total number of sites connected to the NBI to 597 sites. In addition, seventy-nine (79) sites were provisioned with services, cumulatively bringing the total number of sites using services over the NBI to 423 sites. The services over the NBI include: Internet Bandwidth, Data Centre hosting, Integrated Financial Management System (IFMS) services, dark fibre among others. It was noted however that extension of the NBI to all Uganda Broadcasting Corporation (UBC) masts was not achieved as planned. Only three locations of Naguru, Lira and Kololo out of 19 sites were covered.

New transmission sites at Mpondwe border and Koboko constructed under the Missing Links Project

WIFI expansion: A total of 257,463 unique users were registered on MyUg network. With a total number of 5,985,548 log in sessions during the year. The *MYUG* WIFI is still in selected locations around Kampala and Entebbe.

Whole-of-Government Integration and data sharing platform established: The contract for development of the data sharing platform for Government applications and systems was signed, and the provider begun developing the system. Completion of the development of the platform, and the subsequent rollout of the system is expected to be undertaken in FY2020/21.

As part of the efforts to integrate Government systems, NITA-U was to embark on the development of the Government Enterprise Architecture (GEA), and an E-Government Interoperability Framework (E-GIF) which will facilitate inter-agency data exchange supporting the delivery of integrated services

across Government departments. By the end of the FY, the evaluation process was completed, and the procurement was at contracting stage.

Government Cloud Infrastructure, Mobile authentication and digital signature (mobile ID) operationalised: The NITA-U established the Government Cloud Infrastructure (Tier 3 National Data Centre) to provide centralised hosting services for all Government data, applications and systems. By 30th June 2020, sixty-six (66) new applications and systems were hosted in the National Data Centre (NDC) cumulatively bringing the total number of applications hosted in the National Data Centre to 123. Consolidation of hosting requirements for MDAs into the NDC eliminates duplications of efforts and wastage of Government resources.

Support development of Electronic Government Procurement System (e-GP) and rollout to 10 pilot entities: e-Government Procurement went live in June 2020. The system automates the entire Procurement process thereby creating efficiency and transparency in the process. The rollout of the systems including capacity building of the ten (10) pilot entities (PPDA, NITA-U, Ministry of Finance, Planning and Economic Development (MFPED), Uganda National Roads Authority, NSSF, Kampala Capital City Authority, Mpigi District Local Government, Ministry of Water and Environment, Rural Electrification Agency, and Ministry of Health) to optimally use the system was expected to commence at the beginning of FY2020/21.

Implementation challenges

- The outbreak of COVID-19 pandemic and lockdown slowed implementation of some projects.
- Long delays in securing procurement approvals/no-objection particularly from the World Bank affected absorption of funds.

Recommendation

- The NITA-U should speed up procurement of planned contracts and regularly engage the World Bank Task Team Leader to ensure that "no objections" are secured in time.

3.2.3 Information Security Sub-Programme

Background

The Directorate of Information Security provides leadership, organisational structures and processes at the national level that safeguards information against accidental or unauthorised modification, destruction, or disclosure. It coordinates efforts to remediate security alerts and respond to information security related incidents and threats; Coordinate with other institutions including law enforcement to identify and plan for security in all aspects of data, application, hardware, telecommunication, and computer installation and to carry out information security assessment for other organisations.

In order to protect MDA resources and systems from potential cyber-attacks and associated risks such as cyber terrorism, the Government of Uganda (GoU) has put in place structures and mechanisms to operationalise the National Information Security Framework (NISF).

Performance

Computer Emergency Response Team (CERT) Advisory and Alerting carried out: Two cyber Incident Response trainings were carried out in Q2 and Q4 on the process and techniques for handling incidents within MDAs as level one before escalation to the CERT.UG/CC. Fifty-seven (57) cyber

security advisories were disseminated to MDAs informing them on the security vulnerabilities and the possible mitigation procedures.

CERT.UG Accredited by FIRST: The annual members meeting was differed due to the COVID-19 global pandemic.

Cyber security monitoring capability enhanced: Procurement for accunetix for web application vulnerability assessment tool was completed in Q3. Procurement for security awareness monitoring was not carried out due to non-response from bidders.

Cyber security promoted in Uganda, information assurance provided for the NBI, and Technical support provided to MDAs: Forty (40) information security awareness sessions were carried out to improve understanding of information security risks and vulnerabilities using a mix of digital and in-person sessions.

International Cyber Security Collaborations maintained: Two conferences were organised: a) East Africa Information Security Conference in collaboration with ISACA Kampala Chapter on 14th-16th August 2019 at Commonwealth Resort, b) East Africa Cyber Defence Conference held on 12th November 2019 at Royal Suites Hotel, Bugolobi in partnership with NRD Cyber Security.

ISO 27001 Assessment carried out for NITA: The Expression of Interest for the procurement of a cyber-security awareness firm was completed. Actual contracting was expected in the first quarter of FY 2020/21.

National CERT Forensic and Environment enhanced: Procurement for the National CERT Forensics and Environment under RCIP was concluded. Delivery of equipment was for the Forensics Solution was done, awaiting the completion of the CERT environment for installation and commissioning. The CERT environment inception stage was completed and civil works started in June 2020. It was anticipated that works would be completed before end of Q1 FY2020/21.

L-R: Ongoing configuration of routers for Last Mile Connectivity and civil works for the CERT Forensics Centre

National Information Risk Register maintained: Two quarterly meetings for validation, awareness and plan of action for the National Cyber Risk Assessment which contributes to identification of National Critical Information Infrastructure were held.

National Information Security Framework (NISF) Implementation initiated in 16 MDAs: Six NISF assessments were carried out for Uganda Electricity Generation Company limited, National Forestry Authority, Ministry of East African Affairs, Ministry of Trade, Uganda National Bureau of Standards, and NAADS with implementation roadmaps. Risk Management training was carried out for 29 MDAs.

NISF Remediation carried out under RCIP for 5 MDAs: Four firms were shortlisted under the Request for Proposals (RFP) stage. Submission of bids delayed due to several postponements as per PPDA advice on halting receipt of bids during the COVID-19 lockdown period. Evaluation of the RFP was initiated on 16th June 2020. Contracting was expected in the first quarter of FY 2020/21.

Information assurance provided for the NBI and Technical support provided to MDAs:

The following were achieved:

a) Provided technical support to DCIC on network security enhancement
b) Provided technical support to ERA on Cyber Security Assessment for UMEME and UETCL
c) Provided support to MoSTI and UTB to develop their institutional ICT Policy Manual
d) Provided support to UCDA to review their institutional ICT Policy Manual and Procedures
e) Provided support to Wazalendo SACCO to review their BCP
f) Provided support to Nakaseke District to develop their draft institutional IT Policy
g) Technical support given to DCIC on the ePassport Project (PKI components)
h) Technical support provided to MoES for enhancement of the EMIS
i) Technical support provided to DCIC to develop their IT Security Policy
j) Technical support provided for remediation planning of eVisa security assessment
k) Technical support provided to MoHLUD for review of PPMIS System Security and ToRs
l) Integration of upcountry network nodes into Tacas for centralised authentication and creation of users
m) On boarded service desk usage of Zabbix for website uptime monitoring/ availability
n) Maintenance of the Open VAS platform
o) Maintenance of Tacas authentication server
p) Site to site VPN maintenance for ePG
q) MISP set up and maintenance
r) Technical support provided to URSB on WAN Setup and DC on boarding
s) Resolution carried out for 32 Hacked Government websites
t) Resolution of security connectivity requests for assistance for One Stop Center servers
u) Data protection and privacy practices assessment carried out for nine e-commerce companies
v) Technical support provided to URSB on WAN Setup and DC on boarding
w) ICT Policy Manuals drafted for 12 MDAs
x) Resolution of UEGCL and NDA Ransomware cases
y) DCIC e-Visa audit
z) Resolution of NITA-U IP Blacklisted IPs
aa) Maintenance and review of access policy creations and configuration for NITA-U Firewalls

3.2.3.1. E-Government Services Sub-Programme

Background

Electronic government, also known as digital government, online government, or connected government is the comprehensive implementation of ICT in MDAs and Local Governments. The directorate's mission is "*Integrating Uganda to provide quality services to citizens, and to improve the national competitiveness through administration innovation, and to reform unnecessary processes based on interconnected government and safe society*".

Performance

Government cloud implemented (20 e-government applications hosted in the data center/ government cloud): NITA-U established the Government Cloud Infrastructure (Tier 3 National Data Centre) to provide centralised hosting services for all Government data, applications and systems. In the FY2019/20, sixty-six (66) new applications and systems were hosted in the National Data Centre (NDC), cumulatively bringing the total number of applications hosted in the NDC to 123 for 67 MDAs. Consolidation of hosting requirements for MDAs into the NDC eliminates duplications of efforts and wastage of Government resources.

Procurement of batteries and transformers (Jinja and Kampala): Procurement for a 500KVa transformer for Statistics House was initiated and delivery was expected in July 2020.

Short Message System (SMS) gateway and mobile gateway implemented: The SMS gateway was developed to provide a platform for dispatch of SMS in bulk by MDAs at affordable prices. By the end of the FY2019/20, subscribers of MTN and Airtel were able to receive SMS messages through the SMS Gateway with the short code 6120 and sender ID "NITA". The subscribers can also access Government services through *260#. The SMS gateway was rolled out in 14 Government entities. A cumulative total of 2,051,587 SMSs had so far been pushed through the SMS gateway from these entities by the end of the year.

Interoperability Framework and Enterprise Architecture put in place: As part of the efforts to integrate Government systems, NITA-U embarked on development of the Government Enterprise Architecture (GEA) and an E-Government Interoperability Framework (E-GIF) which will facilitate inter-agency data exchange supporting delivery of integrated services across Government departments. Evaluation of bids was completed and the contract drafted and submitted to the World Bank for a "no objection".

Whole-of-Government Integration and data sharing platform established: The NITA-U embarked on the integration of systems and services with the aim of easing data sharing, reducing ICT costs and in turn improve public service delivery. The contract for development of the data sharing platform for Government applications and systems was signed and the provider had already commenced the process of developing the system. Completion of the platform and subsequent rollout of the system is expected to be undertaken in FY2020/21.

Change management: All activities related to change management were differed due to the COVID-19 pandemic and subsequent lockdown.

Mobile ID Contract Signed Mobile ID piloted with four e-services: Procurement of a supplier for mobile ID solution was at contract negotiation stage.

Deploy, and manage a Unified Messaging and Collaboration System (UMCS): The Unified Messaging and Collaboration System (UMCS) provide a standardised platform for seamless communication across Government. A user satisfaction survey for UMCS for U-mail enrolment was conducted. In the FY2019/20, UMCS was rolled out to additional thirty-one (31) Government Ministries, Departments and Agencies (MDAs) cumulatively bringing the total number of MDAs using the UMCS to 43 MDAs with a combined total of 11,657 users. At least 10,078 (81%) of the on boarded users were active during the year.

Deploy and manage an e-GP system across government: The system automates the entire procurement process thereby creating efficiency and transparency. e-Government procurement went live at the end of the FY2019/20. The rollout of the systems including capacity building of the ten (10) pilot entities (PPDA, NITA-U, MoFPED, UNRA, NSSF, KCCA, Mpigi DLG, MWE, REA and MoH) to optimally use the system is expected to commence during FY2020/21.

Two priority e-services implemented: Seven e-services were developed. The priority e-services identified were: Kolibri Application, Crop Traceability System, Electronic Document Management and Record System. The draft project charter for Kolibri was in place, 30 secondary schools in hard-to-reach areas identified for Kolibri e-learning platform deployment. Readiness assessments were conducted in 30 schools identified for deployment of Kolibri.

E-citizens portal promoted with at least 100 e-services available: The e-citizens portal had 107 e-services as of end FY 2019/20.

e-Payment Gateway (ePG) implemented: Key stakeholders were engaged on implementation of the gateway including the Accountant General (AGO) Ministry of Local Governments (MoLG), Uganda Revenue Authority (URA), Standard Chartered Bank, and Uganda Wildlife Authority among others. E-Payment gateway was implemented with 19 e-services in five (5) entities, six (6) banks and two (2) Mobile Network Operators were enabled for integration. The five services added include: COVID-19 Crowdsourcing Service, UWEC Booking Portal (10 services), E-GP- (2 services), Uganda Museum (6 services) and DotShule School Payments.

The banks on boarded onto the e-payment gateway include: NC Bank, GT Bank, UBA, Orient Bank, Centenary Bank, Equity Bank, and the Mobile Network operators include MTN and Airtel.

Operationalise IT Service Desk: Procurement for a contractor to establish the service desk with multiple communication channels including a toll-free line was delayed due to the outbreak of COVID-19. Materials for the Service Desk training were procured and training of service desk operators was conducted via Zoom.

At least 15% increase in number of MDAs supported by the service desk: A total of 2,730 tickets were logged in the service desk tool. 57% of all the MDAs were supported by the Service Desk in FY 2019/20 representing a 15% increment from the results at the end of FY 2018/19.

Information Technology Enabled Services/Business Process Outsourcing (ITES/BPO) industry developed and promoted and Business Partnerships and jobs created: Amidst the COVID-19 pandemic, the BPO centre still managed to provide employment opportunities to 1,055 people. A business meeting was held with M/s Kuelap and Makerere University on building a solution for Digital Financial Inclusion (https://kuelap.io/). Several ITES engagements were held including: Engagement with United Nations Conference on Trade and Development (UNCTAD) on Uganda Technology and

Innovation Needs Assessment, Engagement with United Nations Capital Development Fund (UNCDF) and MFPED on Open APIs/Open Data and Digitisation Technical Working Group meeting with UNCDF GSMA UNDP on Inclusive Digital Transformation.

Provide regular technical support to MDAs and LGs as and when called upon: A total of 200 MDA/LGs were provided with technical support and NITA-U services, of which 65 were to LGs.

Rollout of Zoom licenses in Government: The NITA-U in collaboration with the United Nations Development Programme (UNDP) and Microsoft secured ten thousand zoom licenses which were rolled out to one hundred and twenty (120) institutions to enable their business and staff to continue with their work and engagements during the lockdown as a result of the COVID-19 pandemic. The IT Service Desk trained seventy-eight (78) staff on usage of zoom.

Increased usage of N7 system and process for procurement of IT goods and services: There was an improved adoption to the N7 process from 47 in FY2018/19 to 78 in FY2019/20.There was an increase in demand for sharing services as a result of this process. The entities that received services as a direct result of this process are; NSSF- Connectivity, BTVET- Hosting, MoICT- Hosting (AIMS), URSB–Hosting, UAC-Hosting (Gender-Dashboard), MoFA- Hosting (Accreditation system), MFPED-Hosting (ECMIS), URSB- backup, Mulago-hosting (IHMS), MAAIF- Hosting (Geo portal, e-statistics), Building Control System- SMS gateway, Ministry of Gender-SMS gateway and NWSC-SMS gateway.

Develop and maintain 50 MDA and LG websites: A total of twenty-nine (29) Government websites were developed, and six (6) redeveloped and revamped. In addition, two hundred seventy (270) domains were renewed and managed. The total number of websites hosted and obtaining technical support from NITA-U by 30th June 2020 were three hundred eighty-eight (388). Relatedly six (6) internal processes were automated, they include: Document management system, cash request, payment requisition, procurement requisition, travel request, and fuel request.

2,900 Microsoft licenses distributed to MDAs and enrol at least 5 MDA/LGs onto the MBSA: A total of 2,900 licenses were being used by MDAs, and six new MDAs were enrolled on the Microsoft Master Business Service Agreement (MBSA). They include: Office of the Vice President, Uganda Registration Services Bureau (URSB), Ministry of ICT, Mbarara DLG, Uganda AIDS Commission, and National Drug Authority (NDA).

Promotion of E-Government Services: E-government excellence month did not occur due to the COVID-19 pandemic. A total of 415 stakeholder engagements were held and 21 sensitisations carried out.

Web Presence for Lower Local Governments enhanced: A total of 29 new websites were developed, and six websites were redeveloped bringing the total number to 35. Two hundred seventy (270) domains were renewed and managed. The total number of websites hosted and obtained technical support from NITA-U were 388. Secure Socket Layer (SSL) certificates were deployed for all 388 web services. Training sessions were conducted for thirty-seven (37) individuals from different district on content management and technical skills in Drupal and Word press[1], 41 IT Officers were trained on creation of Google Analytics (How to manage web analytics and how to optimise traffic on web page), and C-panel training for thirty-nine (39) officers.

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1   Drupal and wordpress are content management systems/software used by individuals with basic IT skills to manage their websites.

Table 3.5: Electronic Public Services Delivery (e-Transformation) Overall Performance FY 2019/20

Sub programmes	Output	Annual Budget (Ug shs) '000'	Cum. Receipt (Ug shs) '000'	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Information Security	Level of privacy protection for personal or confidential data collected, processed and stored; information security awareness conducted; MDAs implementing National Information Security Framework (NISF) promoting initiatives, Cyber security promoted, National CERT Forensic and Environment enhanced.	384,400	384,400	14.00	10.00	0.60	NBI resilience maintained at 99%; Cyber security advisories were developed and disseminated. NISAG framework was promoted.
E- Government Services	A desired level of e-government services in MDAs & LGs attained, Implementing government entities supported in the development and adoption of e-services, MDAs/LGs provided technical assistance to in the implementation of e-Government projects, Government staff enrolled on shared services, SMS gateway and mobile gateway implemented, Deploy, and manage a Unified Messaging and Collaboration System, e-Payment Gateway (ePG) implemented, Information Technology Enabled Services/Business Process Outsourcing (ITES/BPO) industry developed and promoted	1,219,013	1,219,013	44.00	28.00	1.71	E-Government procurement (e-GP) system completed. Several entities enrolled on the e-payment gateway, awareness campaigns on e- services conducted at different foras. 66 new applications and systems were hosted in the National Data Centre. Rolled out Zoom licenses to 120MDAs. A total of 2,900 Microsoft licenses were being used by MDAs, and six new MDAs were enrolled on the Microsoft Service Agreement (MBSA). The BPO centre provided employment to 1,055 people.
Project:1400 Regional Communication Infrastructure	Kms of optical fibre cable laid and trnasmission sites in Bwera, Kiryandongo- Pakwach- Nebbi-Koboko; Soroti-Katakwi-Moroto set up under the missing links project; NBI Network resilience; MDAs/LGs sites and target user groups (hospitals, schools, Universities) connected to the NBI, Mobile ID Contract Signed Mobile ID pilot	43,841,839	40,085,000	75.00	47.00	66.12	The Missing Links Project was completed in West Nile and Karamoja sub regions. The Last Mile Project was ongoing and 185 MDAs were connected during the year. Wifi network was not expanded as expected.

Sub pro-grammes	Output	Annual Budget (Ug shs) '000'	Cum. Receipt (Ug shs) '000'	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
	ed with four e-services, Provide regular technical support to MDAs and LGs						
	Programme Performance (Outputs)					68.43	Fair
Outcome Perfor-mance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	% Level of privacy protection for personal or confidential data collected, processed and stored			80	100	100	
	Number of implementing government entities providing eservices			55	107	100	
	Number of Services started and completed electronically to enhance user experience			2	2	100	
	Programme Performance (Outcomes)					100	
Overall Programme Performance						79.5	Good performance

Source: NITA-U, IFMS

3.2.4: Shared IT infrastructure Programme

The programme is executed through the sub-programme of Technical Services.

The overall programme performance against outputs and outcomes for the FY 2019/20 was good (75%). The output performance was fair (62%), while outcome performance was 100%. The average output performance was due to delays in concluding procurements and outbreak of COVID-19. Table 3.5 shows the overall programme performance.

3.2.4.1 Technical Services

Background

The directorate's core roles are to provide first level technical support and advice for critical Government information technology systems including managing the utilisation of resources and infrastructure for centralized data center facilities for large systems through the provision of specialized technical skills. In addition, it identifies and advises Government on all matters of information technology development, utilization, usability, accessibility and deployment including networking, systems development, information technology security, training and support; and providing guidance on the establishment of an infrastructure for information sharing by Government and related stakeholders.

The planned outputs under the programme for the FY2019/20 include: A rationalised and integrated national IT infrastructure and systems; establishment of last mile connectivity to enhance provision and access to e-Government Services through NBI/EGI (800 sites connected); Extension of the NBI/EGI under GoU funding; support to broadband initiatives to extend the NBI; commercialisation contract management; provision and management of WiFi services and provision of Value Added Services.

Performance

The approved budget for the sub programme FY 2019/20 was Ug shs16.48bn and all was released (100%). A total of Ug shs 16.42bn (99.7%) was spent representing very good release and absorption of funds. Some of the planned outputs were ongoing, while others were differed to the subsequent financial

year.

Procurement of firm to implement Last Mile Project under RCIP: The contract for the equipment vendor under the Last Mile Project was signed by all parties. The contract for a Leased Line provider was also signed and the site surveys commenced.

Monitoring of the Environment and Social Safeguards for the Last Mile and Prepare the Quarterly Reports for Environment and Social Safeguards: Field visits by the World Bank (WB) team, NITA – U specialists was undertaken for the Last Mile Route.

Supervision of Last Mile Project under RCIP and Missing Links: Supervision of the Last Mile implementation under RCIP commenced under NITA–U and an Independent supervisor. The agency supervised laying of 842kms of OFC and building of the transmission sites at seven sites in Karuma, Nebbi, Arua, Koboko, Moyo, Moroto, and Mpondwe.

Supervision of the Implementation of the Solar PV Project: The existing contract was terminated. The revised scope and procurement plan were submitted to the WB for approval. Procurement of Solar PV commenced and work was expected to start in FY 2020/21.

Supervise pilot to extend NBI/EGI using Rural Electrification: The MoU with, REA, UCC and NITA–U was signed. The OFC equipment was shipped to the local provider awaiting installation.

Renewal of annual UCC PIP/PSP[2] License: The license was renewed and a total of Ug shs 174,587,136 paid to UCC. The 2% of profit was transferred to UCC in line with the UCC legal provisions.

Technical support to initiatives and Proof of Concepts to extend Last Mile Connectivity was provided. Maintained the NBI to deliver quality services to the public and private sector as per agreed Service Level Agreement (SLA) (target 97% and 99.8% for spur segments and 99.8% for protected segments). 100% MDA client services (all on spur links) achieved minimum SLA target while 65% of IFMS links monitored recorded 100% uptime and similarly over 25% of other services including Internet and leased lines also had the same uptime.

Review of the commercialisation contract to suit emerging market demands: The amendment to commercialisation contract was completed.

Provision and Management of Wireless Internet (*WiFi*) Services: The business plan for Wi-Fi was under development and procurement of contractor for Wi-Fi Expansion and the Core Management Strategy were ongoing.

Bandwidth Manager and Hotspot Network Management License renewed and supported Software subscription and Support renewed: Bandwidth Manager and Hotspot Network Management License was renewed and the software subscription and support renewed.

Under provision of Value Added Services, NITA-U in partnership with Uganda Investment Authority

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2   Telecommunication Public Infrastructure Provider/Public Service Provide (PIP/PSP) licences authorises holders to establish and maintain communication infrastructure, and voice and data services respectively.

supported ENGO holdings to set up Uganda's first Mobile phone and computer manufacturing and assembling factory with daily capacity of 2,000 feature phones, 1,500 smart phones and 800 laptops, employing 400 staff. The company, located in Namanve Industrial and Business Park, was expected to deliver to Ugandans affordable smart devices (branded as SIMI mobile) that will further deepen access to e-Government Services. The first Ugandan-assembled SIMI handsets hit export markets with more than 18,000 units shipped to Morocco in May 2020. Table 3.6 shows the programme performance by 30thJune 2020.

Table 3.6: Performance of the Shared IT Infrastructure Programme for FY 2019/20

Sub-pro-grammes	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Technical Services	Clearance of Phase III Exim Bank loan shortfall	607,430,400	607,430,400	1.00	1.00	2.93	Loan cleared
	Delivery (Transport) of Internet Bandwidth to MDAs/LGs and Target user groups through the NBI Clearance of arrears for MDAs whose funds were consolidated and sites are beyond the geographic reach of the NBI and are being served by other ISPs Bandwidth Manager and Hotspot Network Management License renewed and supported Software subscription and Support renewed Firewall Software licenses renewed and hardware supported Data Centre (NDC) and Disaster Recovery Site (DRS) Maintenance NITA-U IT support service and retooling provided	10,502,567,313	10,502,567,313	10.00	5.50	55.00	Service was provided to additional 79 MDA/DLG sites cumulatively to a total 423. The services accessed through the NBI include Internet Bandwidth, IFMS, leased lines, Data Centre and dark fibre among others. Bandwidth Manager and Hotspot Network Management License was renewed and supported. Software subscription and Support was renewed. Firewall Software licenses renewed and hardware supported. The National Data centre and Disaster recovery site was maintained

Sub-pro-grammes	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor-mance Score (%)	Remark
	Supervise and monitor the Contractor implementing last mile connectivity to MDAs, LGs and Priority User Group. Project Management of Missing Links Project Under RCIP. Supervision of the Implementation of the Solar PV Project, Supervision of Extension/Relocations of the NBI to MDAs under GoU Funding, Support to Broadband Initiatives to extend the NBI. NBI Network Upgrade to 100Gbps. Commercialization Contract Management, generate at least USD 4M from the commercialization of the NBI, Supervise the commencement of production of IT products at the assembly plant in Namanve.	4,827,817,240	4,827,817,240	411.00	51.00	2.88	Supervised the laying of 750Kms of OFC along the Missing Links Route Supervised the building of transmission sites at Karuma, Mpondwe, Arua, Moroto, Moyo, Koboko and Nebbi. Procurement of Solar PV commenced and Bids returned. 100G additional capacity on the East ring activated. Western Ring of the NBI Upgraded to capacity of 40Gbps. Ug shs 607,430,400 paid to clear the Exim bank loan shortfall. supported ENGO holdings to set up Uganda's first Mobile phone and computer manufacturing and assembling factory
	Programme Performance (Outputs)					62.51	Fair performance
Outcome Performance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	Number of MDAs, LGs, Hospitals, Schools utilizing services (internet, data centre, IFMIS, Leased lines and Dark fibre) over the National Backbone infrastructure bandwidth per inhabitant			481	597	100	Targets achieved and surpassed
	Programme Performance (Outcomes)					100	
	Overall Programme Performance					75	Good performance

Source: NITA-U, IFMS

3.2.5   Streamlined IT Governance and Capacity Development Programme

The programme is composed of four sub-programmes namely: Headquarters, Legal and Regulatory Services, Planning, Research and Innovations, and Finance and Administration.

Programme performance

The approved budget for the programme for the FY 2019/20 was Ug shs 21.10bn, which was all released and Ug shs19.07bn (93%) spent, representing very good release and expenditure performance. The overall physical performance was good (86%).The outcome target was achieved and surpassed, while 78% of the outputs were achieved. Table 37 shows the overall programme performance.

3.2.4.1: Headquarters

The headquarters' sub-programme is headed by the Executive Director. It is responsible for the management and operations of the Authority; management of the funds, property and business of the Authority, and the promotion, training and disciplining of the staff of the Authority in accordance with their terms and conditions. The overall goal of the sub program is to Strengthen and align NITA-U to deliver its mandate.

Performance

The approved budget for the sub-programme FY 2019/20 was Ug shs 824,683,000 and all (100%) was released. Ug shs 628,207,986 was spent by 30th June 2020 representing 76% expenditure performance.

Output performance

Board Governance engagements and audits facilitated: Board meetings were facilitated. Carried out risk based internal audits of NITA-U Business, based on the annual work plan. The NITA-U brand was promoted. The agency conducted risk based internal audits on: Domestic arrears audit, financial statements audit, procurement audit and a draft report was being reviewed.

Partnerships with leading media houses to create awareness on the ICT were established and as a result, the following was achieved: A total of 32, articles in the print media focusing on ICT, 21 appearances and 14 news stories on radio. In partnership with digital influencers the hashtag #DigitizeUg was used to create awareness. Seven digital campaigns were also carried out to promote the NITA-U brand.

3.2.4.2. Regulation and Legal Services

Background

The sub-programme is responsible for providing an enabling regulatory environment for achievement of NITA's mandate and implementation of the cyber laws and other related laws; Ensure the compliance and enforcement of the cyber laws, NITA Act, regulations and other related legislation; Arbitrate disputes arising between suppliers of Information Technology solutions and consumers; Provide legal services to NITA-U; Provide corporate secretarial services to NITA-U; and ensure compliance with all laws, procedures and policies.

The overall objective is to have a well-regulated IT environment in public and private sectors.

Performance

The approved budget for the sub-programme in FY 2019/20 was Ug shs 439,009,000, and all was released and Ug shs 390,354,436 (89% of released funds) spent.

The following outputs were undertaken:

ICT Policies, strategies, laws, regulations, and technical standards developed: A Regulatory Impact Assessment was conducted for the policies to be reviewed/developed following the recommendations of the Gap Analysis of the Policy, Legal and Regulatory Framework for the ICT Sector, in conjunction with the Ministry of ICT&NG and the Cabinet Secretariat, Office of the President.

The directorate supported the Ministry of ICT&NG to develop ToRs for the ICT Sector Competitiveness and Innovation Strategy; National ICT Policy and the e-waste management policy. World Bank approval for the concept note for the ICT Competitiveness and Innovation strategy was obtained.

Develop Two (2) priority IT legislation supported: The NITA-U (National Data Bank) Regulations, 2019 were approved by the Minister of ICT & NG and published in the Uganda Gazette. The Second Draft of the Data Protection and Privacy Regulations 2019 were developed and under consultation for its approval. The Draft Strategy and Roadmap for implementation of the Data Protection and Privacy Act, 2019 was developed. The directorate undertook preliminary activities in preparation to commence development of the IT Products Certification Regulations

Fifteen (15) sensitization activities on IT legislation carried out to enhance awareness within Government, regulated entities and the public: The agency conducted forty-six (46) sensitisation and awareness activities. Engagements were held with the private sector (including financial institutions, ICT practitioners), professional associations (including the Uganda Law Society, ISACA and ICTAU), higher institutions of learning, and MDAs.

The Directorate also developed content based on the cyber laws to create awareness to the public during the COVID-19 lockdown period and guidance on transacting online. Awareness to the public was a month-long campaign conducted through social media and it generated positive feedback. Other social media engagements included focus group discussions on innovation, technology and the law, and harnessing the benefits of technology in legal practice.

Twenty (20) compliance assessments of MDAs and other regulated entities conducted: Twenty-three (23) entities were assessed on their adherence to IT Standards and consumer protection provisions under the Electronic Transactions Act. Thirteen (13) of the assessments were for MDAs on compliance with the following IT Standards: Guidelines and standards for acquisition of IT hardware and software for Government, 2013 and structured cabling standards, 2013. Findings showed an improvement in the overall MDA compliance rating with the standards at 69% up from 59% in previous year.

In regard to the standards for acquisition of IT hardware and software, the MDAs scored an average 76% compared to a rating of 65% in FY 2018/19. There was also reported improvement in the overall MDA compliance rating with the Structured Cabling Standards, 2013 at 62% compared to 53% in FY 2018/2019.

Ten (10) of the assessments were undertaken for online service providers based on the consumer protection requirements under the Electronic Transactions Act, 2011. The entities scored an average 49% compliance rating, and remedial action plans were agreed with each of them to close the gaps.

Certify 100 IT providers: Ninety-one (91) providers of IT products and services were audited and of these, 87 were certified in accordance with the attendant regulations. A list of all certified firms was published in *The New Vision* in December 2019 and a copy posted on the NITA-U website.

Conduct periodic inspections for 50 certified providers: Inspections were conducted for Twenty-five (25) certified providers. The COVID-19 lockdown slowed the uptake of IT certification by service providers as access to their business premises to conduct audits or inspections or access requisite documentation was not possible however, the directorate developed operational guidelines that enabled a number of companies to be certified on the basis of electronically submitted documents.

The NITA-U Executive committee approved the Standard Operating Procedures developed for IT Certification.

Legal liability maintained below 0.5% of the NITA-U annual budget: The NITA-U legal liability was maintained within 0.5% of NITA-U's annual budget. Two new cases were instituted against NITA-U bringing total number of cases to three (3).

Preparation of contracts, MoUs, SLAs and related documents requested within 10 working days: A total of 60 contracts and 96 MoUs were prepared within the stipulated timelines. The contracts were of a total value of Ug shs100,134,158,701.19.

The contracts drafted were for the following areas: GoU funded contracts mainly for goods/supplies and service, contracts for NITA-U services, RCIP funded contracts for the respective projects under RCIP, and stand-alone confidentiality and non-disclosure agreements.

100% contracts of Ug shs 200 million and above obtain Solicitor General's approval: Approvals for all contracts with a value of Ug shs 200million and above were obtained from the Solicitor General.

Establish a legal library for NITA-U (with electronic, online and physical legal resources): Subscription was paid to providers of an online library and access granted to the staff under the sub programme. Physical legal resources such as IT legislations were procured from time to time, based on need.

3.2.4.3. Planning, Research and Innovation

Background

The roles of the directorate are: To support the development, monitoring and evaluation of National IT strategies, plans, policies, programmes and initiatives in line with the NITA-U mandate. To lead change and provide a comprehensive approach in the development and implementation of IT strategic research & innovation agenda for the public sector in line with the NITA-U mandate and communicating corporate messages from agenda setting through impact assessment. To create, implement and maintain an IT capacity building, training and awareness framework, Policy and Strategy in line with the NITA-U mandate. To build and maintain a framework, model and process to provide centralized and coordinated support to programme management of all IT Projects across the Public Sector in line with the NITA-U mandate.

Performance

The approved budget for the sub-programme FY 2019/20 was Ug shs 780,000,000 which was all released and Ug shs 734,383,164 (94%) spent by 30[th]June 2020.

IT Standards development: Ten (10) awareness sessions conducted: Thirteen (13) awareness sessions were held to promote uptake and implementation of IT Standards.

Certification of NITA-U ISO 20000 undertaken: The ToRs were developed and proposal evaluation was completed, and technical input provided into the draft contract.

Five (5) New IT Standards developed and gazetted: A total of ten (10) priority standards were developed, reviewed and approved by National Technical Standards Committee.

Four (4) MDAs supported in the uptake of IT Standards: Five (5) MDAs were supported in the uptake of IT Standards; PPDA, URSB, MoWT, NBRB, NDA.

ICT Skills Training and Needs Assessment (STNA) conducted and an ICT Skills training and Needs Action Plan (STNAP) developed for government as part of the process to standardise IT Training   in civil service: The process was still under procurement. The resources were reportedly inadequate to move to the next steps of contracting.

A strategy for institutionalisation of the ICT Function in government developed, Inception report developed reviewed and approved: The inception report was approved and the consultant was finalising the second set of deliverables (Situational Analysis, Stakeholder Engagement Report, International Benchmark Report and the Gap analysis Report which constitutes 30% of the project.

ICT Training Sessions conducted in partnership with Civil Service College and other Partners: Two training sessions in partnership with the Civil Service College for the newly recruited civil servants were conducted. Refresher training on UMCS were organised with the NITA-U Project teams. In addition, support was provided to trainings of all NITA-U projects and initiatives including RCIP.

IT Data Management and Research (Two NITA-U user demand driven surveys conducted): Five (5) user demand driven surveys were conducted and these include: UMCS User Satisfaction Survey in different entities; NITA-U Service Desk Customer Satisfaction Survey; NITA-U Staff Welfare Survey during the COVID-19 lockdown; User Satisfaction Survey for Canteen Service offered at NITA-U; and Little Cab Transport Services User Satisfaction Survey in NITA-U.

NITA-U Statistical Abstract developed and published: The NITA-U Statistical Abstract for 2019 was developed approved and published on the NITA-U website.

Monitoring and inspection of two (2) NITA-U projects/initiatives conducted and status reports produced and one stake holder engagement held: A total of six (6) M&E studies were conducted. They include: A joint half annual monitoring visit/inspection for the NBI phase IV infrastructure i.e. (transmission sites, poles and fiber), an impact assessment of the NBI, the M&E/EHS baseline survey of the 700 MDAs sites to be connected under the last mile project, the MYUG Wi-Fi Project assessment, a readiness assessment of the Kolibri E-learning platform in 30 rural hard to reach schools in South West and Northern Uganda was conducted. The findings informed the further roll-out and training of teachers in Kolibri E-learning for 12 schools which turned out to be ready for the deployment of the platform. Conducted the midterm review of the RCIP Project.

A monitoring and evaluation and reporting system developed for NITA-U: The automation of the NITA-U M&E System Project achieved the following during the year under review;

- Periodically reviewed the system dash boards and ensured they were aligned.

- Prepared and shared periodic progress reports with the project implementation team (PIT)

- Coordinated weekly PIT meetings with the vendor.

- Responded to issues raised by the vendor and the NITA-U technical team.

The directorate benchmarked with other M&E systems in government and made improvements to the M&E system. The system shall track gender and equity issues at all levels of reporting.

3.2.4.4 Finance and Administration

Background

The directorate is responsible for providing administrative and technical support to the Authority to optimally plan, generate, manage, deploy and account for all financial and other resources in the delivery of its mandate. The directorate is responsible for strengthening and aligning the NITA-U to deliver its mandate.

Performance

The approved budget for the sub-programme FY 2019/20 was Ug shs13,603,003,359 and all was released (100%). By 30th June 2020, Ug shs 12,681,997,015 (93% of released funds) was spent.

Conducive working environment: Office rental space was secured at Palm Courtsand rent was paid for the period ending 30th June 2020. Electricity and water accounts maintained up-to-date to ensure continuous supply of utilities. Nine (9) mobile desk phones were acquired and staff provided with airtime for mobile phones. The office premises both at Palm Courts, Jinja DRC, and warehouse were maintained safe and secure through the private security company supported by Uganda Police. The office premises were fitted with personal hygiene facilities and other personal protective equipment (PPEs) in the wake of the COVID-19 pandemic.

Motor vehicles were maintained in a functional state, serviced regularly, and comprehensively insured. Corporate transport services were secured to ease transport for staff in the absence of official vehicles. Office machinery (generators, air conditioners, access control, and firefighting equipment) were regularly serviced and maintained in functional and operating status. Two staff training were conducted in fire safety measures, and safety and healthy working habits. One fire drill was conducted for the entire NITA-U staff and fire marshals appointed for each floor.

Architectural designs and Bills of Quantifies (BoQs) of the NITA-U home: Concluded the procurement of the company to fence NITA-U plot at Namanve and the fence was constructed. In addition, payment for ground rent for Namanve land was done. Table 3.7 shows the overall performance of the programme.

Table 3.7: Performance of Streamlined IT Governance and Capacity Development by 30th June 2020

Sub-pro-grammes	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor-mance Score (%)	Remark
Headquarters	NITA-U brand promoted, Audits conducted as per the work plan. Board engage-ments facilitated, Engaged stake holders. Com-munications and Partnership Strat-egy promoted	824,683,000	824,683,278	7.00	5.00	2.79	NITA brand pro-moted and board facilitated. 71% of outputs achieved.
Regula-tion, Com-pliance and Legal Services	Enactment of laws and regula-tions and develop-ment of policies; Create a condu-cive regulatory environment for the development of e-government and e-transac-tions; Preparation of contracts, MoUs and related documents re-quested; Fifteen (15) sensitization activities on IT legislation car-ried out; Twenty (20) compliance assessments of MDAs and other regulated enti-ties conducted; Legal liability maintained below 0.5% of the NITA annual budget; Good corporate secretarial servic-es provided to the board and man-agement	439,009,000	439,009,102	15.00	13.40	1.86	Conducted sensiti-sation and aware-ness activities. Stakeholder's comments on draft Data Protec-tion and Privacy Regulations were discussed. 89% of outputs achieved.
Planning, Research & Devel-opment	Certification pro-cess effectively promoted; Certifi-cation of NITA-U ISO 20000 un-dertaken; Five (5) new IT standards developed and gazetted ; Support Two (2) MDAs in the uptake of IT Standards; Two (2) NITA-U user	780,000,000	780,000,000	19.00	14.00	2.72	MDAs were supported in the uptake of IT Standards. 73% of outputs achieved

Sub-pro-grammes	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor-mance Score (%)	Remark
	demand driven surveys conduct-ed; A monitoring, evaluation and reporting system developed for NITA-U						
Finance and Ad-ministra-tion	Architectural de-signs and BoQs of the NITA-U home developed; staff salaries and gra-tuity paid, Office rental space se-cured throughout the FY; A func-tional Procuring & Disposal Unit; RCIP Project Au-dits conducted	13,242,003,000	13,603,003,359	12.00	10.00	50.90	Fenced NITA-U plot at Namanve. Staff salaries and office rent paid. 81% of outputs achieved.
1541 In-stitutional Support for NI-TA-U	Strengthened and aligned NITA-U to deliver its man-date, Purchase of Office and ICT Equipment, in-cluding Software, Purchase of Office and Residential Furniture and Fittings, fencing of NITA-U land in Namanve and ground rates paid.	5,820,000,000	5,819,043,940	4.00	3.00	20.69	75% of outputs achieved
	Programme Per-formance (Out-puts)					78.95	fair performance
Outcome Perfor-mance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	Level of compliance with IT related laws, legislation and standards (%)			55	69	100	
	Programme Performance (Outcomes)					100	
	Overall Programme Performance					86.3	

Source: NITA-U & IFMS

3.2.5 Challenges

- Low uptake of services by some MDAs/LGs including the NBI due to lack of quality terminal equipment, computers, and local Area Networks (LANs).

- High cost of services and end user devices.

- Staffing at NITA-U is at less than 40% of the approved structure.

- Inadequate ICT knowledge and skills.

- Low absorption of funds due to delays in procurement and receipt of "no objection" from the World Bank on some of RCIP project components.

- Limited ICT innovation capacity, research and development.

- The outbreak of COVID-19 affected some of activities especially during the lockdown.

3.2.6 Recommendations

- The NITA-U should fast track implementation of the Last Mile Project which will support MDAs/ LGs with provision of ICT equipment. In addition, MDAs should prioritise acquisition of critical equipment to utilise the delivered NBI.

- The Ministry of Public Service and NITA-U should review the staff ceiling for NITA-U to increase on implementation efficiency by filling more technical positions.

- The ICT Sector should explore partnerships with the academia to stir innovative solutions that can be placed in the local market as well as compete globally.

- The NITA-U should regularly engage with the World Bank to ensure that "no objections" are secured in time.

- The NITA-U should urgently execute the change management strategy through engaging the bidding community (services providers) to create awareness of e-GP project prior to roll out.

- The ICT sector should enhance implementation of strategies for human capital development as outlined in its strategic plan and the National Development Plan (NDP).

3.3   Ministry of ICT and National Guidance (Vote 020)

3.3.1 Background

The Ministry of ICT was created in 2006 to provide strategic and technical leadership and coordination in all ICT matters. 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*"[3]. The information and national guidance component was transferred to the Ministry of ICT in 2016 to form the Ministry of Information, Communications Technology and National Guidance (MoICT&NG).

The Vote mission is to increase access and usage of ICT infrastructure and services throughout the country, ensure effective communication of government policies and programmes and promotion of a national ideology for socio economic transformation.

The MoICT&NG has four 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;

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[3]   MoICT 2016

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.

d) Information and national guidance.

The Ministry's key outcomes are:

(i)   Responsive ICT legal and regulatory environment

(ii) Increased employment and growth opportunities

(iii) Shared national vision, national interest, national values and common good

Delivery of the outcomes is through three programs namely: Enabling environment for ICT development and regulation; Effective communication and national guidance and general administration, policy and planning.

Performance

The approved annual budget for the Ministry of ICT and National Guidance for FY 2019/20 was Ug shs 63.195bn, of which Ug shs 62.175bn (98%) was released and Ug shs 61.795bn (99.4% of released funds) spent by 30th June 2020. The Ministry received a supplementary budget of Ug shs 6bn for scaling up communication in the fight against COVID-19. However, Ug shs 7.02bn under the development component was not released as planned.

3.3.2 Enabling Environment for ICT Development and Regulation Programme

The programme is composed of four sub-programmes namely: Information Technology, Information Management Services, Broadcasting Infrastructure and Posts and Telecommunications.

The approved budget for the programme was Ug shs 2.72bn, of which Ug shs 2.56bn (94.3%) was released and Ug shs 2.53bn (93%) spent by 30th June 2020. The overall programme performance was good (78%). Table 3.8 shows the overall financial and physical performance of the programme by outputs.

3.3.2.1 Information Technology

Enabling Policies, Laws and Regulations developed: A Dissemination and Training workshop on Information Security was undertaken in Western Uganda among Local Government Information Technology (IT) and Information Officers on information security framework and strategy. The Final draft of the E-Services Strategy was developed and updated. A digitalisation readiness assessment was undertaken among the LGs of Luwero, Wakiso, Mukono, Kayunga and Mpigi. A Draft Fourth Industrial Revolution (4IR) Strategy was developed. A Draft report on the ICT Innovation Policy was produced.

The department of IT developed the Open Data Portal Systems Requirements Specifications Manual and provided support on the procurement of the e-Government Procurement System (eGP). Surveys were undertaken in media houses in Greater Kampala on availability of health and education content

digitisation platform for persons with disabilities (PWDs) and effectiveness of programmes in provision of psycho-social support to COVID-19 affected persons.

3.3.2.2 Information Management Services

Enabling Policies, Laws and Regulations developed: The concept note for the survey and the data collection tools for the digital ecosystem and marketplace for local innovative ICT products was developed. Obtained support from UNCDF for technical assistance on developing the innovation policy.

They conducted a pilot survey on status and proposals for improving the ICT innovation ecosystem; and conducted a market analysis on the uptake of e-services. The sub-programme held engagements with officials of Wits University, South Africa between staff of Ministry of ICT, Uganda Institute of ICT and Makerere University on developing a collaboration framework aimed at reviewing skills gaps in Uganda's ICT Sector, creating a pipeline for new courses, designing the structure and the operating model for the National ICT Innovation Hub. The sub-programme completed a partnership plan with the Makerere University Artificial Intelligence Lab to enable the piloting of the Capability Maturity Model Integration (CMMi) in the Ministry of ICT.

A situational analysis was carried out to ascertain the status of implementation of the 4th Industrial Revolution Technologies in the country. The Draft Fourth Industrial Revolution Strategy was developed, pending presentation to stakeholders for their input.

The Free and Open Source (FOSS) draft guidelines were developed. Carried out research on the FOSS implementation guidelines and international best practices. The Open Data Portal Systems Requirements Specifications Manual was developed.

Coordinated an online training in virtual reality, games development and mobile apps development sponsored by the Government of the Arab Republic of Egypt where 40 persons received training. Held a retreat to carry out a Regulatory Impact Assessment (RIA) for the innovation policy, the Zero draft of the Innovation Policy was produced.

The department provided technical support to MoH in the identification, design and setup of ICT solutions in response to COVID-19. They supported MoWT on the driving permit system, and also supported NITA-U on the procurement of the e-Government Procurement System.

In terms of gender and equity, technical support in validating the capacity needs assessment and readiness of MDAs for implementing the 2018 London Global Disability Summit commitments and the Convention of Rights of PWDs (CRPD) was provided. The sub-programme conducted two training camps for software developers on responsive web applications development at Makerere University and Kyambogo University, participated in multi-institutional consultations on accessibility in partnership with the National Union of Disabled Persons of Uganda.

Business Process Outsourcing: Carried out a market survey for BPO and ICT enabled services; Provided technical support to the NTFIV project in developing the Country Value proposition for Uganda's Business Process Outsourcing (BPO) and IT enabled services (ITes) industry and road map for export of BPO and ITes to the European Union market. Provided technical support to the NTFIV project in developing the Country Value proposition for Uganda BPO and ITes enabled services industry; participated in the Dubai 2020 expo preparatory meetings and held the National ICT expo at Uganda Institute of ICT that was opened by the President on 17th December 2019.

3.3.2.3 Broadcasting Infrastructure

The Issues Paper on the review of Uganda Communications Act, 2013 and NITA-U Act 2009 was drafted. Best practices in management of ICT infrastructure was carried out with the Republic of South Korea. The task team on the review of UCC and NITA-U Acts was established. Three stakeholder consultative meetings for review of the two Acts were conducted, and a zero draft proposal for a working bill (UCC and NITA-U) prepared.

The National Broadband Policy was disseminated to stakeholders. The department provided technical guidance on establishment of satellite based broadband internet connectivity in Bwindi Impenetrable Forest and Kidepo National Parks.

In terms of developing broadband infrastructure blue print, the department collected and documented the available ICT Infrastructure under UETCL and UTL. They visited the Spectrum Monitoring and Management Center at UCC to benchmark for best practices. Undertook an ICT policy consultation with South Korea on joint infrastructure sharing and broadband as a public utility. Provided technical guidance on establishment of satellite based broadband internet connectivity in Bwindi Impenetrable Forest and Kidepo National Parks.

Undertook a study of levies imposed on telecommunication masts by district authorities to ascertain their impact on overall cost of communication services to end users. Conducted surveys in media houses in Greater Kampala on availability of health and education content digitisation platform for PWDs and effectiveness of programmes in provision of psychosocial support to COVID-19 affected persons.

A project concept was developed for improving infrastructure requirements for PWD learning centers. The department conducted studies with focus on media houses and PWDs to establish the extent through which ICTs have enabled availability and accessibility of media local content, and utilization of ICTs by PWDs in schools in the districts of: Mbale, Soroti, Lira, Iganga, Gulu, Mbarara, Ntungamo, Bushenyi, Hoima, Kabale, and Kabarole.

Training was undertaken on ICT Infrastructure Standardisation with Japan International Cooperation Agency and validated the proposed ICT/digitisation interventions with relevant stakeholders for the digital transformation programme in the NDPIII.

3.3.2.4 Posts and Telecommunications

The final draft of guidelines for use of Postal Networks/Service centers for e-Government was developed. An initial Regulatory Impact Assessment for Universal Service Policy was developed. The Draft Standards and Guidelines for Data Centers in MDAs and LGs were developed and a draft framework to guide management of the Uganda Internet Exchange Point (UIXP) was developed. A benchmarking trip on Universal Service Fund was carried out in Lusaka, Zambia.

Data to support the National GIS prefeasibility study was collected from UMEME, KCCA, NWSC, REA, MWE and LGs (Kitgum, Arua, Nebbi, Packwac, Moyo, Dokolo, Kyoga, Buikwe, Kapchorwa, Tororo, Mbale, Sironko, Bududa, Kabale, Kisoro, Ntungamo, Ibanda, Mitoma, Bushenyi).

A retreat to draft a pre-feasibility study for development of National GIS System to support addressing was held and a benchmarking trip on National GIS Systems and Digital Addresses in Ghana was carried out.

The monitoring of the NBI connectivity, and compliance with directives of Northern Corridor Integration Projects was carried out. The proposed Pilot e-Government Center was not set up in one post office as planned due to limited funds. Table 3.8 shows performance of the enabling environment for ICT Development and Regulation Programme.

Table 3.8: Performance of the Enabling Environment for ICT Development and Regulation Programme for FY2019/20

Subpro-gram	Outputs	Annual Budget (Ugshs)	Cum. Receipt (Ugshs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Information Technology	Enabling Policies, Laws and Regulations developed	380,000,000	360,000,000	8.00	7.00	12.93	Sensitisation and monitoring on Information Security performed. Data Protection Law and cyber laws to 8 LGs undertaken. Drafted guidelines for free and open source software use. Carried out awareness to increase the demand for e-Services in five MDAs.
	E-government services provided	80,000,000	80,000,000	26.00	18.00	2.04	Evaluation of BPOs in Kampala done.
	Hardware and software development industry promoted	110,000,000	100,000,000	14.00	10.00	3.18	Hardware and software development promoted.
Information Management Services	Enabling Policies, Laws and Regulations developed	350,000,000	320,000,000	8.00	6.50	11.46	Obtained technical assistance from UNCDF on developing the Innovation Policy.
	E-government services provided	350,000,000	280,000,000	23.00	17.00	11.91	Supported MoH and GoU in provision of e-services.
Broadcasting Infrastructure	Enabling Policies, Laws and Regulations developed	650,000,000	610,000,000	5.00	3.00	15.31	Communications Act 2013 and NITA-U Act 2009 were undergoing review.
Posts and Telecommunications	Sub-sector monitored and promoted	710,000,000	690,000,000	6.00	4.00	17.94	Development of guidelines for use of Postal Networks/ Service Centers for e-Government Services initiated
Programme Performance (Outputs)						74.76	Good performance
Outcome Performance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	Proportion of formal (registered) ICT enterprises (%)			5	4	80	Target not achieved
	Number of e-services offered			350	300	86	Target not achieved
	Number of locally developed applications/innovations			50	40	80	Target not achieved
	Programme Performance (Outcomes)					82	
	Overall Programme Performance					78.6	Good performance

Source: MoICT&NG

3.3.3 Effective Communication and National Guidance Programme

The objective of the programme is to ensure effective communication and national guidance in order to increase citizen's participation in national programmes. The programme consists of three sub-programmes namely: National Guidance, Information, and Uganda Media Centre.

The approved budget for the programme FY 2019/20 was Ug shs 13.45bn, of which Ug shs 19.36bn (144%) was released and Ug shs 19.13bn (98.8% of released funds) spent. Both release and expenditure performance were very good. The over performance of the release was due to a supplementary release of Ug shs 6bn for COVID-19 communication interventions.

The overall programme performance was good (88%). Both output and outcome performances were very good (90) and good (85%) respectively. Table 3.9 shows the overall performance of the programme.

Under the Media Centre, 5,194 print and electronic media were monitored against an annual target of 20,000. Sixty-nine (69) mission heads and media attaches were engaged. A total of 448 print and electronic media were engaged, against a target of 508. In terms of support to MDAs, 617 media coverage activities were coordinated. The 57th Independence Day and 34th Liberation Day magazines were published. The average performance was attributed to emergency of COVID-19 disease and lockdown. The mode of monitoring print and electronic media changed overtime, and thus the number of media to be monitored reduced as well. Whereas the target of 508 due to the lesser space in the print media was not met, there was an equitable coverage of the entire country to spread the message of COVID-19. UMC sent teams to all the major sub regions in Uganda to provide hope to Ugandans through publicising different government interventions and programmes that could be used to encounter the negative effect of COVID-19. The Heroes Day magazine was not published due to limitations in movement across the country.

Under the **National Guidance Sub-Programme**, research on current socio-political and economic events in the country on citizen's support to National governance issues in West Nile and Busoga sub region were conducted. The department carried out research and inspection of District Information Officers and their communication tools in the districts of Mityana, Mubende, Kyegegwa and Kakumiro to support guidance activities.

Civic education awareness campaign in Kamuli with a focus on the religious and cultural leaders from Buyende, Kaliro and Kamuli districts were conducted. The department conducted radio talk show program in Bugisu (Mbale) sub-region; to publicise government programmes and policies and increase the levels of awareness and changing people's ideological consciousness by promoting the ethics of hard work and ownership of government programmes.

They collected data on National Objective and Duties of Citizen in preparation for the drafting of a bill on National Objectives. The data was collected from selected districts of Busia, Iganga and Namayengo. Radio talk show programmes on comprehensive awareness campaign on duties of citizens to publicise the spread of COVID-19 were conducted on Arua One 88.7 FM, Radio Maria 90.5 FM in Nebbi, Britop 94.1 FM Kyegegwa, Kakumiro Community Radio 95.1 FM, Radio KPS -FM in Kamuli, Radio West FM in Mbarara and Victoria Radio FM in Jinja.

The department conduct special field research on the post COVID 19 era, specifically on the enforcement of the Presidential Directive and MoH guidelines and assessed District COVID-19 task force preparedness, lessons learnt, effects and its impact on domestic violence in the eastern region.

Information Sub-Programme

Public Accountability and open Government coordinated Platforms for Government Citizen Interaction Centre (GCIC) established: The GCIC twitter account got 1,962,000 views, and 781,876 Facebook views; The Ministry of ICT & NG twitter account managed by GCIC got 828,000 views. The GCIC Twitter and Facebook accounts were promoted. This increased the number of followers from 35,000 on Twitter to 38,600 by June 2020. The Facebook followers grew to 15,657. GCIC managed the Ministry Twitter handle and grew the followers from 42,181 to 52,400 by 30th June 2020.

The GCIC call centre was maintained. The Call Centre agents supported MoH call centre in handling COVID-19 related calls. The call centre received and handled 533 calls/queries from citizens and feedback was provided.

Conducted training for District Communication Officers and District Information Officers from Western Uganda, Busoga, Elgon and West Nile regions, and Deputy Resident District Commissioners (D/RDCs) from Eastern Uganda on effective use of digital and social media to communicate.

Worked with State House to promote and popularise H.E. the President's messages and national addresses on COVID-19. Provided online coverage for twelve (10) press briefings held at the Uganda Media Centre. Carried out nationwide popularisation programme on radios for the 22 Presidential Directives issued in 2016 at the inaugural Cabinet meeting. These programmes reached approximately 10 million Ugandans.

Worked with MoH to host webinars on the science behind COVID-19 and coping with mental health during COVID-19; in partnership with MoH documented the efforts of health workers on the front line of COVID-19 in a project called Faces of Care. Worked with Uganda AIDS Commission and Uganda Broadcasting Corporation to host a candle light event to commemorate the World AIDS Day. Carried out a national radio campaign to explain Government measures and efforts in the fight against COVID-19.

In addition, the sub-programme held twenty (20) radio and TV talk shows to explain achievements of Government to the citizens and highlight the role of citizens in service monitoring and delivery. Worked with NITA-U to develop an Open Government Solution. Engaged the UPDF and Uganda Police Force (UPF) officers on social media management and use.

Centralised media buying management services: Dissemination of guidelines for centralised media buying initiative was done in 60 districts. The Ministry procured M/s QG Saatchi & Saatchi as the media clearing agency. Advertising channels were identified and engaged. The agencies published the National Liberation Day and International Women's Day supplements by MDAs in the following outlets: *The Independent* magazine, *The East African* newspaper, *The Public Lens* magazine, *The Observer* newspaper, *The New Vision*, *The Red Pepper*, *The CEO* magazine, *The Second Opinion* magazine, *The Daily Monitor* and selected radio stations.

Media services for the 34th Anniversary of the Government Manifesto Week by MDAs were provided in print and broadcast media including Uganda Broadcasting Corporation, NBS television, Chimp Reports (on-line media), *The Observer*, *Red Pepper*, and NTV and Vision Group channels.

In addition, media campaigns against COVID-19 were carried out through various media outlets. The media agency QG Saatchi & Saatchi was paid agency fees for the Manifesto Week & COVID-19 response publicity activities. A total of Ug shs 10.4bn was paid under advertising and public relations.

Dissemination of Public Information

Coordinated monthly working group meetings with strategic GoU partners i.e. UBC, Media Centre, NITA-U, UCC, State House, President's Office, Offices of RDCs, Vision Group, etc for better information dissemination. Daily press and media analysis were undertaken. The following were accomplished: Assessment of effectiveness of online media in communication of GoU programmes, assessment on access to information by people with disabilities and mental health, research on the impact of COVID-19 response and communication and information dissemination on the hearing-impaired people in Acholi sub-region and data on communication activities in selected LGs was collected.

Twelve (12) Public Education Media Programmes (PEMPs) were coordinated in nine (09) MDAs namely: MoES, Ministry of Gender, Labour & Social Development, UNBS, Uganda Retirement Benefits Regulatory Authority (URBRA), NITA-U, Parliament of Uganda, URA, Higher Education Students Financing Board (HESFB) and UPF. The PEMPs focused on COVID-19 interventions, International Day of the Family national public dialogue, Consumer awareness on accurate measurements during lockdown, Importance of long term savings, Mobilising the informal sector for retirement savings, role of voluntary service schemes in the retirement industry, free digital education content for students with kolbri computer application by NITA-U, and business transacted in the August house during the 4th session of the 10th Parliament. Table 3.9 shows the programme performance for the FY 2019/20.

Table 3.9: Performance of the Effective Communication and National Guidance Programme by 30th June, 2020

Sub-programme	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Uganda Media Centre	Media and communication support provided	410,000,000	410,000,000	20000.00	5194.00	0.79	A total of 5,194 print and electronic media were monitored against an annual target of 20,000.
	Transfers to other Government Units	1,200,000,000	1,200,000,000	4.00	4.00	8.92	Funds to UMC were transferred.
National Guidance	National Guidance	590,000,000	590,000,000	15.00	12.00	3.51	Conducted research on current socio-political and economic events in the country on citizen's support to National governance.
Information	Government Citizen's Interaction Centre operational	1,350,000,000	1,520,000,000	2500.00	1981.00	7.06	GCIC website received 15,000 visits and handled calls/queries from citizens and feedback was provided
	Dissemination of public information	470,000,000	2,800,000,000	0.50	5.00	3.49	Radio and TV talk shows to enlighten citizens on government undertakings were held including COVID-19 messages in several languages.
	Centralised media buying management services	9,440,000,000	12,850,000,000	4.00	5.20	66.98	Guidelines for centralised media buying initiative made. Additional funding for COVID-19 messages utilised.

Sub-pro-gramme	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor-mance Score (%)	Remark
	Programme Perfor-mance (Outputs)					90.74	Very good performance
Outcome Perfor-mance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	Number of inquiries raised by citizens through GCIC			2500	1981	79	
	Number of MDAs participating in open govern-ment session			15	13	87	
	Proportion of inquiries responded to through GCIC			0.7	0.63	90	
	Programme Performance (Outcomes)					85	
	Overall Programme Performance					88.8	Good performance

Source: MoICT&NG

3.3.4 General Administration, Policy and Planning Programme

The overall objective of the programme is to provide policy guidance, strategic direction and to generate sector statistics to inform planning and policy review.

The approved budget for FY 2019/20 was Ug shs 47.03bn, of which Ug shs 40.25bn (85.6%) was released and Ug shs 40.14bn (99.7%) spent. The overall programme performance was 85%.

3.3.4.1 Strengthening Ministry of ICT Sub-Programme (retooling project 0990)

Two consultative workshops were undertaken on budgeting, planning and sector performance. Two workshops were conducted on gender and equity planning and budgeting for all Heads of Department (HoDs), and Heads of Agencies under the ICT and National Guidance sector. The ICT and National Guidance Sector Development Plan was reviewed, updated and aligned to NDPIII. The Sector Working Group (SWG) meetings were undertaken. The sector monitoring activity was undertaken and a report produced. The ICT and National Guidance Sector Investment Plan (SIP) activities were facilitated and coordinated. The ICT Sector Statistics document was reviewed and submitted to UBOS for consideration and approval. Three project proposal were prepared for consideration by the Ministry of ICT Projects Preparation Committee before submission to the SWG and MFPED for approval. However, the ministry experienced challenges in accessing the Integrated Bank of Project (IBP) system which delayed the submissions. HoDs were trained in Smart Planning, Budgeting and Reporting.

Under the National ICT Initiatives Support Programme (NIISP): Three ICT hubs were supported namely: Resilient African Network, Tech Buzz Hub, and Hive Collab. The construction of the ICT Innovation Hub was completed (99%) and the structure was under defects liability period. Procurement of all the furniture and fittings was completed and most of the items delivered, pending installation of the ICT and electric equipment.

Substantially completed ICT hub and furnished working area at Nakawa

L-R: Furnished conference and dining halls at the National ICT Innovations Hub Nakawa

Support for indigenous ICT innovators provided: The support to ICT Innovators under phase two was processed. A total of Ug shs 6.034bn was disbursed to sixty (60) Indigenous ICT Innovators (see Annex 1) supported enterprises. The NIISP staff participated in various online hackathons[4] due to limitations in physical movements during the second half of the FY 2019/20. Plans were finalised to equip spaces at Muni University in Arua District and Soroti University in Soroti as part of the strategy to establish test labs and centres as well as high powered computing centres.

The NIISP partnered with the UNCDF to develop a Policy for the initiative. Monitoring activities for local innovation products were coordinated and facilitated. Mentorship activities for ICT Innovators were supported and undertaken in partnership with private ICT hubs. These were: the MIIC, Innovation Village, CAMTech, Hive Colab, RAN Lab, Outbox Hub and Microsoft East Africa. Establishment of innovation spaces was rescheduled to FY2020/21 due to insufficient funds during FY2019/20.

The Ministry participated in various ICT innovation campaigns in Kampala and abroad to promote and popularise the NIISP. The first ICT Innovations Expo was held on 17th December 2019 at the UICT Nakawa to popularise the NIISP. The FY2017/18 ICT Innovation awardees under the fund were monitored and mentored.

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4   Hackathon is an event, in which a large number of people meet to engage in collaborative computer programming.

3.3.4.2 Uganda Broadcasting Corporation Revamp Phase II

Background

The Uganda Broadcasting Corporation (UBC) was founded as a result of the Uganda Broadcasting Corporation Act, 2004, which merged the operations of Uganda Television (UTV) and Radio Uganda. It started broadcasting on November 16, 2005 as a national public broadcaster. The UBC Act stated that UBC should be funded by levying a television licence fee. The agency has four (4) television channels and eleven (11) radio stations[5]. The television channels include: UBC TV, UBC Star TV, UBC Magic One, and UBC Channel One.

In FY2017/18, Cabinet approved the UBC revamp process to ensure that the national broadcaster is able to acquire new equipment and technology, market the agency, restructure staffing and develop better content to become more competitive and self-reliant. The process initially started with an approved budget of Ug shs 18.5bn, of which Ug shs 12.49bn was released and spent. Due to inadequate releases, the activities were not completed and the second phase was planned for FY 2019/20.

The approved annual budget for UBC FY 2019/20 was Ug shs 28.69bn, of which Ug shs 16.38bn (subvention) was expected from GoU as part of the second phase of revamping the corporation, Ug shs 8.72bn from internally generated funds and Ug shs 3.61bn from arrears expected from GoU/MoICT&NG for salaries of UBC full time staff.

Performance

By 30th June 2020, Ug shs 14.9bn (91%) had been transferred to UBC to undertake the following: Fees for Satelite uplink and downlink, configuration of 18 Digital Terrestrial Television (DTT) sites, procurement of operating system software and antivirus for 140 computers. Assorted UPS and 10 KVA batteries; redesign the Local Area Network (LAN) for Broadcast house, procure 32TV sets and accessories, upgrade and relocate UBC radios to respective regions, market UBC, among others. Table 3.10 shows UBC's performance.

Table 3.10: UBC Budget Performance for FY 2019/20

Depart-ment	Key Output	Annual Allo-cated Budget (Ug shs, 000)	Cumulative Receipts (Ugs000)	Cumulative expenditure (Ugs000)	Reasons for the Vari-ance
1. Content Development and Programming					
Radio	Facilitation of news gatherings, Ground zero program, production of articles and features, production of drama of stay safe campaign for COVID-19.	163,200	1,075,007	1,075,007	Additional funding received for COVID-19 awareness.
TV	Facilitation of news gathering, facilitation of TV and radio learning programme, production of COVID-19 documentaries, skits and local content, production of sport adverts, Procurement of local content cancer awareness and prevention, Behind the Headline Programme on UBC.	1,482,325	3,349,609	3,349,609	Additional funding for COVID-19 productions.

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5   The radios are: Mega FM in Gulu, Magic100FM, Star FM, UBC Red (Radio Uganda), Butebo FM in Eastern Uganda, UBC West, UBC West-Nile, Voice of Bundibugyo, Buruuli FM, Ngeya FM in Kasese and Totore FM in Karamoja.

Depart-ment	Key Output	Annual Allo-cated Budget (Ug shs, 000)	Cumulative Receipts (Ugs000)	Cumulative expenditure (Ugs000)	Reasons for the Vari-ance
Sub Total		1,645,525	4,424,616	4,424,616	268.9%
2.Marketing					
Marketing	Payment of sales commission, Launch of Behind the Headline show on UBC TV, Organisation of x-mass children party, Facilita-tion of the Teaching program on UBC TV	652,331	975,684	975,684	Over spending was a result of the COVID-19 pandemic which necessitated the use of visual and audio teaching program that was championed by the department.
Sub Total		652,331	975,684	975,684	149.6%
3.Institutional Strengthening and Capacity Building					
Administra-tion	Payment of cleaning services, payment of fuel for operation, maintenance of the main store UBC, repair of motor vehicles, fuel for operation , supply of LG TVs, redesign of the reception and procurement of furniture.	2,485,500	1,098,882	1,098,882	This output was ex-pected to be funded from the internally and grants. However, the pandemic affect-ed sales. Currently the corporation has uncleared obligations since the suppliers had already executed the contractual obligation.
Audit	Site field inspection, printing of reports, purchase of office stamp.	28,000	31,980	31,980	The overspending was as a result of the extra assignments to the unit by the BOD.
Corporate Services	Facilitation for board retainer, retreat, survey, meeting	1,430,000	1,205,419	1,205,419	Shortage of funds affected some of the activities, the case of Survey that could not be concluded in time.
Finance	Payment of URA tax arrears, payment NSSF arrears, procure-ment of stationaries, development of the debt policy, payment of property rates (KCCA), payment for development of financial manuals, payment of DFCU & Stanbic Bank loan facilities and bank charges	5,172,265	3,227,359	3,227,359	Shortage of funds affected some of the activities, the case of Staff gratuity, URA tax arrears, and NSSF arrears.
Human Re-source	Payment of staff salaries, allow-ances & wages, staff gratuity, staff medical expenses, staff welfare, staff trainings and travel cost.	5,416,063	4,573,277	4,573,277	Shortage of funds affected some of the activities, the case of staff trainings, staff salaries and allowance, and medical expenses.
Procurement	Payment of Clearing charges, Pallet for stores, and assorted CDs, DVD camp tapes, Patch panel replacement.	284,500	56,739	56,739	Shortage of funds affected some of the activities, the case of clearing charges and allowances for the con-tracts committee.
Public Rela-tions	Procurement of branded safety wares, cameras for PRO, print-ing branded reflectors and press jackets.	200,000	81,920	81,920	Shortage of funds affected some of the activities like procure-ment of branded corpo-rate wear.

Department	Key Output	Annual Allocated Budget (Ug shs, 000)	Cumulative Receipts (Ugs000)	Cumulative expenditure (Ugs000)	Reasons for the Variance
Subtotal		15,016,328	10,275,579	10,275,579	68.4%
4.Technology and Infrastructure Development					
Engineering	Payment of electricity (yaka), repair & redesign of TV studio, purchase of equipment's(radio & TV), Procurement of cameras, relocation of radio stations, repair & maintenance of ACs, remodeling of radio studio in Mbarara, procurement of audio mixers	3,080,900	3,499,121	3,499,121	Over spending was due to the outstanding UMEME bill as a result of the installation of prepaid meters at all transmission sites.
Library & Archive	Archiving Accessories-Umatic, Betacam VTRs, DV cam recorders	341,500	-	-	Shortage of funds affected implementation of the project.
Information Technology	LAN Redesign, Procurement of Desktops, Live Streaming Software, Production computers, Website redesign, procurement of capture cards, Procurement of Antivirus, Preventive maintenance and Pastel Software upgrade.	937,700	861,458	861,458	Shortage of funds affected implementation of some activities.
Signet	Payment for satellite charges, Road maintenance work upcountry sites, Main Kololo 200m clean up, Repair of Microwave, Supply of UPS, Repair and service of transmitters, procurement of cooling fluid for transmitter-band uplink upgrade, repair and maintenance of DTT and radio antenna and repair and service of generators	7,015,715	4,450,116	4,450,116	Shortage of funds affected implementation of most activities.
Sub total		11,375,815	8,810,696	8,810,696	77.5%
Grand Total		28,690,000	24,486,576	24,486,576	85.3%

Source: UBC

Technology and Infrastructural Development/Capital Investments

Maintenance and services of the micro wave link system was carried out for 26 sets - this resulted in improved signal strength of UBC TV brands. Transmitters on 17 UBC sites were serviced and repaired thereby enhancing the corporation transmission and reducing signal loss especially in remote areas. This further helped increase the efficiency of the machines. The payment for satellite services were remitted to Intelsat to pay part of the arrears which resulted into uninterrupted transmission during the year.

Procurements: The agency procured assorted TV equipment: Speakers and microphones for Magic TV, 40 desktop computers, eight (8) production computers, 30 uninterrupted power supplies (UPS's), 420 litres of cooling fluids for all DTT sites, and 140 anti-virus licenses. The Local Area Network (LAN) was redesigned for the broadcast house and work was ongoing by August 2020. The online streaming software and installation for all 11 UBC radios was completed. This will enhance access to UBC brands content online. In addition, professional digital satellite receivers, signal monitoring equipment and video capture cards to enhance production of programs and news were procured.

Service, repair and maintenance

The repair and maintenance of generators at eight UBC DTT Sites and UPS's, and replacements of 30 batteries (22 pieces for big UPS and eight pieces small) was completed. Repair, service, maintenance and acquisition of spares for air conditioners for 80 units was undertaken. Maintenance of the DTT Antenna at 17 UBC sites thus improving lifespan of the antennas. Tower repair and maintenance were made at 24 UBC sites, thus increasing on the lifespan of the towers. Twenty-two (22) pieces of exciters were repaired to ensure uninterrupted transmission.

The agency carried out a power audit to ascertain the gaps and recommended appropriate action to improve UBC's services through monitoring power consumption. UBC Coverage Mapping Study for DTT/DTH[6] hybrid was conducted.

The UBC website was redesigned and content updated to suit the most recent trends. Payment for Transpondent (satellite) services was issued to Intelsat Corporation. Renovation of the administration block was ongoing by 30th August 2020.

L-R: Upgraded UBC Auditorium and some of the acquired UPSs mounted in racks

Restructuring and business process re-engineering

Payment in respect to domestic arrears was done relating to: Legal obligations (court awards), staff gratuity, verified general supplies, National Social Security Funds employee and staff contribution, and URA.

All salaries are being paid on time. Payment for electricity bills arrears to UMEME for all UBC sites was partially done and prepaid meters (*Yaka*) installed. Servicing and refill of the fire extinguishers, and training of staff was conducted. A central registry to handle all documents was created. The institutional vehicles were serviced and repaired.

Production of content, programming and dissemination

News reporters and correspondents countrywide were facilitated to gather news. The corporation outsourced content providers to supply local content. No improvements were done on the TV studio sets and auditorium as planned.

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6   Digital Terrestrial Television/Direct to Home.

UBC sales and marketing

The agency procured promotional materials for the sales and marketing section. The strategy for internal communication campaign was developed. Commission to sales executives were paid in a timely manner.

Digital migration under Signal Network Limited (SIGNET)

In 2015, Uganda shifted from analogue to digital terrestrial transmission for both TV and radio broadcast in fulfilment of the International Telecommunication Union (ITU) deadline. Management of this process was handed to M/s SIGNET, a subsidiary of UBC with initial financial support from Uganda Communications Commission (UCC).

UBC/Signet main transmission mast and Satellite Station at Kololo

During the FY 2019/20 monitoring, it was observed that digital migration was partially done due to lack of financing. Moreover, the equipment procured in 2012 lacks redundancy and had reached the final year of useful life cycle, thus needed replacing. It was further noted that the existing equipment lacked Service Level Agreements (SLAs) which increases administration and maintenance costs as the company relies on third party vendors for repairs compared to manufacturers.

The UCC licensing framework divides Uganda into nine broadcasting regions, however the SIGNET equipment on ground cannot restrict broadcasting to a specific region. The essence of digital migration to free up spectrum has not been realised since the SIGNET equipment capacity allows up to 39 TV channels, which is below the viable capacity of 90TV channels.

Out of the 27 transmission sites, only seven had full time technicians and lacked transport equipment (motor vehicles/motor cycles) to move to sites without technicians' thereby increasing response time in case of a fault. It was reported that the existing radio transmitters were procured and installed between 1990 and 1995 (25 years ago), thus the technology is currently obsolete. Operations are further constrained with VAT charges of 18% on all equipment procured. Only 56% of the country is covered by TV signals. There is therefore need to complete the digital migration with additional transmission sites (11 masts and 40 gap fillers) to illuminate the valleys and hilly locations across the country. In spite of the ongoing investments in the National Backbone Infrastructure under NITA-U, Signet was relying on satellite as the primary transmission method which costs over US$27,000 per month in fees. Table 3.11 shows the performance of the programme.

Table 3.11: General Administration, Policy and Planning Programme by 30ᵗʰ June, 2020

Sub pro-gram	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical perfor-mance Score (%)	Remark
Head-quarters	Policy, consul-tation, planning and monitoring services	930,000,000	910,000,000	4.00	3.50	1.77	ICT and National Guidance Sector Investment Plan (SIP) activities facilitated and co-ordinated.
	Ministry Sup-port Services (F&A)	3,210,000,000	3,160,000,000	4.00	3.60	6.24	Administrative and welfare activities supported.
	Ministerial and Top Manage-ment Services	270,000,000	270,000,000	20.00	5.00	0.14	Top management meeting coordinat-ed and facilitated.
	Procurement and Disposal Services	130,000,000	120,000,000	4.00	3.50	0.26	Ministry monthly procurement re-ports prepared.
	Financial Man-agement Ser-vices	420,000,000	410,000,000	4.00	3.40	0.78	Payments systems audited and a report produced.
	Human Re-source Manage-ment Services	5,070,000,000	5,040,000,000	100.00	99.00	10.74	Staff welfare main-tained. UBC con-tract staff paid.
	Records Man-agement Ser-vices	100,000,000	90,000,000	100.00	98.00	0.21	Records managed
Project: 0990 Strength-ening Ministry of ICT	ICT Initiatives Support	4,550,000,000	4,140,000,000	6.00	4.00	7.09	First ICT Innova-tion Expo held in Dec. 2019
	Innovators and Innovation Hubs	11,950,000,000	9,073,500,000	67.00	42.00	20.98	Support to 60 inno-vators and innova-tions hubs given.
	Government Buildings and Administrative Infrastructure	1,000,000,000	1,000,000,000	1.00	0.60	1.28	Spaces for hubs at three universities secured. Construc-tion of ICT Hub at Nakawa substan-tially completed.
	Purchase of Office and resi-dential furniture and fittings	400,000,000	400,000,000	1.00	1.00	0.85	Procurement com-pleted, furniture delivered to ICT hub
	Purchase of Office and ICT Equipment, including Soft-ware	1,000,000,000	640,000,000	100.00	6.00	0.20	Procurement com-pleted
	Transfers to oth-er Government Units	18,000,000,000	14,990,000,000	100.00	62.00	28.49	Funds transferred to the UBC for Phase II revamp of national broadcast-er. Activities still ongoing.
	Programme Performance (Outputs)					79.03	

Sub program	Output	Annual Budget (Ug shs)	Cum. Receipt (Ug shs)	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	Remark
Outcome Performance	Outcome Indicator			Annual Target	Achieved	Score (%)	Remark
	Level of Compliance to the planning, budgeting and Financial Management to National frameworks and Guidelines			0.55	0.55	100	
	Proportion of strategic plans that are implemented			0.67	0.62	93	
	Programme Performance (Outcomes)					96	
	Overall Programme Performance					85.1	

Source: IFMS &MoICT

Conclusion

The overall programme performance was good rated at 85%. Whilst the under release of about Ug shs 7bn on the development budget. The Ministry of ICT&NG transferred Ug shs 6bn to 60 innovators and Ug shs 14.9bn to UBC for revamp activities. The National Innovations Hub was completed and furnished pending commissioning. It was however observed that UBC was still grappling with debts (Ug shs 75bn) arising out of unpaid taxes, court awards, gratuity to restructured staff, unremitted NSSF contribution and penalties in the previous years, amidst uncompetitive programming, low advertising revenue, and unmotivated staff.

Whereas UBC was broadcasting lessons on both television and radio channels as a bridging mechanism following the closure of schools during the COVID-19 lockdown, the activities were not funded by the Ministry of Education and Sports, this included payment of allowances to the teaching staff. It was further observed that the digital migration was partially done and only 56% of the country is covered by free to air TV signals. The outbreak of COVID-19 slowed down execution of planned activities during the fourth quarter.

Challenges

- Poor planning leading to delays in initiating procurements.

- Old transmission equipment at UBC leading to poor signal reach, low quality transmission (Standard Definition as opposed to High Definition), high maintenance costs and late adoption to market technology trends

- Lack of Service Level Agreements for most UBC equipment.

- Low levels of motivation and morale of UBC staff due to a poor reward system as compared to the market rates.

- Huge debt servicing demands (about Ug shs 75bn) on the available UBC resources.

- Migration from analogue to digital was not completed yet UBC/SIGNET are expected to meet the industrial standards and demands of the clients.

Recommendations

- The MoICT&NG should initiate procurements in time to avoid implementation delays.

- The MoICT and MFPED should maintain the UBC subvention for wages in the medium term and the MoICT should develop a specific project to revamp UBC in a more organised manner. The UBC should explore alternative financing sources like grants and public private partnerships (PPPs) for sustainable implementation of work plans.

- The MFPED should consider writing off the UBC statutory debts and associated penalties to ease operations.

- The NITA-U should connect the UBC/SIGNET sites to the NBI optic fiber under the Last Mile Connectivity.

- The MoICT and UCC should consider financing SIGNET under the Rural Communications Development Fund since it provides universal access to ICTs.

3.4   Overall ICT Sector Performance

The overall sector performance was good (82.2%). The release performance was at 96%, while expenditure was at 95%. The Effective Communication and National Guidance Programme registered the highest score of 88.8%, while Shared Infrastructure Programme had the least score of 75%. The relatively low performance under the latter was due to delays in procurement leading to late implementation which affected achievement of output targets.   Table 3.10 shows the summary performance by programme.

Table 3.10: Physical Performance of the ICT Sector by 30th June 2020

Programme	Score (%)	Rating
Electronic Public Services Delivery (e-Transformation) Programme	79.5	Good
Shared IT Infrastructure Programme	75	Good
Streamlined IT governance and Capacity Development Programme	86.3	Good
Enabling Environment for ICT Development and Regulation Programme	78.6	Good
Effective Communication and National Guidance Programme	88.8	Good
General Administration, Policy and Planning Programme	85.1	Good
Overall Sector Performance	82.2	Good

Source: Author's compilation

3.5 Progress on achievement of NDP II indicators

The key NDP II indicators for the ICT sector include: increase in proportion of sector budget, increase internet penetration, proportion of businesses using internet, increase in number of mobile lines subscription, proportion of districts with backbone, proportion of households with a television and tele-density. It was observed that the sector lacks authentic information on some of the NDP indicators as they require regular surveys.

Findings showed an increasing trend of ICT sector financing from Ug shs 17.01bn in FY 2014/15 representing 0.15% of the total annual budget to Ug shs 152.225bn in FY2019/20 representing 0.4% of the budget thus meeting the NDP II target for the year.

The mobile telephone lines increased from 23,206,729 in December 2016 to 28,450,429 subscribers

in March 2020, however the subscribers declined to 25,452,770 in June 2020 (see figure 1). The UCC attributed this contraction partly to a cleanup by the telecom operators, who rid the register of SMS only receiving SIM cards. It was however noted that the performance was above the NDP target of 17.1 million.

Figure 1: Mobile Telephone Subscription and Tele-density as of June 2020
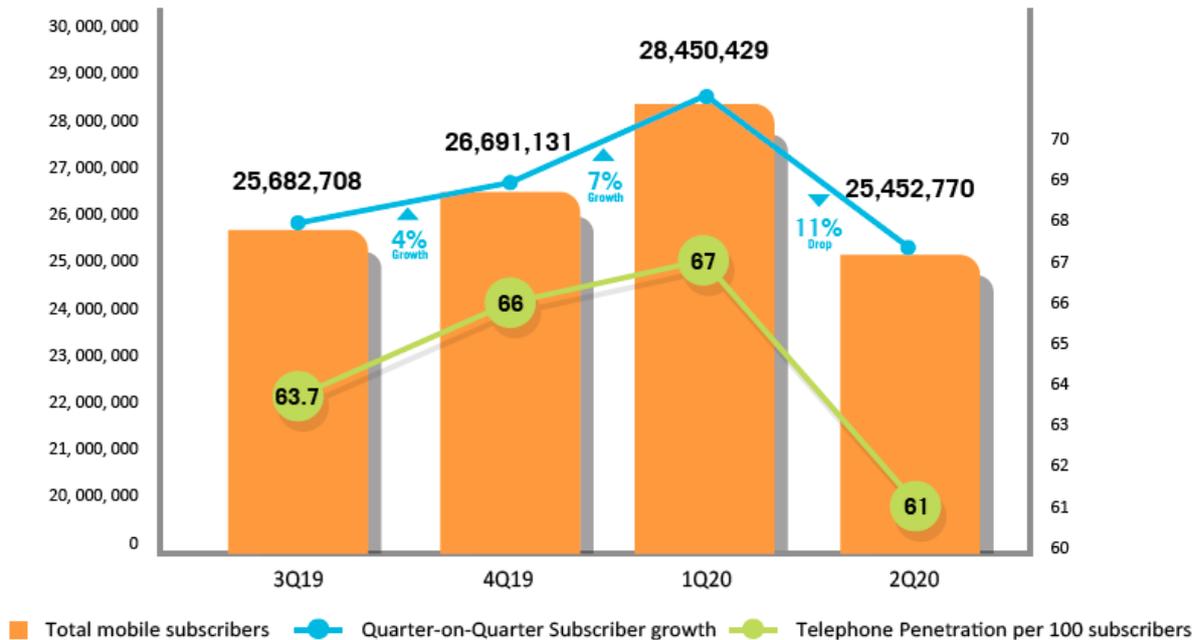
Source: UCC

Tele-density (lines per 100 population) growth increased from 63.1 in December 2016 to 67 in March 2020 before declining to 61 in June 2020 after the clean up by one of the mobile cellular service provider. This was therefore off the projected target of 85 for FY2019/20. The relative slow growth in tele-density is a result of decreasing market concentration, reducing market power and an increasing mobile market competition. This was further exacerbated by the cleanup, outbreak of COVID-19 and lockdown measures that prevented onboarding of new clients, and caused a 13% global reduction in shipment of goods including mobile phones.

Internet bandwidth in country grew from 49.98 million MBs in December 2016 to 59.1 billion MBs in June 2020. The sector witnessed a reduction in the cost of broadband internet bandwidth from US$300 per megabyte per second (mbps) in 2016 to US$70 per Mbps by June 2020 (supplied by NITA-U over the NBI). Other service providers introduced mobile data bundles with fairly competitive pricing.

At the end of June 2020, the total internet stood at 18.9 million connections compared to 10.07 million in December 2016, translating into a penetration of 46 internet connections for every 100 Ugandans. Mobile handsets remain the dominant form of internet access, accounting for 99.86% of subscriptions at the end of June 2020. The growth in mobile internet access and usage is attributed to the increasing 4G and 3G coverage, drop in smart phone and bandwidth prices, new demand from Work-From-Home protocols instituted by different corporate bodies following the nationwide lockdown, new price competition resulting in subsidized internet offerings by the leading carriers among others.

Proportion of business using Internet: Information on this indicator was not available since no survey was conducted during the period under review.

Proportion of districts with backbone: The Missing Links Project (Phase 4 of the NBI) extended connectivity through the NBI to the West Nile and North Eastern (Karamoja) part of the country during the FY2019/20 bring on board an additional 750Km of optic fibre to the NBI as implemented bringing the total number of Km of optical fibre cable owned by NITA-U to 3,394Km. The NBI is currently covering forty-nine (49) districts representing 38.5% of districts covered against the NDP II target of 80%. It ought to be noted however that the number of districts in the country keeps changing every year. In addition, the private sector has also extended optic fiber cable to more districts.

Proportion of households with a TV:

Free-to-Air (FTA): The delivery of FTA channels is mainly via the government-owned SIGNET Uganda Limited. By 30th June 2020, 39 FTAs were carried on the SIGNET platform. The Pay-TV market in Uganda is served by a combination of satellite, cable and digital terrestrial networks, with seven licensed content aggregators. As of June 2020, the total active subscribers were at 1.56 million representing 16.29% presence of a TV per household[7] against a target of 18%. The pay TV market experienced a 2% contraction between March and June 2020. This was attributed to the continued suspension of major sports leagues due to COVID-19.

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7   UBOS projected 9.576 million households in Uganda by 2020

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1   Conclusion

The overall sector performance was good (82.2%). The release performance was at 96%, while expenditure was at 95%. The programmes with more recurrent outputs performed better than those with development outputs. These included: Effective Communication and National Guidance (88.8%), Streamlined IT Governance and Capacity Development (86.3%), General Administration, Policy and Planning (85%). On the other hand, the programme with development (capital investment) outputs such as Shared IT Infrastructure Programme (75%) posted relatively lower scores. The core constraints in achieving set targets included: Delays in initiating and completing the procurement of contractors for the various project components, securing "*no objection*" from the World Bank, and the outbreak of COVID-19 in the third quarter of the FY.

Good progress was observed on the key sector NDP II indicators of increased ratio of the National Budget allocated to ICT, increased access and usage of broadband internet bandwidth, increased internet users, increased telephone subscribers and reduction in prices of internet data. However, there was a decline in tele-density and limited progress on the number of districts covered by optic fiber cable.

The sector faces low ICT technical capacity within MDAs (human resource, hardware and software) to support the systems, under staffing at the MoICT and NITA-U to attend to all requests from MDAs and stakeholders, resistance to integration of ICT systems, and high debt burden and inadequate funding to Uganda Broadcasting Corporation.

4.2   Recommendations

- The MoICT&NG and MFPED should maintain the UBC subvention for wages in the medium term, and the MoICT should develop a specific project to revamp UBC in a more organised manner. The UBC should explore alternative financing sources like grants and PPPs for sustainable implementation of work plans.

- The NITA-U and MoICT&NG should initiate procurements in time to avoid implementation delays.

- The MoICT&NG and NITA-U should enhance awareness and sensitisation campaigns on the benefits of IT systems to increase uptake and maximise the economies of scale.

- The NITA-U through the RCIP should prioritise provision of key hardware and software such as computers and structured cabling to agencies where the NBI was delivered but not in use in order to increase on uptake of e-enabled services. The UBC sites should be enrolled on the NBI, and in the bulk software licensing modalities.

- The MoICT&NG, NITA-U and Ministry of Public Service should review the staff ceiling for the sector to increase implementation efficiency.

- The MoICT&NG and NITA-U should develop a change management strategy to ensure that duplication is minimised on procurement and use of ICT installations as well increase clients on the existing NBI.

REFERENCES

Integrated Financial Management System Data FY 2019/20 (Development and Recurrent) as of 30ᵗʰJune 2020.

MFPED, 2019/20: *Approved Estimates of Revenue and Expenditure* (Recurrent and Development) Volume 1: Central Government Votes. Ministry of Finance, Planning and Economic Development, Kampala.

Ministry of Information and Communication Technology (2019); *Ministerial Policy Statement, FY 2019/2020 (Kampala 2019)*

Ministry of Information and Communication Technology (2019); *Quarter 4 Performance report FY 2019/20*

National Information Technology Authority (2019); *Quarter 4 Performance report FY 2019/20*

National Information Technology Authority (2020); Report of NITA-U Annual Performance FY 2019/20submitted to BMAU

National Planning Authority (2015*), Second National Development Plan (NDPII) 2015/16 – 2019/20*

Uganda Bureau of Statistics (2020) *Explore Statistics, population and census*, https://www.ubos.org/explore-statistics/20/

Uganda Communications Commission (2019), *Market Performance Report Q4 2019*.

Uganda Communications Commission (2020), *Market Performance Report Q2 2020*: https://www.ucc.co.ug/wp-content/uploads/2020/10/Industry-Perfomance-report-Q2-20.pdf

Annex 1: National ICT Initiatives Support Programme (NIISP) Phase Two Innovators

	Innovation title	Company name	Sector	Award amount
1	Illiphant-the African film and music video on demand app	M-idea Limited		100,000,000
2	Tax returns assistant mobile application	Techpro Systems ltd	Finance	50,000,000
3	Owc i app	Atamba Pharmaceuticals smc (u) ltd	Health	50,000,000
4	Bucxs	Bucxs Limited	Finance	100,000,000
5	Clinicmaster	Clinicmaster International	Health	300,000,000
6	Self-service kiosks	Afrolynx it Solution-smc Limited	Public administration	100,000,000
7	Dagala app	Dagala Limited	Health	100,000,000
8	Kaino	Kainoafrica	Education	100,000,000
9	Constituency farmers app	Buyaga Rural Women Health and Development Network	Finance	60,000,000
10	Mwalimu an intelligent content repository and education management system	Eurekalinks (u) Ltd	Education	50,000,000
11	Livestock farm-lite	Billbrain Technologies Limited	Agriculture	70,000,000
12	Mama ope	Mamaope Medicals Limited	Health	70,000,000
13	Eprocsys	Star e-solutions Limited	Public administration	300,000,000
14	Patasente	Patasente Limited	Finance	100,000,000
15	Akello banker	Quest Digital Finance Limited	Agriculture	100,000,000
16	Multi-factor authentication system	Leads it solution-smc Limited	Finance	100,000,000
17	E-registry	Govtec Limited	Public administration	200,000,000
18	A lite vein locator	A-lite Uganda Limited	Health	70,000,000
19	Smart medtech management system	Prime Biomedical Uganda Limited	Health	100,000,000
20	Chapchap	Chapchap Africa Limited	Finance	200,000,000
21	Mobi care	Mobicare Uganda Limited	Health	100,000,000
22	Getaplot	Getaplot Company Limited	Public administration	100,000,000
23	Sema	Stichting Sema	Public administration	100,000,000
24	Hr mmagic	Qed Solutions Limited	Public administration	100,000,000
25	Redah	Redah Informatics Limited	Public administration	300,000,000
26	E-lunda	Omni-tech Limited	Agriculture	74,900,000
27	Legal case file management systems	Infosec Technologies Limited	Public administration	100,000,000
28	Package for school management	Schoolmaster Solutions Ltd	Education	100,000,000
29	School education management and governance platform	School Africa Limited	Education	70,000,000
30	School management and business process tracking platform for school in Uganda	Schoolmaster Solutions Ltd	Education	100,000,000
31	Electronic document management system	Infoconsults International Limited	Public administration	100,000,000
32	National assets management system	Mpola fintech Group Limited	Public administration	300,000,000

	Innovation title	Company name	Sector	Award amount
33	Digital postal services management system	Citz Technologies Ltd	Public administration	100,000,000
34	Omulunzi information management system	Del Youth Group	Agriculture	70,000,000
35	Akatale app	Shopping List (U) Ltd	Finance	70,000,000
36	Mobile app for UNEB	Infotronics Business Systems	Education	250,000,000
37	Young engineers	African School of Innovations Science & Technology Limited	Education	100,000,000
38	Yonja	Yonja Mobile Solutions Ltd	Public administration	100,000,000
39	ICT as an enabler of business processing outsourcing in Uganda	Midas BPO Limited	Public administration	100,000,000
40	Jaguza	Jaguza Tech Uganda Limited	Agriculture	100,000,000
41	National education management system	Joint venture between Zeenode Uganda Limited and SMS One Uganda Limited	Education	100,000,000
42	Mylib	Softbox Limited	Education	100,000,000
43	Nano satelite technology	Space Technology Agency	Public administration	36,000,000
44	Strack	Global Auto Systems Ltd	Education	70,000,000
45	Unified medical laboratory sample tracker	Kumukutu Limited	Health	24,000,000
46	Travel Uganda monitor	Kole DLG	Agriculture	70,000,000
47	Photo-Kabada	Photo - Kabada Ltd	Health	38,380,000
48	Open platform for health management information system	Decimal Works Limited	Health	75,000,000
49	Saccs – comprehensively customised accounting software for clinics	Savie Media Ltd	Health	80,000,000
50	Agro-value chain manager	Billbrain Technologies Limited	Agriculture	70,000,000
51	Soul food	Millennial Lions (U) Company Limited	Agriculture	63,000,000
52	Blind assistant	Blind Assistants Club	Public administration	40,000,000
53	Mylclapp	Yest Innovations Limited	Public administration	6,300,000
54	Sign language dictionary and translator	Mosaic Tech Ltd		15,000,000
55	Autothermal	Neosave Technologies Company Ltd		100,000,000
56	An app for counselling university students on psycho social issues	Reban Group of Companies – SMC Ltd		70,000,000
57	Signtapp	Open Signs Impact Innovations Ltd		72,300,000
58	Digital speech assistant	Digital Speech Assistive Devices Limited		100,000,000
59	Education app	Onita Education Services		100,000,000
60	Integrated Intelligent Computer Systems (IICS)	Integrated Intelligent Computer Systems Ltd		50,000,000
	Total			**6,034,880,000**

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