



DIGITAL TRANSFORMATION PROGRAMME

SEMI-ANNUAL BUDGET MONITORING REPORT

FINANCIAL YEAR 2022/23

APRIL 2023

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TABLE OF CONTENTS

ACRONYMS	iv
FOREWORD	vii
EXECUTIVE SUMMARY	viii
CHAPTER 1: INTRODUCTION	1
1.1 Background	1
1.2 Programme Goal and Objectives.....	1
1.3 Sub-programmes	1
CHAPTER 2: METHODOLOGY	3
2.1 Scope	3
2.2 Approach and Methods	3
2.3 Data Collection and Analysis	3
2.4 Limitation	4
2.5 Structure of the Report	4
CHAPTER 3: PROGRAMME PERFORMANCE	5
3.1 Overall Programme Performance.....	5
3.2. Enabling Environment Sub-programme.....	6
3.3 Research, Innovation and ICT Skills Development Sub-programme	8
3.4. E-services Sub-programme	11
3.5 ICT Infrastructure Sub-programme.....	14
CHAPTER 4: CONCLUSION AND RECOMMENDATIONS	17
4.1 Conclusion.....	17
4.2 Recommendations	17
REFERENCES	18
Annex 1: List of interventions sampled for monitoring.....	19
Annex 2: List of Certified IT Service Providers during the first half of FY 2022/23	19
Annex 3: List of entities integrated with the data sharing and integration platform in the first half of FY 2022/23	21
Annex 4: List of entities enrolled on UMCS in the first half of FY 2022/23	22
Annex 5: BPO centres supported in the first half of FY 2022/23	22
Annex 6: List of Information security awareness sessions conducted in the first half of FY 2022/23	23
Annex 7: List of sites connected to the NBI in the first half of FY 2022/23	24
Annex 8: List of New applications & systems hosted in the National Data Centre in the first half of FY 22/23	25



ACRONYMS

4IR	Fourth Industrial Revolution
AIA	Appropriation in Aid
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
EMIS	Education Management Information System
EDRMIS	Electronic Document and Records Management Information System
E-GP	Electronic Government Procurement
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
GOVNET	Government Networks
IAC	Information Access Centre
ICT	Information, Communications Technology
ICTAU	Information Communications Technology Association of Uganda
IFMS	Integrated Financial Management System
iHMIS	integrated Health Management Information System
IPPS	Integrated Payroll and Pension System
ISO	International Standards Organisation
ITES	Information Technology Enabled Services
ITU	International Telecommunication Union
IXP	Internet Exchange Point
LG	Local Government
MBPS	Mega Byte Per Second
MBSA	Microsoft Business and Services Agreement
MDAs	Ministries, Departments and Agencies
MoICT&NG	Ministry of Information, Communications Technology and National Guidance
MoU	Memorandum of Understanding
NBI	National Backbone Infrastructure



NDC	National Data Centre
NDP III	Third National Development Plan
NEMA	National Environment Management Authority
NISF	National Information Security Framework
NITA-U	National Information and Technology Authority
NOC	Network Operating Centre
OFC	Optic Fibre Cable
PDMIS	Parish Development Model Management Information System
PBS	Programme Budgeting System
PWG	Programme Working Group
RCIP	Regional Communication Infrastructure Programme
SIGNET	Signal Network Limited
SLA	Service Level Agreement
SMS	Short Messaging System
SOPs	Standard Operating Procedures
ToRs	Terms of Reference
TV	Television
UBC	Uganda Broadcasting Corporation
UCC	Uganda Communications Commission
UDAP	Uganda Digital Acceleration Project
Ugshs	Uganda Shillings
UICT	Uganda Institute of Information Communication Technology
UMC	Uganda Media Centre
UMCS	Unified Messaging Collaboration System
UPL	Uganda Posts Limited
US\$	United States Dollar
Wi-Fi	Wireless (Internet)



FOREWORD

Uganda like many other countries in the world continues to be affected by the aftermaths of the Coronavirus Disease (COVID-19) pandemic, Russia's invasion of Ukraine, climate change effects, and increasing food prices among the many global shocks today. Amidst this environment, the Government has shown a strong commitment to innovatively raise and allocate resources to fund its strategic interventions, in a bid to build resilience and drive sustainable economic growth and development.

For this Financial Year 2022/23, the semi-annual programme monitoring findings show a fair performance across the board, with a few programmes on track to achieving their annual goals. This performance notwithstanding, there are still many perennial challenges that are putting many government interventions at risk of not achieving their intended objectives.

Since we are operating in an environment of scarcity, it is imperative that we expedite the processes of streamlining and strengthening our planning, implementation, monitoring and execution of Government programmes. We must harness the comparative advantages expected from operating in a programme mode. To that effect, all Ministries, Departments, Agencies and Local Governments should critically review the noted challenges and institute innovative ways of circumventing them during the remaining months.

Ramathan Ggoobi

Permanent Secretary/Secretary to the Treasury



EXECUTIVE SUMMARY

The Digital Transformation (DT) Programme seeks to increase information and communication technology (ICT) penetration and use of ICT services for social and economic development. The key expected results include: increasing ICT penetration; reducing cost of ICT devices and services; creating more direct jobs in the sector; increasing ICT incubation; and increasing government services online.

The Ministry of Information, Communication Technology and National Guidance (MoICT&NG) plays the lead and coordination role of programme activities with supportive roles from the National Information Technology Authority-Uganda (NITA-U). Other core agencies include the Uganda Broadcasting Corporation (UBC), Uganda Communications Commission (UCC), Posta-Uganda, and Uganda Institute of Communication Technology (UICT).

The DT Programme interventions are implemented under four sub-programmes: Enabling Environment; Research, Innovation and ICT Skills Development; ICT Infrastructure; and e-services. This report contains budget monitoring findings for the period 1st July to 31st December 2022 detailing the performance of the planned interventions under the four sub-programmes.

Performance

The DT Programme approved budget for Financial Year (FY) 2022/23 is Ug shs 243.335 billion (bn) of which Ug shs 120.266bn (49.42%) was released and Ug shs 108.239bn (90% of the release) spent by 31st December 2022. At the programme level, both the release and expenditure performance were good and very good respectively. The Enabling Environment Sub-programme received 57.54% of the annual budget, whereas the other sub-programmes got less than 40% of their annual budget. The E-services Sub-programme had the least release absorption at 59.29% of the budget, whereas the Enabling Environment Sub-programme had the highest budget release absorption at 93%. About 77.1% of the budget release under the enabling environment sub-programme was spent on payment of pension and gratuity arrears.

The Digital Transformation Programme's overall output performance was good at 70.8%. The Enabling Environment; and Research, Innovation and ICT Skills Development Sub-programmes performance was good at 89.8% and 85.8% respectively, whereas ICT Infrastructure performed fairly and E-services attained poor performance, mainly attributed to low budget releases during the first quarter.

Enabling Environment

The regulatory impact assessment report for the Business Process Outsourcing (BPO) Policy was finalised and a Memorandum of Understanding (MoU) between M/s Monenco Iran Consulting Engineers and the MoICT&NG for the provision of technical support in telecom and data governance in Uganda was signed. The basic skills for data analysis and visualization using artificial intelligence and machine learning were acquired by MoICT&NG. The NITA-U developed four IT standards during the period under review.



Research, Innovation and ICT Skills Development Sub-programme

The MoICT&NG developed and piloted the Parish Development Model (PDM) Management Information System (PDMIS) registration and financial inclusion system and reviewed the system requirements for the Integrated Health Management Information System (iHMIS). Quality assurance and information security audits for the electronic government procurement (e-GP), iHMIS, Education Management Information Systems (EMIS), and Electronic Document and Records Management Information System (EDRMIS) were provided to the developers. The fourth Industrial Revolution (4IR) strategy was launched and draft ICT Intellectual Property guidelines were developed. Three ICT innovation hubs established in FY2021/22 at Kabale, Muni and Soroti Universities were operationalised. The National ICT Innovation Hub at Nakawa was hosting eleven innovators compared to seven (7) in FY2021/22. A total of 71 IT services providers were certified and technical support was provided to Ug Hub Data Integration Project.

E-services

A total of 31 entities were enrolled on the whole of government integration; six websites were developed; and ten entities on boarded on the Unified Messaging and Collaboration System (UMCS) by NITA-U. The NITA-U also provided eight Computer Emergency Response Team (CERT) advisories and alerts; and supported 17 Ministries, Departments and Agencies (MDAs) on malware prevention and website defacement.

ICT Infrastructure

The MoICT&NG finalised the draft Regulatory Impact Assessment Report for spectrum management in Uganda and surveyed standards of ICT and e-government services provided by post offices in Western, Eastern and Northern regions. The NITA-U delivered bulk internet to 1,241 sites and connected 12 MDAs and target user groups to the National Backbone Infrastructure (NBI).

Conclusion

The overall Digital Transformation Programme (DTP) performance was good with 73.55% of the half-year targets achieved. The release performance by half year was good with 49.4% of the annual budget received and 90% of the received funds spent. The Enabling Environment Sub-programme performed better than other sub-programmes. Despite the good performance, the uptake of e-services was still low. A total of 420 wireless hotspots were established across the country in the previous financial years, however only 300 were maintained and supplied with the internet during the period under review. The low number of MDAs connected to the NBI is likely to delay the reaping of returns on investment for the various ICT infrastructure established and prepaid internet over NBI. The key challenges included: the lack of a programming interface for applications developed by some MDAs that affected their integration onto the data sharing platform; inadequate budget/lack of funds to procure ICT equipment for data collection for the PDM; and delayed approval of the Uganda Digital Project (UDAP) which greatly hindered the commencement of the planned infrastructure activities.



Recommendations

1. The DT Programme Working Group and the Ministry of Finance, Planning and Economic Development (MFPED) should prioritise funding for critical technological interventions.
2. The NITA-U/MoICT should enforce the rationalization and harmonization of IT initiatives and services in MDAs to ensure the compatibility of the developed applications with national data-sharing platforms.
3. The DT Programme secretariat and MoICT should review the existing frameworks and implement the broadband policy to reduce the cost of internet and gadgets and increase ICT uptake.



CHAPTER 1: INTRODUCTION

1.1 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.*”

The MFPED through its Budget Monitoring and Accountability Unit (BMAU) tracks the implementation of programmes/projects by observing how values of different financial and physical indicators change over time against stated goals, indicators and targets (how things are working). The BMAU work is aligned with budget execution, accountability, service delivery, and implementation of the Domestic Revenue Mobilisation Strategy (DRMS).

The BMAU is undertaking Programme-Based Monitoring to assess performance against targets and outcomes in the Programme Implementation Action Plans (PIAPs) of the third National Development Plan (NDPIII). The Semi-Annual and Annual field monitoring of government programmes and projects are undertaken to verify the receipt, and application of funds by the user entities and beneficiaries, the outputs and intermediate outcomes achieved, and the level of gender and equity compliance in the budget execution processes. The monitoring also reviews the coherency in implementing the PIAP interventions/outputs; the level of cohesion between sub-programmes; and the challenges of implementation.

The monitoring covered the following Programmes: Agro-Industrialization; Community Mobilisation and Mindset Change; **Digital Transformation**; Human Capital Development; Innovation, Technology Development and Transfer; Integrated Transport Infrastructure and Services; Mineral Development; Natural Resources, Environment, Climate Change, Land and Water Management; Public Sector Transformation; Regional Development; Sustainable Development of Petroleum Resources; and Sustainable Energy Development.

This report presents findings from monitoring the Digital Transformation Programme for the budget execution period from 1st July 2022 to 31st December 2022.

1.2 Programme Goal and Objectives

The Digital Transformation Programme is envisaged to increase ICT penetration and use of ICT services for social and economic development. The objectives of this programme as laid out in the NDP III are to:

- i) Increase the national ICT infrastructure coverage;
- ii) Enhance usage of ICT in national development and service delivery;
- iii) Promote ICT research, innovation and commercialization of indigenous knowledge products;
- iv) Increase the ICT human resource capital; and
- v) Strengthen the policy, legal and regulatory framework.



1.3 Sub-programmes

The National Digital Transformation Programme is implemented through the following sub-programmes:

- i) Enabling environment;
- ii) Research, Innovation and ICT Skills Development
- iii) E-services; and
- iv) ICT Infrastructure.



CHAPTER 2: METHODOLOGY

2.1 Scope

This report is based on selected sub-programme interventions and outputs under the Digital Transformation Programme that are contributed to by the following votes: Vote 020: Ministry of Information, Communication Technology and National Guidance (MoICT&NG); and Vote 126: National Information Technology Authority of Uganda (NITA-U). The selection of areas to monitor is based on a number of criteria:

- Outputs were planned for and undergoing implementation in the period of review
- Significance of the budget allocations to the sub-programmes within the programme budgets, with focus being on large expenditure interventions. Preference is given to development expenditure.
- Potential of interventions to contribute to programme and national priorities.

Out of the 22 interventions, 12 were monitored (Annex 1: List of interventions sampled for monitoring).

2.2 Approach and Methods

Both qualitative and quantitative methods were used in the monitoring exercise. The physical performance of planned outputs was assessed through monitoring a range of indicators and linking the progress to reported expenditure and/or planned targets. The purposive sampling method was used in selecting outputs from the Programme Implementation Action Plans (PIAPs), Ministerial Policy Statements (MPS) and progress reports of the respective Ministries, Departments, and Agencies (MDAs) for monitoring. Multi-stage sampling was undertaken at three levels: i) Sub programmes ii) intervention and iii) outputs.

2.3 Data Collection and Analysis

Data collection

Both primary and secondary data were collected from the sources and by the means that are indicated below:

- i) Literature review: MPS FY2022/23; National and Programme Budget Framework Papers; PIAPs, The third National Development Plan (NDP III), periodic progress reports and work plans for the respective implementing agencies, Budget Speech, Public Investment Plans, Approved Estimates of Revenue and Expenditure, project reports.
- ii) Review and analysis of data from the Integrated Financial Management System (IFMS); Program Budgeting System (PBS); Institutional Websites; and Quarterly Performance Reports.
- iii) Consultations and key informant interviews with project managers and activity implementers.
- iv) Field visits to various project sites for primary data collection, observation and photography.
- v) Call-backs in some cases were made to triangulate information.



Data Analysis

Both qualitative and quantitative approaches were used to analyse the data. Qualitative data was examined and classified in terms of constructs, themes or patterns to explain events among the beneficiaries (interpretation analysis) and reflective analysis where the monitoring teams provided an objective interpretation of the field events.

Quantitative data on the other hand was analyzed using advanced Excel tools to aid interpretation and presented in form of tables.

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 programme performance. This was derived from the approved annual budget of each output divided by the 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 attained outputs contributed 100% to the overall semi-annual programme performance.

The overall programme performance is an average of individual sub-programme performances assessed. The performance of the programme and sub-programme was rated on the basis of the criterion in **Table 2.1**. Based on the rating assigned, a traffic light colour-coded system was used to alert the policymakers and implementers on whether the interventions were achieved (Green), on track (Umber) or off track (Red) to aid decision-making.

Table 2.1: Assessment guide to measure performance in FY 2022/23

Score	Comment	Performance Rating
90% and above	Very Good (Achieved at least 90% of outputs)	Green
70%-89%	Good (Achieved at least 70% of outputs)	Yellow
50%- 69%	Fair (Achieved at least 50% of outputs)	Orange
49% and below	Poor (Achieved below 50% of outputs)	Red

Source: Author's Compilation

2.4 Limitation

Lack of disaggregated financial information for some outputs that contribute to several interventions.

2.5 Structure of the Report

The report is structured into four chapters. These are Introduction; Methodology; Programme Performance; and Conclusion and Recommendations respectively.



CHAPTER 3: PROGRAMME PERFORMANCE

3.1 Overall Programme Performance

The Digital Transformation Programme (DTP) overall performance was good at 70.8% as shown in Table 3.1. The Enabling Environment Sub-programme performed better than other sub-programmes.

Table 3.1: Digital Transformation Programme Performance as at 31st December 2022

Sub-programme	Performance Rating (%)	Remark
Enabling environment	89.87	Good
Research, Innovation and ICT skills development	85.86	Good
E-services	43.87	Poor
ICT Infrastructure	63.58	Fair
Average	70.79	Good

Source: Author

The DT Programme approved budget is Ug shs 243.335bn, of which Ug shs 120.266bn (49.42%) was released and Ug shs 108.239bn (90% of the release) spent by 31st December 2022. At the programme level, both the release and expenditure performance were good and very good respectively (Table 3.2).

The Research, Innovation and ICT Skills Development; and E-services sub-programmes had the least budget release, whereas the Enabling Environment Sub-programme had a good budget release, having gotten 57.54% of the annual budget. The other sub-programmes received less than 40% of their annual budget as shown in table 3.2. The E-services had the least absorption at 59.29% of the budget release, whereas the Enabling Environment Sub-programme had the highest budget release absorption at 93%. About 77.1% of the budget release under the Enabling Environment Sub-programme was spent on payment of pension and gratuity arrears. This implied that the core programme deliverables may not be achieved. The low budget releases during Q1 affected the performance of the E-services and ICT Infrastructure sub-programmes.

Table 3.2: Programme budget allocation and outturn by 31st December 2022

Sub-programme	Budget (Ug shs, bn)	Release (Ug shs, bn)	Spent (Ug shs, bn)	% Release	% Spent
ICT Infrastructure	31.162	11.914	11.016	38.23	92.46
E-services	14.142	4.927	2.921	34.84	59.29
Research, Innovation and ICT Skills Development	39.172	12.015	9.389	30.67	78.15
Enabling Environment	158.858	91.409	84.912	57.54	92.89
Total	243.335	120.266	108.239	49.42	90.00

Source: IFMS



3.2 Enabling Environment Sub-programme

The sub-programme aims at strengthening the policy, legal and regulatory framework of the DT programme and has two interventions to be implemented over the NDPIII period. These are: review and develop appropriate policies, strategies, standards and regulations that respond to industry; and regulate, coordinate and harmonize ICT infrastructure planning, sharing and deployment within the public and private sector.

Performance

The overall sub-programme performance was good at 89.87%; four IT standards were developed and basic skills for data analysis and visualization using Artificial Intelligence (AI) and machine learning were acquired by MoICT&NG staff (table 3.4). The detailed performance of the two monitored interventions is given in the ensuing sub-sections.

3.2.1 Review and develop appropriate policies, strategies, standards and regulations that respond to industry needs

The intervention aims at strengthening the ICT policy, legal and regulatory framework and the planned outputs for FY2022/23 include: policies, regulations and standards planning and budgeting services developed; administration and support services and; data protection and privacy policy developed. The performance of the intervention is given below;

A review of the National ICT Policy and Business Process Outsourcing (BPO) Policy was ongoing. Stakeholder engagements for the National ICT Policy were finalized in Q2 and submission to the Cabinet secretariat is expected in Q3. The Regulatory Impact Assessment report for the draft BPO policy was finalized.

The NITA-U developed four IT standards against the annual target of five standards as listed in table 3.3. The NITA-U also conducted two sensitization engagements with the Office of the President and the National Building Review Board (NBRB), and 67 awareness sessions on data protection and privacy; and reviewed the annual audit plan.

Table 3.3: Information Technology standards developed in the first half of FY 2022/23

S/N	Standard	Description of the developed standards
1	FDUS ISO 17363:2013 Supply chain applications of RFID — Freight containers.	The standard defines the usage of read/write radio-frequency identification technology (RFID) cargo shipment-specific tags associated with containerized freight for supply chain management purposes (“manifest tags”).
2	FDUS ISO 17364:2013 Supply chain applications of RFID — Returnable transport items (RTIs) and returnable packaging items (RPis)	The standard provides specifications for the identification of the RTI and the returnable packaging item (RPI); makes recommendations about additional information on the RF tag; specifies the semantics and data syntax to be used; and the air interface standards between the RF interrogator and RF tag.
3	FDUS ISO/IEC 9594_8:2020/ Cor 1:2021 Information technology — Open systems interconnection — Part 8: The Directory: Public-key and attribute certificate frameworks - Technical Corrigendum	The standard addresses some of the security requirements in the areas of authentication and other security services through the provision of a set of frameworks upon which full services can be based specifically focusing on public-key certificates and attribute certificates.
4	Information Technology – Generic cabling for customer premises – Part 1: General requirements	This standard specifies a multi-vendor cabling system which may be implemented with material from single or multiple sources.

Source: NITA-U



3.2.2 Regulate, coordinate and harmonize ICT infrastructure planning, sharing and deployment within the public and private sector

The intervention contributes to the programme's objective of strengthening the policy, legal and regulatory framework. The planned output for FY2022/23 is ICT infrastructure planned, developed and managed.

Mapping of ICT infrastructure information requests with utility sectors was undertaken by MoICT&NG. With support from UN Global Pulse Laboratory, an introduction to basic skills and tools training for data analysis, and visualization using artificial intelligence (AI) and machine learning was undertaken. A Memorandum of Understanding (MoU) between the Ministry and Monenco Iran Consulting Engineers was signed for the provision of technical support in telecommunications and data governance in Uganda. The MoICT&NG developed a concept paper for business promotion tools and materials for the BPO/Information Technology Enabled Service (ITES) industry. The key challenge was a shortfall in funding during the period under review.

Table 3.4: Performance of the Enabling Environment Sub-programme as at 31st December 2022

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (Ug shs, bn)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Review and develop appropriate policies, strategies, standards and regulations that respond to industry needs	Planning and budgeting services	1.040	21.1	98	15.00	2.00	63.29	Fair performance
	Data protection and privacy	0.165	12.1	98	9.00	1.50	100.00	Very good performance
	Legal and advisory services	0.251	18.7	98	8.00	2.30	100.00	Very good performance
	Policies, regulations and standards	0.175	41.5	86	7.00	2.70	93.03	Very good performance
	Administration and support services	0.175	41.5	86	7.00	2.70	93.03	Very good performance
Average Outputs Performance							89.87	Good performance

Source: IFMS, NITA-U & MoICT&NG

Conclusion

The Enabling Environment Sub-programme output performance was good at 89.87% with most of the planned and funded activities implemented. Although the budget performance of the sub-programme was good, 77% of the released funds were for payment of gratuity and pension arrears. A review of the digital transformation legal and regulatory frameworks was ongoing through at initial stages of reviews and stakeholder consultations. The delays in finalizing legal, policy and regulatory frameworks are likely to impact the country to leverage the benefits of a highly revolving ICT ecosystem. Basic skills for data analysis and visualization using artificial



intelligence and machine learning were acquired. However, the budget shortfalls affected the implementation of some activities like monitoring of programme activities, training of staff, and undertaking surveys among others.

3.3 Research, Innovation and ICT Skills Development Sub-programme

The sub-programme aims to promote ICT research, innovation and commercialization of indigenous knowledge products and increase the ICT human resource capital. The sub-programme has 11 interventions, of which six (6) were under implementation. These include: develop and implement ICT Research and Innovation ecosystem; develop innovation and incubation centres; support local innovation and promote export of knowledge products; promote local manufacturing and assembly of ICT products; develop a well-grounded ICT professional workforce; and develop an ICT professional's quality assurance framework. All six interventions under implementation were monitored.

Performance

The sub-programme overall performance was good at 85.9% for the outputs funded during the period under review (table 3.5). However, some of the planned activities were not implemented due to budget constraints. The detailed performance of the monitored interventions is given hereafter.

3.3.1 Develop and implement ICT Research and Innovation ecosystem

The intervention contributes to the objective of promoting ICT research, innovation and commercialization of indigenous knowledge products. The planned outputs for the FY2022/23 include: information systems and innovation fund managed, and support to the Uganda Institute of Information and Communication Technology (UICT) provided.

Innovation Fund management

The MoICT&NG reviewed the systems requirements and specifications for the Integrated Hospital Management Information System, and National Assets Information Management System (NAIMS). The PDMIS Registration and Financial Inclusion System was launched and piloted to collect data from 48% of the Parishes in Uganda. The 4th industrial revolution strategy was launched and the Innovation Hub was promoted through the Ministry's social media pages.

Support to UICT

In a bid to operationalize the National ICT Innovation Hub, four (4) staff were recruited¹. In partnership with Crossroad's Animation Uganda, the Hub conducted a 3D Animation boot camp that provided a practical overview of computer animation. The animation training was attended by 127 participants (127 males, and 30 females). The Innovation Hub in collaboration with UICT under the Digital Literacy Program has admitted 1,228 students for short CISCO courses of which 219 have completed during the period under review.

3.3.2 Develop ICT centres of excellence and vocational institutions

The intervention contributes to the programme's objective of increasing the ICT human resource capital. The planned outputs for FY2022/23 are inclusive access to quality ICT training at the tertiary education level ensured, and five BPO/ITES centres supported.

The UICT admitted 600 students for diploma programs under government sponsorship for the academic year 2022/23. The NITA-U supported 11 BPO centres during this period, three of which were new centres supported through internet connectivity.

¹ Hub Technical Service Associate; Physical Facilities Associate; Hub Procurement Associate; Public Relations and Communications Associate



3.3.3 Develop innovation and incubation Centres

The intervention contributes to the programme's objective of promoting ICT research, innovation and commercialization of indigenous knowledge products. The planned outputs for the FY2022/23 are regional ICT hubs supported, and grants to ICT innovators provided.

The MoICT&NG established and operationalized three ICT innovation hubs at Muni, Soroti and Kabale universities. The MoICT&NG implemented a partnership with Refactory Uganda to provide advisory services to the National ICT Innovation Hub with a specific focus on innovation, incubation and acceleration processes. An MoU was signed with the Innovation Village and Estonian Development Agency aimed at benefiting all innovators that the village works with and supporting those within the ICT innovation ecosystem. No grants were extended to ICT innovators due to inadequate budget releases.

3.3.4 Support local innovation and promote export of knowledge products

The intervention also contributes to the programme's objective of promoting ICT research, innovation and commercialization of indigenous knowledge products. The planned outputs for the FY2022/23 are BPO and innovation hub support service provided.

The MoICT&NG profiled core ICT and Non-ICT based BPO companies and conducted a BPO/ITES industry situational monitoring and evaluation exercise. The ministry also signed an MoU with various agencies for support in capacity building (Refactory and MTN) and business mentoring (Outbox); developed a concept paper for business promotion tools and materials for the BPO/ITES services industry; and held preparatory engagements for the visit of Japanese technopreneurs to Uganda in collaboration with Japanese International Cooperation Agency.

The MoICT&NG reviewed the system requirements for the development of a National Assets Information Management System and assured quality for the Parish Development Model Information Systems and the Online Business Registration System for Uganda Registration Services Bureau (URSB). The MoICT&NG participated in review and contract management meetings for the development of the Education Management Information System, E-Government Procurement Systems, Online Business Registration System, and Electronic Document and Records Management System.

The National ICT Innovations Hub at Nakawa is being managed by the Uganda Institute of Communication Technology (UICT) and is operational though at a low scale. The hub is hosting eleven (11) innovator groups² in the fields of coding training; e-commerce; product visualization; education; entertainment; information and records management; transport and logistics; and premise security (artificial intelligence). There were no grants extended to innovators under NIISP due to inadequate budget releases during the period under review.

3.3.5 Promote local manufacturing and assembly of ICT products

The intervention aims at promoting and supporting local ICT assembly and manufacturing through the promotion of ICT research, innovation and commercialization of indigenous knowledge products. The planned output for the FY2022/23 is ICT services provided.

² Code Impact; Sumic Online; Elago Technologies Ltd; Wal-e-Visual; Crossroads Animation; Technology Innovation Association; E-posta; Info Consults International; Kacyber Technologies; Ridelink and Askari Project.



The MoICT&NG provided quality assurance and information security audits for the following systems: e-Government Procurement System (e-GP); Integrated Hospital Management Information System (iHMIS); Education Management Information System (EMIS); and Electronic Document and Records Management Information System (EDRMIS). The EDRMIS was piloted at the MoTIC&NG and Uganda Retirements Benefits Regulatory Authority (URBRA). A generator for the National Innovation Hub-Nakawa was procured and delivered. The Draft ICT Intellectual Property guidelines were developed and validation by stakeholders was scheduled in Q3. The MoICT&NG provided technical support to the National Identification Registration Authority (NIRA) in the due diligence exercises for determining the technologies for the new system.

3.3.6 Develop an ICT professional's quality assurance framework

The intervention planned key deliverable over the NDPIII period is the certification framework to regulate ICT professional standards developed. The planned outputs for the FY2022/23 include: legal and advisory services;

The NITA-U certified 71 IT service providers against the annual target of 100 (Annex 2: List of Certified IT Service Providers during the first half of FY 2022/232) and conducted 11 sensitization engagements to increase awareness of the IT laws and regulations. The stakeholder engagements with the Uganda National Bureau of Standards (UNBS) to review and provide input in the IT products certification regulations were also held. A compliance assessment plan to guide the compliance assessments for FY 2022/23 was developed. The NITA-U supported the implementation of the Last Mile Project and UgHub Data Integration Project.

Table 3.5: Performance of the Research, Innovation and ICT Skills Development Sub-programme as at 31st December 2022

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (Ug shs, bn)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Support local innovation and promote export of knowledge products	E-services	0.222	44.8	85	2.00	1.00	100.00	Very good performance
	BPO Support services	5.842	2.7	73	4.00	1.20	100.00	Very good performance
Develop and implement ICT Research and Innovation ecosystem	Innovation fund management	1.20	6.3	68	3.00	0.80	100.00	Very good performance
	Support to UICT	9.360	41.8	72	2.00	0.40	47.88	Poor performance
Develop ICT centres of excellence and vocational institutions	Grants to ICT innovators	4.0	9.3	6	2.00	0.40	100.00	Very good performance



Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (Ug shs, bn)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Promote local manufacturing and assembly of ICT products	ICT services	2.643	39.9	78	24.00	8.50	88.80	Good performance
Support local innovation and promote export of knowledge products	Grants to ICT innovators	7.181	86.6	69	5.00	2.00	46.18	Poor performance
	Support to UICT	8.440	13.0	100	10.00	3.00	100.00	Very good performance
	Support to regional ICT hubs	0.220	44.5	90	10.00	4.00	89.89	Good performance
	Average Outputs Performance						85.86	Good performance

Source: IFMS, Field Reports and Findings

Conclusion

The sub-programme output performance was good at 85.8%. Three innovation hubs were operationalized and several others were supported, however, there were no grants extended to innovators under NIISP due to budget releases and this is likely to affect the promotion of ICT research, innovation and commercialization.

3.4. E-services Sub-programme

The sub-programme goal is enhanced usage of ICT in national development and service delivery and has six interventions to be implemented over the NDPIII period. The current monitoring covered three interventions: mainstream ICT in all sectors of the economy and digitize service delivery; strengthen cyber security in the country; and digitize, archive and commercialize local content and data.

Performance

The sub-programme performance was poor at 43.87% with most of the planned activities at the initial stages of implementation (table 3.6) due to inadequate budget releases (34.8% of the approved budget released). Mainstreaming of ICT in all sectors of the economy and digitizing service delivery intervention performed fairly, whereas strengthening cyber security in the country performed poorly. The detailed performance of the two monitored interventions is given hereafter.

3.4.1 Mainstream ICT in all sectors of the economy and digitize service delivery

The intervention contributes to the programme's objective of enhanced usage of ICT in national development and service delivery. The intervention seeks to promote interoperability, data sharing and integration of government systems; and the rollout of e-services to citizens and government institutions. The planned outputs for the FY2022/23 include: e-services rolled out; parish development model (PDM) equipment procured; and PDM operations supported.

E-services rolled out



During the period under review, three (03) modules of the PDMIS (Citizen Participation Information System, Financial Inclusion System and M&E) were tested for User Acceptance and piloted in six (6) districts. The integration of the PDMIS onto the SMS gateway to disseminate information on the Financial Inclusion Pillar was finalized. The first draft of the Business Process Outsourcing (BPO) Bill and scheme of service for ICT norms and cadres across the government were developed.

The NITA-U enrolled a total of thirty-one (31) entities onto the whole of government integration (Annex 3: List of entities integrated with the data sharing and integration platform in the first half of FY 2022/23) and data sharing platform and developed six additional websites . A total of 10 entities were on-boarded onto the Unified Messaging and Collaboration System (UMCS) (Annex 4: List of entities enrolled on UMCS in the first half of FY 2022/23) bringing the cumulative total of 138 entities enrolled to UMCS. During the period under review, 3,496 MDA/ LG tickets were issued and handled by the service desk.

Technical support was provided in the preparation of knowledge transfer and cooperation frameworks between the Ministry of ICT & NG and three external entities: International Youth Fellowship, Ministry of Economic Affairs- Estonia, and Ministry of ICT - Vietnam. Technical support was provided to the Ministries of: Foreign Affairs, and Health for the development of Integrated System and ICT interventions as linkage to care of presumptive Tuberculosis (TB) patients respectively.

The MoICT&NG provided technical support to 16 MDAs and eight Local Governments (LGs) in the development and implementation of the following systems: The Parish Development Model Information Systems; e-Government Procurement System; Electronic Document Management Systems; Online Business Registration System; the National Identification System; Hospital Management System; and the Education Management Information System. The NITA-U supported eleven BPOs through the extension of NBI connectivity and price stabilization that created 50 employment opportunities (Annex 5: BPO centres supported in the first half of FY 2022/23).

Procurement of PDM equipment and support to PDM operations were not implemented due to inadequate budget releases during the period under review.



3.4.2 Strengthen Cyber Security in the country

The intervention aims at enhancing cyber security through the implementation of the National Information Security Framework (NISF); provision of Computer Emergency Response Teams (CERTs) services; utilization of the national cyber threat intelligence platform; and training in cybercrime investigation and prosecution. The planned outputs for the FY2022/23 include: cyber security strengthened.



Equipped CERT-UG working environment

The NITA-U provided technical support to 17 MDAs on malware prevention, website defacement and network support, and disseminated eight CERT advisories and alerts (Annex 6: List of Information security awareness sessions conducted in the first half of FY 2022/23). The NITA-U conducted three NISF assessments. However, most of the planned outputs were not implemented due to budget constraints. This poses a threat to ICT users in terms of preparedness for cyber insecurity.

Table 3.6: Performance of the E-services Sub-programme as at 31st December 2022

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (Ug shs, bn)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Mainstream ICT in all sectors of the economy and digitize service delivery	E-services	0.514	28.7	99	5.00	2.00	100.00	Very good performance
	PDM equipment	4.80	31.3	-	4038	0.00	0.00	Poor performance
	PDM Operations	0.480	31.3	63	2.00	0.00	0.00	Poor performance
	E-services	6.351	35.3	100	7.00	3.00	100.00	Very good performance
Strengthen Cyber Security in the country	Cyber security	0.106	34.5	86	15.00	1.00	19.34	Poor performance
Average Outputs Performance							43.87	Poor performance

Source: IFMS, Field Reports and Findings



Conclusion

The sub-programme performance was poor at 43.87% with most planned outputs at the initial stages of implementation. The poor performance was attributed to inadequate budget releases that affected procurement of ICT equipment for data collection for the Parish Development Model; sensitization on cyber security, and lack of a programming interface for applications developed by MDAs for integration on the data sharing platform. This is likely to negatively impact the attainment of the sub-programme goal of enhanced usage of ICT in national development and service delivery.

3.5 ICT Infrastructure Sub-programme

The sub-programme goal is to increase national ICT infrastructure coverage and has three interventions to be implemented over the NDPIII period. The sub-programme output performance was fair at 62.58% (table 3.7). The detailed performance of the two monitored interventions is given hereafter.

3.5.1. Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last-mile connectivity to key areas (districts, sub-counties, schools, hospitals)

The intervention contributes to the sub-programme goal of increased national ICT infrastructure coverage through extension of the national backbone infrastructure and connection and provision of internet to MDAs. The planned outputs for the FY2022/23 are infrastructure development and management; infrastructure planning; and ICT infrastructure deployment.

Infrastructure development and management

The MoICT&NG collected information for the development of the Digital Transformation Programme Coordination Framework through the ICT cluster under the Northern Corridor Integration Project (NCIP). The Department of Data Networks Engineering participated in meetings on spectrum allocation and management in Uganda undertaken in collaboration with the Korea Information Society Development Institute (KISDI) aimed at drafting the strategy for the delivery of radio and digital TV services using alternative platforms. A draft Regulatory Impact Assessment Report for Spectrum Management and policy recommendations for organizational structure and pricing in the management of spectrum were developed.

ICT infrastructure planning

To promote the usage of post offices for the delivery of e-government service, the MoICT&NG surveyed standards of ICT and e-Government services provided by Post Offices in the Western, Eastern and Northern regions of Uganda. The MoICT&NG also attended the East African Community (EAC) regional workshop in Moshi-Tanzania on the validation of a draft framework on e-commerce-related aspects for consumer protection for postal services in the East Africa region.

The mapping of ICT infrastructure information requests with utility sectors was undertaken and three system modules were completed for the Parish Development Model Information Management System. Questionnaires for the needs assessment of the ICT infrastructure at health centres were designed.



ICT infrastructure deployment

The NITA-U delivered bulk internet to 1,241 sites and connected twelve (12) MDAs/LGs and target user groups (TUG) sites to the NBI (Annex 7: List of sites connected to the NBI in the first half of FY 2022/23) against the annual target of 70MDAs. The NITA-U also maintained 300 MyUG free wifi sites across the country running. The internet service was maintained at 99.8% availability. New infrastructure was extended due to delayed approval of the Uganda Digital Acceleration Project (UDAP).



L-R: Optic fibre cables extended to Mbarara DLG, and serviced TUG at Hive collab Mbarara

3.5.2. Establish and enhance national common core infrastructure (data centres, high power computing centres, specialized labs)

The intervention has two key planned deliverables over the NDPIII period: Third National Data Centre established and the enhancement of usage of the National Data Centre (NDC). The planned output in the FY22/23 is IT infrastructure and systems maintained.

The NDC service time was maintained at 100% and a total of 44 new applications were hosted bringing the cumulative number of applications hosted to 237 from 99 entities (Annex 8: List of New applications & systems hosted in the National Data Centre in the first half of FY 22/23). Six MDAs were enrolled onto the Microsoft baseline security analyzer (MBSA) bringing the total to 59 MDAs enrolled and consuming 2,900 licenses.

**Table 3.7: Performance of the ICT Infrastructure Sub-programme as at 31st December 2022**

Intervention	Output	Financial Performance			Physical Performance			Remark
		Annual Budget (Ug shs, bn)	% of budget received	% of budget spent	Annual Target	Cum. Achieved Quantity	Physical performance Score (%)	
Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last-mile connectivity to key areas	Infrastructure development and management	0.427	40.9	96	4.00	1.00	61.14	Fair performance
	Infrastructure planning	0.373	37.6	79	3.00	1.10	97.39	Very good performance
	Infrastructure planning	21.048	43.6	99	3.00	1.20	91.81	Very good performance
Establish and enhance national common core infrastructure (data centres, high power computing centres, specialized labs)	ICT Infrastructure deployment	4.464	33.3	-	14.00	0.00	0.00	Poor performance
Overall output performance							62.5	Fair performance

Source: IFMS, Field Reports and Findings

Conclusion

The sub-programme performance was fair 62.6%. The MoICT&NG signed several partnerships for ensuring a streamlined ICT infrastructure planning and deployment. However, the number of MDAs connected to the NBI was below the target and no ICT infrastructure was put in place. This was attributed to inadequate budget releases and delayed approval of the Uganda Digital Acceleration Project. The low number of MDAs connected to the NBI is likely to affect reaping the returns on investment for the various ICT infrastructure established and prepaid internet over NBI.



CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The overall Digital Transformation Programme (DTP) performance was good with 70.8% of the half-year targets achieved. The release performance by half year was good with 49.4% of the annual budget received and 90% of the received funds spent. The Enabling Environment Sub-programme performed better than other sub-programmes. Even though the programme performance was good, uptake of e-services was still low. A total of 420 wireless hotspots were established across the country in the previous financial years, however only 300 were maintained and supplied with the internet during the period under review. The low number of MDAs connected to the NBI is likely to affect the returns on investment for the various ICT infrastructure established and prepaid internet over NBI. The key programme challenges included: the lack of a programming interface for applications developed by some MDAs that affected their integration onto the data sharing platform, inadequate budget for releases and lack of funds to procure ICT equipment for data collection for the Parish Development model, and delayed approval of the Uganda Digital Acceleration Project which greatly hindered the early commencement of the planned infrastructure activities.

4.2 Recommendations

1. The DT Programme Working Group and MFPED should prioritise funding for the critical technological infrastructure under the Uganda Digital Acceleration Project.
2. The NITA-U/MoICT should enforce the rationalization and harmonization of IT initiatives and services in MDAs strategy (2012) to ensure compatibility of the developed applications with national data-sharing platforms.
3. The DT Programme secretariat and MoICT should review the existing frameworks and implement the Broadband Policy to reduce the cost of internet and gadgets and increase ICT uptake.



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National Planning Authority (2020), *Third National Development Plan (NDPIII) 2020/21 – 2024/25*



Annex 1: List of interventions sampled for monitoring

Sub-programme	Intervention
Enabling Environment	Review and develop appropriate policies, strategies, standards and regulations that respond to industry needs
	Regulate, coordinate and harmonize ICT infrastructure planning, sharing and deployment within the public and private sector
Research, Innovation and ICT Skills Development	Develop and implement ICT Research and Innovation ecosystem
	Develop innovation and incubation centres
	Support local innovation and promote export of knowledge products
	Promote local manufacturing and assembly of ICT products
	Develop a well-grounded ICT professional workforce
E-services	Develop an ICT professional's quality assurance framework
	Mainstream ICT in all sectors of the economy and digitize service delivery
ICT Infrastructure	Strengthen Cyber Security in the country
	Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last-mile connectivity to key areas (districts, sub-counties, schools, hospitals, post offices, tourism sites, police, LGs etc.)
	Establish and enhance national common core infrastructure (data centres, high power computing centres, specialized labs)

Source: Authors' Compilation

Annex 2: List of Certified IT Service Providers during the first half of FY 2022/23

S/N	APPLICANT NAME	BUSINESS TRADING NAME	CERTIFICATE NUMBER
1.	SUPPLY MASTERS (U) LTD	SUPPLY MASTERS (U) LIMITED	NITA/CERT/022-598
2.	THENECTO INTERNATIONAL LTD	THENECTO INTERNATIONAL LTD	NITA/CERT/022-649
3.	TABLINE INTERNATIONAL LIMITED	TABLINE INTERNATIONAL LIMITED	NITA/CERT/022-650
4.	DIPO TECHNOLOGIES LIMITED	DIPO TECHNOLOGIES LIMITED	NITA/CERT/022-651
5.	ZONELA INTERNATIONAL LTD	ZONELA INTERNATIONAL LTD	NITA/CERT/022-652
6.	PROVIDE INTERNATIONAL LIMITED	PROVIDE INTERNATIONAL LIMITED	NITA/CERT/022-653
7.	RHOLIN TECH LIMITED	RHOLIN TECH LIMITED	NITA/CERT/022-654
8.	THE UHURU INSTITUTE FOR SOCIAL DEVELOPMENT	THE UHURU INSTITUTE FOR SOCIAL DEVELOPMENT LIMITED	NITA/CERT/022-655
9.	CHEMIX & TECH LTD	CHEMIX & TECH LIMITED	NITA/CERT/022-656
10.	GIMEI TECH SOLUTIONS	GIMEI TECH SOLUTIONS	NITA/CERT/022-657
11.	HITASH CONSULTS LTD	HITASH CONSULTS LIMITED	NITA/CERT/022-658
12.	EIGHT TECH CONSULTS LIMITED	EIGHT TECH CONSULTS LIMITED	NITA/CERT/022-659
13.	ISWAYA JOHN GIIBWA	ISWAYA JOHN GIIBWA	NITA/CERT/022-660
14.	TRESTLE LIMITED	TRESTLE LIMITED	NITA/CERT/022-661
15.	MILPACK INVESTMENTS LTD	MILPACK INVESTMENTS LIMITED	NITA/CERT/022-662
16.	ICT-EMBEDDED (UG) LTD	ICT-EMBEDDED (UG) LTD	NITA/CERT/022-663
17.	KONVERGENZ NETWORK SOLUTIONS LTD KENYA	KONVERGENZ NETWORK SOLUTIONS LIMITED	NITA/CERT/022-664
18.	JHUB TECHNOLOGIES LTD	JHUB TECHNOLOGIES LTD	NITA/CERT/022-665
19.	ALVIN & PARTNERS LTD	ALVIN & PARTNERS LTD	NITA/CERT/022-666
20.	QUEST DIGITAL FINANCE LIMITED	QUEST DIGITAL FINANCE LIMITED	NITA/CERT/022-667



S/N	APPLICANT NAME	BUSINESS TRADING NAME	CERTIFICATE NUMBER
21.	WAYA LIMITED	WAYA LIMITED	NITA/CERT/022-668
22.	SYSIMO TECHNOLOGIES LTD	SYSIMO TECHNOLOGIES LIMITED	NITA/CERT/022-669
23.	ENACT CONSULTING LIMITED	ENACT CONSULTING LIMITED	NITA/CERT/022-670
24.	EVALUATE COMPANY LIMITED	EVALUATE COMPANY LIMITED	NITA/CERT/022-671
25.	GEMCO INVESTMENT CO. LTD	GEMCO INVESTMENTS COMPANY LIMITED	NITA/CERT/022-672
26.	QUIDEXPLUS UGANDA LIMITED	QUIDEXPLUS UGANDA LIMITED	NITA/CERT/022-673
27.	PDO SYSTEMS LTD	PDO SYSTEMS LIMITED	NITA/CERT/022-674
28.	MFT SOLUTIONS SMC LTD	MFT SOLUTIONS - SMC LTD	NITA/CERT/022-676
29.	SARACEN UGANDA	SARACEN UGANDA LIMITED	NITA/CERT/022-677
30.	ROKE TELKOM LIMITED	ROKE TELKOM LIMITED	NITA/CERT/022-678
31.	BLOOM ELECTRONICS (PVT) LIMITED	BLOOM ELECTRONICS PRIVATE LIMITED	NITA/CERT/022-679
32.	LEGITEX SOLUTIONS LTD	LEGITEX SOLUTIONS LTD	NITA/CERT/022-680
33.	MAKERERE CORPORATE INITIATIVE AFRICA	MAKERERE CORPORATE INITIATIVE AFRICA LIMITED	NITA/CERT/022-681
34.	TARGET LINK UGANDA LIMITED	TARGET LINK UGANDA LIMITED	NITA/CERT/022-682
35.	NECAM SERVICE LIMITED	NECAM SERVICES LIMITED	NITA/CERT/022-683
36.	KIRON GROUP LTD	KIRON GROUP LIMITED	NITA/CERT/022-684
37.	OCAJA TECHNOLOGIES LIMITED	OCAJA TECHNOLOGIES LIMITED	NITA/CERT/022-685
38.	PRIMUS AUTO SOLUTIONS	PRIMUS AUTO SOLUTIONS LIMITED	NITA/CERT/022-686
39.	B-CORE SOLUTIONS LIMITED	BCORE SOLUTIONS LIMITED	NITA/CERT/022-687
40.	AIRCOM TECHNOLOGIES LIMITED	AIRCOM TECHNOLOGIES LIMITED	NITA/CERT/022-688
41.	VANTAGE SUPPLIERS- SMC LIMITED	VANTAGE SUPPLIERS - SMC LIMITED	NITA/CERT/022-689
42.	CELLULANT (U) LIMITED	CELLULANT (U) LIMITED	NITA/CERT/022-690
43.	POWERMAN ENGINEERING LIMITED	POWERMAN ENGINEERING LIMITED	NITA/CERT/022-691
44.	HITECH INFOSYS LIMITED	HITECH INFOSYS LIMITED	NITA/CERT/022-692
45.	FLY ONLINE LTD	FLY ONLINE LIMITED	NITA/CERT/022-693
46.	KINCONSULTS LTD	KINCONSULTS LIMITED	NITA/CERT/022-694
47.	REVOLUSYS SOFTWARE LIMITED	REVOLUSYS SOFTWARE LTD	NITA/CERT/022-695
48.	AFROTECH MANAGEMENT CONSULT LIMITED	AFROTECH MANAGEMENT CONSULT LIMITED	NITA/CERT/022-696
49.	COLQWIK INVESTMENTS LTD	COLQWIK INVESTMENTS LTD	NITA/CERT/022-697
50.	FORDWICH COMPANY LIMITED	FORDWICH COMPANY LIMITED	NITA/CERT/022-698
51.	PROFUSE HITECH SYSTEM AND SOLUTIONS SNC LIMITED	PROFUSE HITECH SYSTEMS & SOLUTIONS - SMC LIMITED	NITA/CERT/022-699
52.	ANVII HOLDING LIMITED	ANVII HOLDING LIMITED	NITA/CERT/022-700
53.	FARAS TECHNOLOGIES	FARAS TECHNOLOGIES LTD	NITA/CERT/022-701
54.	KONERGENZ NETWORK SOLUTIONS LTD	KONVERGENZ NETWORK SOLUTIONS (U) LTD	NITA/CERT/022-702
55.	ISHONI INVESTMENTS LIMITED	ISHONI INVESTMENTS LIMITED	NITA/CERT/022-703
56.	LAMININ COMPANY LIMITED	LAMININ COMPANY LIMITED	NITA/CERT/022-704
57.	NAVANTIS SYSTEMS LIMITED	NAVANTIS SYSTEMS LIMITED	NITA/CERT/022-705
58.	PRESENT SECURITY TECHNOLOGY CO LTD	PRESENT SECURITY TECHNOLOGY CO LTD	NITA/CERT/022-706



S/N	APPLICANT NAME	BUSINESS TRADING NAME	CERTIFICATE NUMBER
59.	HAK COMPUTERS AND ELECTRONICS UGANDA LIMITED	HAK COMPUTERS & ELECTRONICS (U) LIMITED	NITA/CERT/022-707
60.	SURE PAY LIMITED	SUREPAY LIMITED	NITA/CERT/022-708
61.	JUBA EXPRESS	JUBA EXPRESS FOREX BUREAU & MONEY TRANSFER LIMITED	NITA/CERT/022-709
62.	MIMITO TECHNOLOGIES LIMITED	MIMITO TECHNOLOGIES LIMITED	NITA/CERT/022-710
63.	POWERLINE CONSULT LTD	POWER LINE CONSULT	NITA/CERT/022-711
64.	JB IT SERVICES LTD	JB IT SERVICES LIMITED	NITA/CERT/022-712
65.	WAKANDI UGANDA LIMITED	WAKANDI UGANDA LIMITED	NITA/CERT/022-713
66.	APHRO LEGACY COMPANY LIMITED	APHRO LEGACY COMPANY LIMITED	NITA/CERT/022-714
67.	LYCAMONEY UGANDA LIMITED	LYCAMONEY UGANDA LIMITED	NITA/CERT/022-715
68.	DIGITAL INFRASTRUCTURE SERVICES	DIGITAL INFRASTRUCTURE LIMITED	NITA/CERT/022-716
69.	PAYLINE HOLDINGS LLC	PAYLINE HOLDINGS LIMITED	NITA/CERT/022-717
70.	BERYL TECH LIMITED	BERYL TECH LIMITED	NITA/CERT/022-718
71.	STREAMLINE HEALTH TECH CO. LTD	STREAMLINE HEALTH TECH CO. LTD	NITA/CERT/022-719

Source: NITA-U

Annex 3: List of entities integrated with the data sharing and integration platform in the first half of FY 2022/23

S/N	Entity	Category	Ownership	Role
1.	Wave Uganda	Fintech	Non-Government	Consumer
2.	Zoe Financial Services	Fintech	Non-Government	Consumer
3.	UAP Insurance	Insurance	Non-Government	Consumer
4.	Profiles International	Fintech	Non-Government	Consumer
5.	Office of the Prime Minister	MDA	Government	Consumer
6.	Ministry of Trade, Industry and Cooperatives	MDA	Government	Consumer
7.	Solooza	Fintech	Non-Government	Consumer
8.	Britam	Insurance	Non-Government	Consumer
9.	Personal and Data Protection Office	Other TUG	Government	Consumer
10.	Approve Technologies Limited	Fintech	Non-Government	Consumer
11.	Electricity Regulatory Authority	MDA	Government	Consumer
12.	Ministry of Water and Environment	MDA	Government	Consumer
13.	Guaranty Trust Bank (Uganda) Ltd	Bank	Non-Government	Consumer
14.	Sail Global Corporation	Fintech	Non-Government	Consumer
15.	Uganda People's Defence Force (UPDF)	MDA	Government	Consumer
16.	Uganda Post Office	Fintech	Non-Government	Consumer
17.	Interswitch East Africa	Fintech	Non-Government	Consumer
18.	BORA Technologies	Fintech	Non-Government	Consumer
19.	Uganda Printing and Publishing Corporation	MDA	Government	Consumer
20.	Cairo Bank	Bank	Non-Government	Consumer
21.	Exim Bank (Uganda)	Bank	Non-Government	Consumer



22.	NPC (National Population Council)	MDA	Government	Consumer
23.	Uganda National Meteorological Authority UNMA	MDA	Government	Producer
24.	Jjengo Tech LTD	Fintech	Non-Government	Consumer
25.	Sage Group	Fintech	Non-Government	Consumer
26.	Bayport Financial Services Uganda Limited	Fintech	Non-Government	Consumer
27.	National Social Security Fund	MDA	Government	Consumer
28.	Local Government Finance Commission (LGFC)	MDA	Government	Consumer
29.	Seamfix	Fintech	Non-Government	Consumer
30.	Fido Credit	Fintech	Non-Government	Consumer
31.	MTN (Uganda)	Telecom	Non-Government	Consumer

Annex 4: List of entities enrolled on UMCS in the first half of FY 2022/23

S/N	Entity Name	No. of License	Used	Status	Activation Date
1.	Kiboga District Local Government	30	19	Active	03/08/2022
2.	Uganda Printing & Publishing Corporation	130	87	Active	05/08/2022
3.	Plusnms	3	3	Active	17/08/2022
4.	Kaliro District Local Government	140	61	Active	09/09/2022
5.	Lugazi Municipal Council	45	36	Active	13/09/2022
6.	Uganda Telecommunications Corporation Limited	20	13	Active	04/10/2022
7.	Kaberamaindo District Local Government	130	126	Active	14/10/2022
8.	Bukomansimbi District Local Government	60	48	Active	17/10/2022
9.	National Council for Persons With Disabilities	10	1	Active	27/10/2022
10.	Ministry of Water and Environment	450	407	Active	27/10/2022

Source: NITA-U

Annex 5: BPO centres supported in the first half of FY 2022/23

S/N	Company Name	Location	Status	BW Offered (Mbps)
1.	CAMTECH	Mbarara	Existing	50
2.	Luwero Incubation Centre	Luwero Community Centre	Existing	1
3.	Exquisite solutions	Namanve Business Park	New	30
4.	Empowering Youth in Technology (EYIT)	Mbarara	Existing	32
5.	Hive Colab	Mbarara	Existing	60
6.	SIM for Life	Mbarara	Existing	50
7.	Hive Colab	Kampala	Existing	100
8.	WITU Hub	Kamwokya, Kampala	Existing	100
9.	Cayman consult	Mukono	Existing	100
10.	Service Cops Limited	Kololo, Kampala	New	15
11.	Envigo Technology	Bugolobi Industrial Park, Kampala	New	20

Source: NITA-U



Annex 6: List of Information security awareness sessions conducted in the first half of FY 2022/23

S/N	Awareness Session
Quarter one	
1.	Internet Safety Awareness Session held for forty-one (41) Mengo Senior School Students on 17 th August 2022 at ICT Hub, UICT
2.	Cyber Hygiene Awareness Session held for Civil Society held in August 2022
3.	Cyber Hygiene presentations for GCIC held on 15 th -16 th September 2022 for 42 participants.
4.	ISC2 –NITA “Relevance of ICT security in Data Protection & Privacy” webinar held on 22 nd September, 2022 for 35 participants from both public & private sector
5.	UGNOG Summit 2022- Awareness session for Uganda Network Operators held on 4 th October 2022 at Naguru Skyz Hotel
6.	FITSPA Annual Fintech Conference- Session on Digital Identity (Streamlining customer due diligence to enhance customer experience held on 13 th October 2022
7.	KTA Annual Symposium- Awareness session on “Leveraging Big Data Analytics and Artificial Intelligence in the Formation of Policy and Provision of public services” held on 20 th -21 st October 2022 at Speke Resort
8.	Milima Security- Twitter Space session on Cyber Hygiene best practices held on 26 th October 2022 for over 30 online participants
9.	Course on Uganda’s policy on ICT infrastructure and Cybersecurity held on 2 nd November 2022 at Senior Command and Staff College, Kimaka for over 15 participants
10.	UIGF- Awareness session on “Advancing normative frameworks for responsible state behaviour in cyberspace in Uganda” held on 8 th November 2022 at Golf Course Hotel
Quarter two	
11.	Cyber security awareness was held on 18 th November 2022 at the FUE-CEO breakfast meeting. This was attended by over 40 CEOs.
12.	Awareness on Child Online Protection held on 21 st November 2022 in Jinja
13.	Awareness session on “Ransomware” held on 9 th December 2022 via Twitter Space. This session was attended by over 1,000 online participants
14.	Awareness session on “Online Safety Tips for Online Shopping” held on 14 th December 2022 via Twitter Space. This session was attended by over 60 online participants

Source: NITA-U

**Annex 7: List of sites connected to the NBI in the first half of FY 2022/23**

No	Category	Type	Entity	Site	District	FY	Project	Connectivity Status
1.	MDA	Government	Operation Wealth Creation (OWC)	Operation Wealth Creation (OWC) - Kyaliwajala Extension	Kampala	FY 22/23	COO	Connected - Using Service
2.	Other TUG	Non-Government	Kyangabi Crater Resort	Kyangabi Crater Resort	Kasese	FY 22/23	COO	Connected - Using Service
3.	BPO/ITES	Non-Government	LAVIT (Lake Victoria Information Technology)	Lavit Kampala	Kampala	FY 22/23	COO	Connected - Using Service
4.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTSU) Ministry of Gender Labour & Social Development Nebbi	Nebbi	FY 22/23	COO	Connected - Using Service
5.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTSU) - Ministry of Gender Labour & Social Development Mbarara	Mbarara	FY 22/23	COO	Connected - Using Service
6.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTSU) - Ministry of Gender Labour & Social Development Mbale	Mbale	FY 22/23	COO	Connected - Using Service
7.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTSU) - Ministry of Gender Labour & Social Development Moroto	Moroto	FY 22/23	COO	Connected - Using Service



8.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTW) - Ministry of Gender Labour & Social Development Kyenjojo	Kyenjojo	FY 22/23	COO	Connected - Using Service
9.	MDA	Government	Ministry of Gender, Labour and Social Development (MOGLSD)	Regional Technical Support Unit (RTSU) - Ministry of Gender Labour & Social Development Gulu	Gulu	FY 22/23	COO	Connected - Using Service
10.	Other TUG	Non-Government	Sami Apartments limited	Sami Apartments limited	Rubirizi	FY 22/23	COO	Connected - Using Service
11.	Schools	Non-Government	Kinoni Girls Secondary School	Kinoni Girls Secondary School	Rwampara	FY 22/23	COO	Connected - Using Service
12.	MDA	Non-Government	Deposit Protection Fund of Uganda	Deposit Protection Fund of Uganda	Kampala	FY 22/23	COO	Connected - Using Service

Source: NITA-U

Annex 8: List of New applications & systems hosted in the National Data Centre in the first half of FY 22/23

S/N	Application	Entity	Category of entity
1.	National Central Electronic Monitoring System (NCEMS)	Lotteries and Gaming Regulatory Board (LGRB)	Existing
2.	Mbarara Service Portal MIS	Mbarara District Local Government	New
3.	Albertine Region Sustainable Development (ARSDP) Bursary Scheme Tracking System	Ministry of Education and Sports (MoES)	Existing
4.	Pearlwood e-portal	Ministry of Gender, Labour and Social Development (MGLSD)	Existing
5.	Citizen Participation System MoICT	Ministry of ICT and National Guidance (MoICT)	Existing
6.	PDMIS Monitoring & Evaluation Module (MEVAL)	Ministry of ICT and National Guidance (MoICT)	Existing
7.	Building Information Management System (BIMS)	National Building Review Board (NBRB)	New
8.	DAES – Digital Authentication and Electronic Signature	National Information Technology Authority (NITA-U)	Existing
9.	The National Population Council Databank	National Population Council	New
10.	The NPC Knowledge Management Information System	National Population Council	New



S/N	Application	Entity	Category of entity
11.	Moodle Elearning	Office of Prime Minister (OPM)	Existing
12.	Library Information Management System - PCF ELIB	Presidential CEO Forum (PCF)	New
13.	Pride E-Recruitment System	Pride Microfinance Bank Limited	New
14.	SRB Authentication Portal	Surveyors Registration Board (SRB)	New
15.	Enterprise Data Warehouse System	Uganda AIDS Commission (UAC)	Existing
16.	National Aids spending Assessment (NASA) Accreditation System for NGOs	Uganda AIDS Commission (UAC)	Existing
17.	Airport Permit Application System	Uganda Civil Aviation Authority (UCAA)	New
18.	UEGCL Co-location	Uganda Electricity Generation Company Limited (UEGCL)	Existing
19.	Human Rights Integrated Information System (HURIS) – Complaints Database	Uganda Human Rights Commission (UHRC)	New
20.	Registration and Nursing System	Uganda Nurses and Midwives Council (UNMC)	New
21.	Integrated Management Information System (ISI-Roads)	Uganda Road Fund (URF)	New
22.	YOUTUNE	YoTune Tech Limited	New
23.	Mental Health and Psychological Social Support (MHPSS)	Ministry of Gender, Labour and Social Development (MGLSD)	Existing
24.	Library Information Management System - PCF ELIB	Presidential CEO Forum (PCF)	New
25.	Electronic Government Procurement (EGP) - Reports and File Servers	Ministry of Finance, Planning and Economic Development (MFPED)	Existing
26.	IGPAC WEB Server	Ministry of Local Government	Existing
27.	Moodle Elearning UPIK	Uganda Petroleum Institute Kigumba (UPIK)	New
28.	UMRA MIS	Uganda Microfinance Regulatory Authority	New
29.	Agriculture Market Information System (AMIS)	Ministry of Agriculture, Animal Industry and Fisheries	Existing
30.	Livestock Integrated Management Information System (LIMIS)	Ministry of Agriculture, Animal Industry and Fisheries	Existing
31.	National Parameters Website Test	Ministry of Finance, Planning and Economic Development (MFPED)	Existing
32.	EMIS	Uganda Export Promotion Board	New
33.	Volunteer & Member Registration System	Uganda Red Cross Society	New
34.	NIRA AUTH API	NIRA	
35.	UWEC Online Booking and Ticketing System	Wild Life Education Center	New
36.	Small Scale Cross Border Trader's Facilitation System	Ministry of Trade, Industry and Cooperatives	New
37.	Wildlife Permit	Ministry of Tourism	New
38.	MUBS Health Information Management System (HMS)	Makerere University Business School	New
39.	MUBS Human Resource Management System (HRMS)	Makerere University Business School	New



S/N	Application	Entity	Category of entity
40.	MUBS FGSR Supervision Portal (FGSR)	Makerere University Business School	New
41.	MUBS Document Tracking Platform (DOCTRACK)	Makerere University Business School	New
42.	WEB system	Mulago Hospital Women's Hospital	New
43.	System Requirements for the Development of the Geo-Spatial M&E System and Farmer Registration Application	UCDA	
44.	SoftPower	SoftPower	New

Source: NITA-U





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