



NDPIII DIGITAL TRANSFORMATION PROGRAMME
IMPLEMENTATION ACTION PLAN



Digital Transformation

July 2020

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List of Acronyms

4IR	Fourth Industrial Revolution
CSOs	Civil Society Organizations
DPs	Development Partners
DT	Digital Transformation
GAPR	Government Annual Performance Report
ICT	Information Communication Technology
KCCA	Kampala Capital City Authority
LGs	Local Governments
MDAs	Ministries, Departments and Agencies
MEMD	Ministry of Energy and Mineral Development
MoES	Ministry of Education and Sports
MoICT&NG	Ministry of Information & Communication Technology & National Guidance
MoPS	Ministry of Public Service
MoSTI	Ministry of Science Technology and Innovation
MoTIC	Ministry of Trade Industry and Cooperatives
MoWE	Ministry of Water and Environment
MoWT	Ministry of Works and Transport
NBI	National Backbone Infrastructure
NCDC	National Curriculum Development Centre
NCHE	National Council of Higher Education
NDPIII	Third National Development Plan
NEMA	National Environment Management Authority
NITA	National Information Technology Authority
OPM	Office of The Prime Minister
PIAP	Program Implementation Action Plan
PWDs	Persons with Disabilities
PWG	Programme Working Group
SMEs	Small and Medium Enterprises
TWG	Technical Working Group
UBC	Uganda Broadcasting Cooperation

UCC	Uganda Communications Commission
UEDCL	Uganda Electricity Distribution Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UICT	Uganda Institute of Communications Technology
UNRA	Uganda National Roads Authority
UTL	Uganda Telecom Limited

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Foreword

This Digital Transformation (DT) Programme Implementation Action Plan (PIAP) was prepared in accordance with the guidelines for linking interventions under 18 programmes of NDP III to the National Development Plan III goal. The PIAP provides DT Programme strategic objectives, key interventions, the planned actions, budgets, results and targets to achieve NDP III goal.

DT programme has five strategic objectives. These are: Increase the national ICT infrastructure coverage; enhance usage of ICT in national development and service delivery; promote ICT research, innovation and commercialization of indigenous knowledge products; increase the ICT human resource capital; strengthen the policy, legal and regulatory framework. The PIAP was developed in consultative manners by the PWG whose members comprise key stakeholders in the ICT sector.

The ICT sector is one of the sectors with the highest potential for creating employment and generation of income for both individuals and government. Currently, the ICT contribute 4.8% to the country's Gross Domestic Product. The use of ICT in day-to-day lives is necessary for lowering cost of doing business, improving efficiency of service delivery and community mobilization. For this potential to be realized, there is need for government to invest in the sector to remove bottlenecks. This PIAP identified key priority areas that contribute most to the achievement of NDP III goal - to Increase Average Household Incomes and Improve the Quality of Life of Ugandan. I wish to point out that the priorities identified in this PIAP are not only in line with NDP III priorities but also with the Sustainable Development (SDG) goals.

I take this opportunity to appreciate the National Planning Authority for providing technical direction in developing the PIAP. I also thank all stakeholders under Digital Transformation (DT) programme and the members of the DT Programme Working Group that participated in the preparation of this. In equal measure, I wish also thank the Secretariat for the DT Programmes for their coordination efforts and putting together this PIAP

HON. JUDITH NABAKOوبا, MP

Minister of ICT and National Guidance

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DIGITAL TRANSFORMATION PROGRAMME IMPLEMENTING PARTNERS

Program Administrative Coordinator: OPM

Program Technical Coordinator/Manager: Ministry of ICT & National Guidance (MoICT & NG)

Lead Implementing Partners

1. Ministry of ICT & National Guidance (MoICT & NG)
2. National Information Technology Authority (NITA-U)
3. Uganda Communications Commission (UCC)
4. POSTA Uganda
5. Uganda Institute of Communications Technology (UICT)
6. Uganda Broadcasting Corporation (UBC)
7. SIGNET Uganda
8. Communication service providers
9. Broadcasting service providers
10. Uganda Telecom LIMITED (UTL)
11. Uganda Electricity Transmission Company Limited (UETCL)
12. Uganda Electricity Distribution Company Limited (UEDCL)
13. Ministry of Energy and Mineral Development (MEMD)
14. Ministry of Science Technology and Innovation (MoSTI)
15. Ministry of Works and Transport (MoWT)

Other Implementing Partners:

16. Ministry of Water and Environment
17. Academia
18. Ministry of Education and Sports (MoES)
19. National Curriculum Development Centre (NCDC)
20. National Council of Higher Education (NCHE)
21. Private Sector
22. Civil Society
23. National Environment Management Authority (NEMA)
24. Security Agencies
25. Kampala Capital City Authority (KCCA)
26. Ministry of Public Service (MoPS)
27. Ministry of Trade Industry and Cooperatives (MoTIC)

28. Uganda National Roads Authority (UNRA)

29. All MDAs & LGS

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1. BACKGROUND

1.1 Introduction

The goal of the Third National Development Plan (NDPIII) 2020/21 - 2024/25 is to Increase Household Incomes and Improved Quality of Life of Ugandans and this will be achieved through implementation of the 18 NDPIII programmes. Among the key focus areas of the plan is digitalization of Government processes and increased utilization of ICT across the entire economy to improve the efficiency, and effectiveness in service delivery, increase productivity and have an impact on the growth. However, for this to be realized, there are key elements that need to be addressed in an integrated manner such as; access to digital infrastructure; affordability and quality of ICT services; provision of basic to advanced digital skills; and limited innovation capacity. A programmatic approach has been adopted to address these bottlenecks under the Digital Transformation Programme (DTP) and the DT Program Implementation Action Plan (PIAP) therefore highlights the activities and resources that will be required. It outlines the key interventions, corresponding outputs together with their actions that will be delivered by participating institutions in response to NDP III outcomes under Programme 10 – Digital Transformation Programme over the period 2020/21 to 2024/25. The PIAP consists of the following key sections:

- i. Background
- ii. Implementation actions
- iii. Implementation arrangements
- iv. Monitoring and evaluation strategy
- v. Financing strategy

1.2 Context

This DT programme seeks to promote the use of ICT in the entire economy and society through: (i) deployment of secure, integrated and cross sector infrastructure; (ii) developing and promoting usage of quality communication and e-services, (iii) digital inclusion and citizen participation; (iv) ensuring standardization and interoperability of systems; (v) enhancement of national cyber security (vi) promoting innovation and commercialization of ICT products; (vii) enhancing digital literacy and developing skills; (viii) supporting development and uptake of emerging technologies such as Fourth Industrial Revolution Technologies; and (ix) process re-engineering and automation for end-to-end government business and service delivery.

The program contributes to the NDPIII objectives (ii) and (iii) which are; Strengthen the private sector capacity to drive growth and create jobs and; Consolidate and increase the stock and quality of productive infrastructure.

1.2.1 Programme outcomes and objectives

The overall **goal** of the programme is to increase ICT penetration and use of ICT services for social and economic development.

The key results to be achieved over the next five years are:

- i. Increase ICT penetration (Internet penetration from 25 percent to 50 percent, Digital Terrestrial Television signal coverage from 56 percent to 95 percent, 70 percent NBI connectivity in Government MDAs/DHq; 90 percent national broadband coverage with minimum speed of 8 Mbps.
- ii. Reduce the cost of ICT devices and services (unit cost of 1Mbps /month of internet on the retail market from USD 237 to USD 70, unit cost of low entry smart phones from UGX 100,000 to UGX 60,000 and cost of a computer from UGX 1,600,000 to UGX 800,000).
- iii. Create 30,000 direct jobs annually within the ICT sector.
- iv. Increase local ICT innovation products developed and commercialized from 72 to 282.
- v. Provide 80 percent of government services online.

To achieve the key programme results, specific objectives have been identified as follows:

To achieve the key programme results, the objectives of this programme 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
- v. Strengthen the policy, legal and regulatory framework

1.2.2 Linkage between key programme results and objectives

Key Results	Programme Objectives
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<p>Increase ICT penetration (Internet penetration from 25 percent to 50 percent, Digital Terrestrial Television signal coverage from 56 percent to 95 percent, 70 percent NBI connectivity in Government MDAs/DHq; 90 percent national broadband coverage with minimum speed of 8 Mbps)</p>	<p>(Objective 1) Increase the national ICT infrastructure coverage.</p>
<p>Reduce the cost of ICT devices and services (unit cost of 1Mbps /month of internet on the retail market from USD 237 to USD 70, unit cost of low entry smart phones from UGX 100,000 to UGX 60,000 and cost of a computer from UGX 1,600,000 to UGX 800,000)</p>	<p>(Objective 5) Strengthen the policy, legal and regulatory framework.</p>
<p>Create 30,000 direct jobs annually within the ICT sector</p>	<p>(Objective 2) Enhance usage of ICT in national development and service delivery.</p>
<p>Increase local ICT innovation products developed and commercialized from 72 to 282</p>	<p>(Objective 3) Promote ICT research, innovation and commercialisation of indigenous knowledge products.</p>
<p>Provide 80 percent of government services online</p>	<p>(Objective 5) Strengthen the policy, legal and regulatory framework.</p>
<p></p>	<p>(Objective 3) Promote ICT research, innovation and commercialisation of indigenous knowledge products.</p>
<p></p>	<p>(Objective 4) Increase the ICT human resource capital.</p>
<p></p>	<p>(Objective 3) Promote ICT research, innovation and commercialisation of indigenous knowledge products.</p>
<p></p>	<p>(Objective 1) Increase the national ICT infrastructure coverage.</p>

	(Objective 2) Enhance usage of ICT in national development and service delivery.

1.2.3 Programme outcomes and indicators

Programme Outcomes	Indicators
Increased ICT penetration	Internet penetration increased from 25% in FY 2017/18 to 50% in 2024/25
	Population covered by broadband services increased from 74% in FY 2017/18 to 90% in 2024/25
	Digital Terrestrial TV signal coverage increased from 56% in FY 2017/18 to 95% in 2024/25
	Radio signal coverage increased from 80% in FY 2017/18 to 98% in 2024/25
	Fixed Broadband connectivity increased from 8,868 in FY 2017/18 to 20,882 in 2024/25
	Unit cost of 1Mbps/month of internet reduced from USD 237 in FY 2017/18 to USD 70 in 2024/25
Increased ICT usage	Proportion of government services online increased from 20% in FY 2017/18 to 80% in 2024/25
	ICT contribution to GDP increased from 2% in FY 2017/18 to 3.69% in 2024/25
	National broadband coverage with minimum speed of 8 Mbps increased from 31% in FY 2017/18 to 90% in 2024/25
Reduced costs of ICT services	Unit cost of low entry smart phones (UGX) reduced from 100,000 in FY 2017/18 to 60,000 in 2024/25
	Cost of a computer (UGX) reduced from 1,600,000 in FY 2017/18 to 800,000 in 2024/25
Enhanced efficiency and productivity in service delivery	ICT Development Index (IDI value) increased from 2.19 in FY 2017/18 to 3.9 in 2024/25

	30,000 ICT direct jobs created annually
Effective legal and regulatory framework	Legal and regulatory framework developed/ reviewed

1.2.4 Sub-Programme Outcomes and indicators

Sub-programme 1: ICT Infrastructure	
Programme Objective (s) contributed to by sub-programme:	
Objective 1: Increase the national ICT infrastructure coverage	
Intermediate Outcomes	Indicators
Increased access to ICTs	Sub-counties with broadband (%)
Increased coverage	Districts hq connected to the NBI (%)
Sub-programme 2: Enhance usage of ICT in national development	
Programme Objective (s) contributed to by sub-programme:	
Objective 2: Strengthen budgeting and resource mobilization	
Increased usage of e-services	Proportion of population using broadband services
Increased quality of e-services	Percentage of beneficiaries satisfied with the QOS over the NBI
Improved service delivery	
Reduced costs of service delivery	Proportion of government services provided online
Sub-programme 3: Research, innovation and ICT skills development	
Programme Objective (s) contributed to by sub-programme:	
Objective 3: Enhance ICT research and innovation	
Objective 4: Increase the ICT human resource capital	
Increased ICT human resource capacity	Percentage of ICT solutions that have been adopted and commercialised
Increased research and innovation products	
Sub-programme 4: Increase the ICT human resource capital	
Programme Objective (s) contributed to by sub-programme:	
Objective 5: Strengthen the policy, legal and regulatory framework	

Ease of doing business	Level of compliance with ICT related laws, legislations and standards
Increased compliance	
Well regulated ICT environment	

2. IMPLEMENTATION REFORMS

The key implementation reforms required to fully implement the DT programme and realize expected goals in the next five years:

- i. Government should take lead in the coordination of ICT infrastructure development and deployment so as to cure the silo-based approach to planning and development of infrastructure.
- ii. Government should digitalize and roll out e-services to all sectors, MDAs and Local Governments to be able to harness the potential of ICT. All sectors, MDAs and LGs will adopt new ways of delivering services, re-engineer their business processes ensuring that they are simplified, streamlined and optimized and develop e-solutions such as ehealth, e-education, e-extension services among others.
- iii. There is need to rationalize agencies under the ICT sector to remove duplications and overlaps of mandates.

3. IMPLEMENTATION ACTIONS

The DT Programme Implementation Action Plan is aligned with the overall NDPIII objectives and its successful execution will greatly contribute to the achievement of the NDPIII goals. The PIAP highlights the key priority outputs and actions that will be implemented to deliver DT programme outcomes over the NDPIII period. In turn, the actions in the Action Plan were generated on the basis of these outputs and corresponding annualized costs captured. The detailed Action Plan is listed in Appendix B to this PIAP.

4. IMPLEMENTATION ARRANGEMENTS

For effective planning and implementation of the DT programme, the appropriate institutional structure has been laid out. It is composed of five levels that is;

- i. High Level Public Policy Management Executive Forum (Apex Platform)
- ii. Leadership and Coordination at The Office of the Prime Minister
- iii. The Programme Leadership Committee
- iv. The Programme Working Group

v. Technical Working Group

These will ensure that there is a multi-sectoral approach planning and implementation, synergies are formed among the various stakeholders (including private sector, development partners, CSOs, MDAs, LGs), programme activities are well coordinated and the silo-based approach to working is mitigated.

4.1 High Level Public Policy Management Executive Forum (Apex Platform)

The main objective of this forum is to strengthen effective public policy management and promote good governance practices. The platform will act as decision forum and convene four government institutions to discuss the implementation of public policies. They include:

- i. Office of the President,
- ii. Office of the Prime Minister,
- iii. Ministry of Finance, Planning and Economic Development
- iv. National Planning Authority

An annual NDP forum chaired by H.E the President will be held to carry out oversight of Government programmes and implementation of the plan. The Office of the President will take overall leadership and provide timely communication of cabinet decisions and mobilize the population towards achievement of the NDPIII goal.

4.2 Leadership and Coordination at Office of the Prime Minister

The OPM is the overall coordinator of implementation of all the 18 NDPIII programmes. They will work closely with the Programme leadership committees to monitor implementation of programmes and ensure that programme results are achieved.

4.3 The Programme Leadership Committee

The Programme leadership committee is composed all political leaders of the MDAs in the programme. This committee will provide political and policy guidance and advocacy; monitor programme implementation based on programme outcome targets and support resolution of political or policy constraints during implementation; and advocate for mobilization of resources to support programme implementation where there are financing gaps.

4.3.1 Membership of the DT Programme Leadership Committee

The MoICT&NG is the lead agency for the DT programme and the leadership committee is composed of the following;

- i. The Minister, MoICT&NG (Chairperson)

- ii. The Minister, MEMD
- iii. The Minister, MoSTI
- iv. The Minister, MoWT

4.3.2 Frequency of DT Programme Leadership Committee meetings

The Leadership Committee shall meet 2 times in year;

- i. At the annual programme review (September / October); to consider the annual programme performance report, to review programme performance, understanding emerging policy issues and agree to programme targets for the following year, and
- ii. In February each year to consider the half-annual performance report and to be appraised of programme implementation.

The key input documents to the work of the Leadership Committee namely half annual and annual performance reports, shall include a policy level section on performance and emerging issues, targeting the LC role for oversight and decision making.

4.4 Programme Working Group

The DT Programme Working Group (PWG) is composed of all heads of MDAs in the programme and the Permanent Secretary, MoICT&NG is the technical lead / chairperson of the PWG. The DT Programme Working Group shall be the highest technical organ and will be required to set programme priorities for implementation, identify key policy issues to be addressed, identify key implementation bottlenecks to be resolved and approve projects under the programme. Specific responsibilities shall be as follows:

- i. Ensuring broad stakeholder consultations among all stakeholders are conducted to discuss key issues related to the programme and harmonize Government and stakeholder positions;
- ii. Identifying key outputs and programme performance targets both annually and in the medium term;
- iii. Examine and review of programme related policies and plans, reviewing past performance, emerging policy issues and future spending pressures;
- iv. Joint clearance of projects for inclusion in the Public Investment Plan;
- v. Ensuring implementation of Program Based Budgeting (PBB) for proper alignment to the NDP III;
- vi. Undertaking monitoring and assessment of programme interventions;

- vii. Preparing semi-annual and annual programme reviews and reports.

4.4.1 Membership of the DT Programme Working Group

The members of the DT PWG include:

- i. Permanent Secretary, MoICT&NG
- ii. Permanent Secretary, MoSTI
- iii. Permanent Secretary, MoWT
- iv. Permanent Secretary, MEMD
- v. Executive Director, NITA
- vi. Executive Director, UCC
- vii. Managing Director, UBC
- viii. Managing Director, SIGNET
- ix. Managing Director, POSTA
- x. Principal, UICT
- xi. Executive Director, UETCL

4.4.2 PWG Secretariat

The PWG shall be supported by a technical secretariat based in the Planning Unit of the MOICT & NG. The responsibilities of secretariat include:

- i. Coordinating the preparation of the Programme Implementation Action Plans (including costing and Monitoring Frameworks) and Programme Budget Framework papers and ensuring alignment with NDP III, Manifesto and Presidential Directives;
- ii. Organising and guiding meetings and activities of management structures;
- iii. Preparation and dissemination of quarterly, semi-annual and annual programme implementation reports;
- iv. Facilitating the annual programme performance reviews
- v. Organising programme monitoring, inspection and other activities to enable collection of physical data to facilitate evidence-based reporting;
- vi. Promoting cooperation, learning and synergies within and outside the programmes;
- vii. Ensuring timely sharing and dissemination of key information to the PWG and programme institutions to facilitate implementation of programme activities
- viii. Facilitating dialogue with partners (DPs, CSOs, etc.) on emerging policy and technical issues aimed at increasing impact on programme outcomes

4.4.3 Frequency of PWG Meetings

The PWGs shall meet at least once every quarter. Specifically, the PWGs shall hold the following meetings, at minimum

- i. A meeting at least 2 weeks (August / September) prior to the annual programme review to consider and approve the annual programme performance report and clear agency budget allocations - Quarter 1;
- ii. A Meeting to set priorities for the subsequent FY, clear new projects and consider the Programme Budget Framework Paper (PBFP) and (October / November) - Quarter 2;
- iii. In February, to consider and clear the programme half annual performance Report - Quarter 3;
- iv. In May / June, to take stock of programme implementation for the year ending and final allocations for the new FY - Quarter 4;

Programme Reports prepared by the PWG secretariat shall be cleared by the Leadership Committee and subsequently forwarded to Office of the Prime Minister for further consideration.

4.5 Technical Working Groups

Technical Working Groups (TWGs) have been formed along the sub-programs and will be required to address specific sub-components of the programme in depth. This will allow the PWGs to limit their discussion to strategic issues of the programme while at the same time ensuring adequate attention is given to the detail for each programme within the TWGs. TWGs are composed of technical officers of all institutions under a sub-program. Specific responsibilities of the TWGs include:

- i. Monitoring the implementation of the sub-component programme areas of the PIAP and highlighting issues for PWGs consideration.
- ii. Reviewing sub-component programme areas of the Annual and semi-annual programme performance reports before consideration by the PWGs.
- iii. Developing positions papers on policy and strategic issues in the sub-componet for consideration by PWG.
- iv. Reviewing new project concept notes and make recommendations to PWG for clearance.

4.5.1 DT Technical Working Groups

Under the DT programme, there are four technical working. They are:

- i. ICT Infrastructure TWG

The TWG will address issues regarding broadband, broadcast and communication infrastructure, last mile connectivity, coordinated implementation of infrastructure by the different stakeholders and national common core infrastructure (data centres, high power computing centers, specialized labs) among others.

ii. E-Services TWG

Key areas to be handled by the TWG include: development of digital services, interoperability of digital services, establishment of e-service delivery points across the country, digitization and archival of documents, cyber-security in the country, data protection and privacy and national postcode and addressing.

iii. Research, innovation and ICT skills development TWG

Specific issues to be considered under TWG are: digital skills development, ICT professional standards, digital literacy campaigns, innovation and incubation infrastructure, development of local digital products among others.

iv. Enabling Environment TWG

This TWG will ensure that there is a conducive legal and regulatory environment to facilitate achievement of the programme targets. It will specifically handle development and review of policies, regulations, guidelines, strategies and standards that fall within the programme.

4.5.2 Membership of the DT Technical Working Groups

The technical working groups are composed of technical officers from institutions that fall under the four technical sub-components.

Technical Working Group	Member Institutions
Infrastructure	Ministry of ICT & National Guidance National Information Technology Authority Uganda Communications Commission SIGNET POSTA COMMUNICATION SERVICE PROVIDERS BROADCAST SERVICE PROVIDERS UTL MoSTI MEMD UTILITY SERVICE PROVIDERS (MoWE, MoWT)

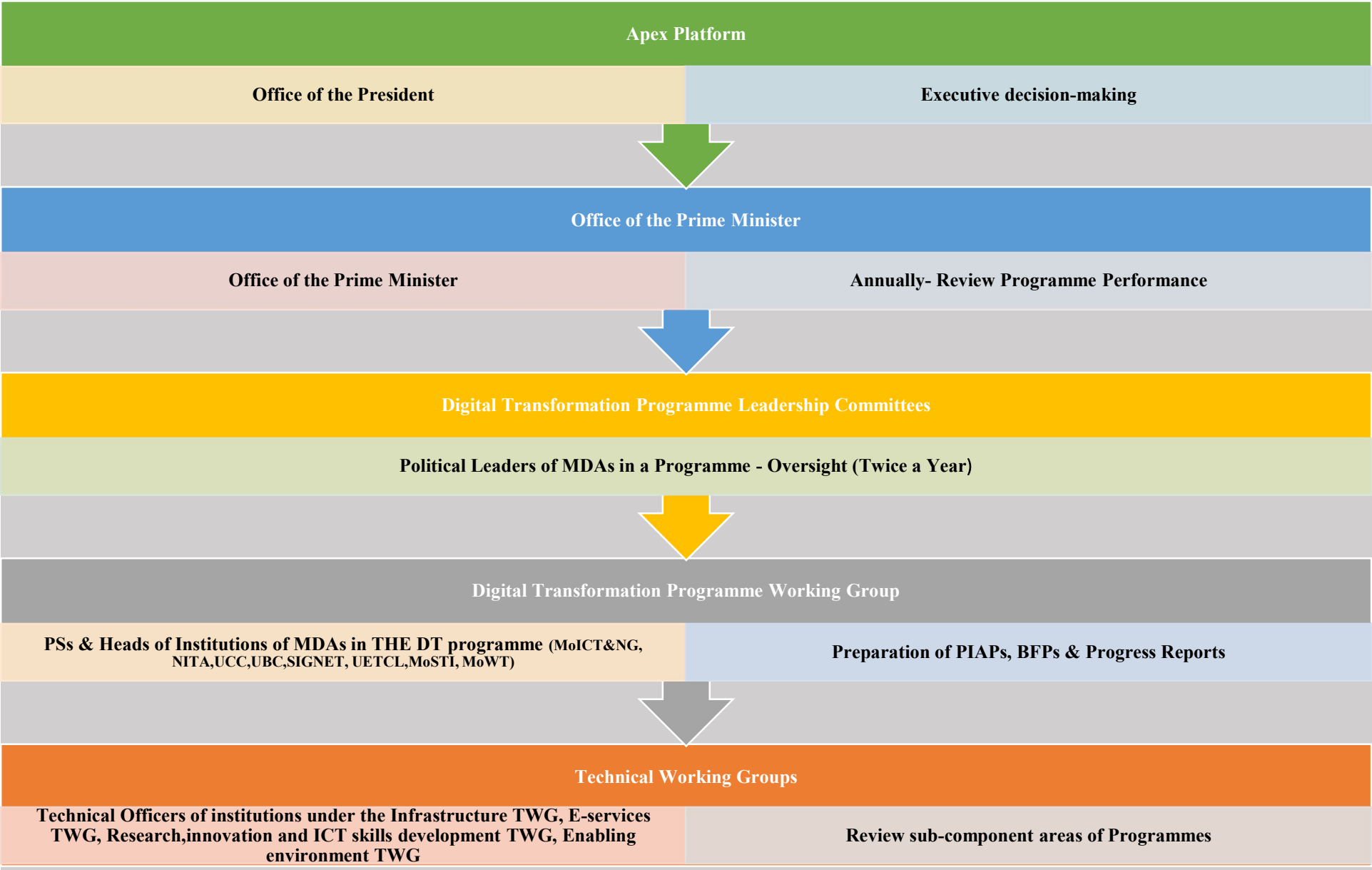
	<p>UETCL UEDCL KCCA UNRA PSFU DPs</p>
E-services	<p>MoICT & NG MoPS MoTIC MoLG NITA- U UCC POSTA UBC KCCA LGs SECURITY AGENCIES PSFU DPs</p>
Research, innovation and ICT skills development TWG	<p>MoICT&NG MoSTI MoES MoPS UICT UCC UBC ACADEMIA NCDC NCHE CIVIL SOCIETY PSFU DPs</p>
Enabling Environment	<p>MoICT & NG</p>

	MoTIC NITA UCC POSTA UBC SIGNET UICT NEMA PSFU DPs
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4.5.3 Frequency of TWG meetings

The TWGs will define the frequency of their meetings. They will be expected to maintain a tracker for the emerging issues and to guide their discussions. The TWGs will generate implementation progress reports which will be presented at the PWGs meeting.

Programme Institutional Structure



5. MONITORING AND EVALUATION STRATEGY

Various activities will be carried over the implementation period to monitor the performance and continually track progress made in achieving the DT programme targets and goals. Progress will be assessed based on the action plan listed in Appendix B. Performance will also be evaluated against a set of outcome and output indicators and targets listed in Appendix C.

5.1 Monitoring and Evaluation Activities

To the extent possible, the programme M&E shall be carried out using existing processes - mostly the annual planning and budgeting cycle. This will minimize duplication of efforts but also increase the adoption of results of these processes within the implementation cycle aligned to the annual budget process. M&E will therefore be carried out through the following activities;

Half Annual and Annual Performance reports

Half Annual (February) and Annual (September) reports will be used to compile progress and performance information based on the Action Plans and key performance indicators. These reports shall be coordinated by the Secretariat, working with the TWGs and presented to the PWG to review. They will also inform the Leadership Committee in their performance monitoring activities. The Annual Performance Report will also provide input into the annual review process.

Annual Review and Evaluation

The Programme annual review, taking place in September/October, shall constitute the main evaluation event each year. This event shall be attended by programme external partners (DPs, CSOs, etc.). During this event, the Leadership Committee shall receive the annual performance report. From time to time, the PWG may commission independent assessment studies on any part of the programme in order to inform this evaluation. In such cases, reports from such studies will be received by the Leadership Committee. The event shall also be used to set targets for the following Financial Year.

Annual reporting – GAPR

The Government Annual Performance Report (GAPR) provides a comprehensive assessment of Government 's performance and the results of public spending of the Financial Year. On an annual basis, the programme will facilitate the OPM in the preparation of the GAPR. The programme will prepare and provide progress on achievement of output targets and implementation of key actions agreed during the previous Government performance retreats.

Mid-term Review

The PWG will commission a mid-term review of the programme in the Financial Year 2022/23 to carry out a detailed evaluation of the implementation and to inform it on progress made and changes that may be necessary to improve implementation. The review study shall be carried out with the help of external independent experts. The results of the review shall be considered and approved by the PWG. The review report shall also be presented to the Leadership Committee.

End of term evaluation

In the last FY of the NDPIII, a final review of the programme and a final review meeting with all stakeholders will be conducted. The overall DT programme performance will be assessed to determine the impact implementation of programme actions has had on the economy. Additionally, analysis of reasons why certain results have been achieved and not others will be undertaken and lessons derived for possible policy revision. The evaluation will inform the next PIAP in terms of required reforms or policy shifts to address the identified bottlenecks.

Diagnostic Studies

The PWG may, from time to time commission studies or surveys to obtain a deep analytical assessment of progress or impact of the entire programme or any part of it. Recommendation from such studies shall be considered by the PWG and possibly by the Leadership Committee.

Field visits

The PWG may, from time to time, carry out physical inspections to collect physical evidence on programme implementation progress and performance. Reports of physical inspections shall inform the monitoring function of the PWGs.

5.2 Roles and corresponding responsibilities for M&E

Secretariat

The DT Programme Secretariat shall coordinate the preparation of half annual and annual programme report, for collecting and compiling data on all aspects of the programme; action plan, key results performance indicators, etc. The Secretariat shall also manage contracts related to external experts for various studies, including for the mid-term review, and shall organize all evaluation events (such as annual programme evaluation). The Secretariat shall maintain a database for all indicators under each of the programme to aid tracking and reporting.

Technical Working Groups

Programme Technical Working Groups shall review sections of half annual and annual report relating to their thematic areas and clear these before the reports are submitted to PWGs. The TWGs shall also review reports of independent evaluation / assessment studies, clear them before their consideration by PWGs

Programme Working Groups

PWGs shall review and clear for LC consideration the half annual or annual performance report together with that of the mid-term and end evaluation reviews. PWGs also shall ensure the approved recommendations of monitoring and evaluation processes are integrated in the work-programme of the PWGs and tracked for their implementation.

Leadership Committee

The Leadership Committee will consider half annual and annual performance reports

6. FINANCING STRATEGY

Adequate financial resources are required for the successful implementation of the programme interventions and projects. Financing models being considered under the DT programme include: Government financing through budgetary provision, Public Private Partnerships (PPP), foreign Direct Investment (FDI) and Development partner support.

All initiatives identified have been costed and the resource requirement for executing this DT PIAP has been estimated at UGX billion over the next 5 years. This amount translates into UGX billion on average annually.

6.1 Annualized costs by Sub-programme

Sub-programme	Annualised Cost Projections (Billions)					
	2020/21	2021/22	2022/23	2023/24	2024/25	Total
ICT Infrastructure:	325.74	348.717	284.678	250.0216	247.8444	1,457.00
E-services:	84.317	129.133	97.571	86.315	80.23	477.57
Research, innovation and ICT skills development:	44.5	51.6	85.262	77.02	70.13	328.51
Enabling Environment:	20.47	24.44	29.64	33.43	37.18	145.16
Grand Total	475.027	553.89	497.151	446.7866	435.3844	2,408.24

6.2 Annualized Costs by lead MDA

Lead	Annualized Costs Projections (Billion UGX)					Total Cost (Billion UGX)
	2020/21	2021/22	2022/23	2023/24	2024/25	
MoICT & NG	42.252	62.322	66.292	52.522	46.812	270.20
NITA-U	261.175	297.578	280.961	249.893	243.892	1,333.50
UCC	47.20	58.59	74.10	78.47	85.37	343.73
UICT	3.2	5.5	5.8	4.3	4	22.80
UBC	16.8	11.4	10.4	9.4	7.6	55.60
SIGNET	100.8	102.8	52.8	44.8	39.51	340.71
POSTA UGANDA	0	11.9	2.9	3.5	3.5	21.80
MOPS	3.4	3.6	3.8	3.8	3.8	18.40
MOES	0.2	0.2	0.1	0.1	0.9	1.50
GRAND TOTAL	475.027	553.89	497.151	446.7866	435.3844	2,408.24

6.3 DT PIAP Financing Framework

Sources of Financing	Total Contributions FY1	Total Contributions FY2	Total Contributions FY3	Total Contributions FY4	Total Contributions FY5	Total Contributions -	(%) Share by source of financing
Central Government Transfers (Total Contribution))							
Non-Tax Revenue							
Development Partners (DPs)- Specify ¹							
<i>DP1</i>							
<i>DP2</i>							
<i>DP2</i>							

¹ NGOs, FBOs, CBOs, PSOs as well as Bilateral donors dealing directly with LGs are all included in this categorisation

Sources of Financing	Total Contributions FY1	Total Contributions FY2	Total Contributions FY3	Total Contributions FY4	Total Contributions FY5	Total Contributions -	(%) Share by source of financing
<i>Etc</i>							
NGOs							
TOTAL							100

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7. Appendices

Appendix A: Projects of the DT Programme

NDPIII PROJECTS

NO	PROJECT TITLE	MDA	START DATE	END DATE	STATUS
1.	Regional Communication Infrastructure Programme (RCIP)	NITAU	2016/17	2021/22	Ongoing
2.	IT Shared Platform (GOVNET)	NITAU	2020/21	2024/25	Feasibility
3.	Transforming postal units into service delivery centres	POSTA			Project Idea
4.	National Postcode and Addressing Geographic Information System	POSTA			Project Idea
5.	National ICT Initiatives Support Project	MoICT&N G			Project Idea
6.	Institutionalization of ICT function in MDAs and LGs	MoICT&N G			Project Idea
7.	Broadband Over Powerline for Rural Schools Internet connectivity	MoICT&N G			Project Idea
8.	National Internet Exchange Point	MoICT&N G			
9.	E-Waste Management Plant and Collection Centres	MoICT&N G			Project Idea
10.	Strengthening National Infrastructure Information	MoICT&N G			Project Idea

	Sharing and Coordination				
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Appendix B: Programme Action Plan

Sub-programme	Objective	Intervention	Output	Actions	Total Cost (Billion UGX)	Annualized Costs (Billion UGX)					Lead MDA
						2020/21	2021/22	2022/23	2023/24	2024/25	
Programme: Digital Transformation											
1. ICT Infrastructure	1. Increase the national ICT infrastructure coverage	1.1 Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last mile connectivity in public service delivery areas leveraging existing infrastructure by government and private sector players	Broadband connectivity extended to parish level	Extend broadband connectivity to parish level RCDF subsidy for supply side interventions Monitor the technical implementation plans of the national broadband infrastructure	91	12.20	14.64	17.57	21.08	25.30	UCC
			National Broadband infrastructure extended	Implement Last mile connectivity and Uganda Digital Acceleration Program to expand access to affordable high speed internet through the NBI Supply and installation of Equipment and management system (Routers, switches, VPs, Access points, Racks, Network management system)	890.39	170.078	184.078	181.078	178.078	177.08	NITAU
			Government service delivery units (schools, hospitals, post offices, tourism sites, police, LGs etc) connected to the NBI	Implement Last mile connectivity and Uganda Digital Acceleration Program to expand access to affordable high speed internet through the NBI Supply and installation of Equipment and management system (Routers, switches, VPs, Access points, Racks, Network management system)							
			Digital Terrestrial Transmission sites (DTT) connected to the NBI	Connect Digital Terrestrial Transmission sites (DTT) to the NBI							
Wireless hotspots (MyUg) deployed at	Deploy wireless hotspots at strategic locations through the MYUG including district WiFi zones for learning										

			strategic locations									
				Connect schools and Tertiary institutions to Highspeed broadband	20.00	0	5	5	5	5.00	UCC	
			National Broadband infrastructure extended	Carryout an ICT infrastructure audit, engage key stakeholders (private sector, NITA, UETCL,UTL) to guide the planning and deployment of common core infrastructure, and evaluate existing initiatives for broadband connectivity in hard to reach areas	5.0	0	2.5	2.5	0	-	MOICT	
		1.2 Expand the Digital Terrestrial Television and Radio Broadcasting network	Existing transmission sites upgraded to ensure redundancy and provision of local regional program stream insertions –	Establish more DTT transmission sites across the country and integrate them into the DTT Network to complete the digital migration project	96.00	32	40	8	8	8.00	SIGNET	
					Cover all TV signal shadow areas in 10 major towns and cities with Digital Tv signal from gap fillers	32.00	8	8	8	4	4.00	SIGNET
					Upgrade existing transmission sites to ensure redundancy and provision of local regional program stream insertions	54.00	10.8	10.8	10.8	10.8	10.80	SIGNET
					Install local insertion equipment in 10 major towns and cities to enable establishment of regional TV channels	16.00	4	4	4	2	2.00	SIGNET
				Existing radio transmission sites upgraded to ensure redundancy and provision of local regional program stream insertions.	Establish radio transmission sites in the shadow and border areas	20.00	6	6	4	2	2.00	SIGNET
				Upgrade existing transmission sites to ensure redundancy and replacement of obsolete equipment	20.00	8	6	3	3	-	SIGNET	

			Alternative signal transmission	Create multiple Free to Air program streams through provision of alternative signal transmission using the over the top and internet protocol TV platforms	17.00	6	4	2	2	3.00	SIGNET
			A national DTT/DTH hybrid broadcast system designed and deployed	Contribute and distribute all TV channels with a national license by satellite to the DTT sites and also direct to viewers homes	19.00	6	4	3	3	3.00	SIGNET
			Television and radio studio facilities enhanced	Build 4 new TV studios and 7 new radio studios and furnish them with state of the art equipment	66.71	20	20	10	10	6.71	SIGNET
				Replace all obsolete radio studio equipment for radio and Television studios						-	
										-	
		1.3 Establish and enhance national common core infrastructure (data centres, high power computing centers, specialized labs)	Third National Data Centre established	Acquisition of space/land	94.91	37.6	34.637	22.67	0	0.00	NITAU
				Installation of Data Centre Infrastructure and facilities (equipment, power, Cooling, Network, Security)							
				Awareness and Sensitisation, Capacity building							
			Enhancement of usage of National Data Centre (NDC)	Upgrade of existing National Data Centre Infrastructure and Disaster Recovery (DR) site	15.2	5.06	5.06	3.06	1.06	0.95	NITAU
				Consolidate requirements and enrollment MDAs applications & systems into the Data Centre							
				Maintenance of Data Centre Infrastructure & Facilities							
				Awareness Creation							
										-	
2. E-services	2. Enhance usage of ICT in	2.1 Main stream ICT in all	Frameworks in place to guide	Develop Government Enterprise Architecture(GEA) and Interoperability Framework (GIF)	1.708	0.994	0.710	0	0	0.00	NITAU

national development and service delivery	sectors of the economy and digitize service delivery	interoperability of Government systems	Implement the GEA & GIF across Government	3.5	0.90	0.90	0.70	0.70	0.30	NITAU
			Creation of awareness, Change management and Capacity building across Government	0.500	0.100	0.100	0.100	0.100	0.10	NITAU
			Develop an Education Enterprise Architecture and Interoperability framework							MOES
		A data sharing and integration platform developed to enhance the delivery of services in government and private sector and operationalised	Develop a common platform through which data shall be shared between MDAs in a cost effective, secure, harmonized and reliable manner to improve e-service deliver, expedite decision making and implementation of Government Programs.	19.893	3.979	4.9	3.979	3.479	3.56	NITAU
			Awareness Creation, Change Management and Capacity building	1.329	0.266	0.266	0.266	0.266	0.27	NITAU
		Government Public Key Infrastructure (PKI) services developed and enforced	Setup the Digital authentication and electronic Signatures Platform and Integrate e-services into the Digital signatures Platform Develop a signing Portal for Digital Signatures Awareness Changement and Capacity building	20.880	0	7.186	5.176	4.17	4.35	NITAU
		e-Citizens Portal enhanced (e-Services added onto the Portal)	Integrate e-services onto the e-Citizens Portal and Create awareness	0.050	0.050	0	0	0	-	NITAU
				0.150	0.030	0.030	0.030	0.030	0.03	
				0.150	0.03	0.03	0.03	0.03	0.03	
		Public and Private institutions supported to review, re-engineer their processes, automate and deliver	Coordinate, develop and expand flagship e-services and rollout e-services across all NDPIII programs	37.964	0	12.593	9.593	8.593	7.19	NITAU
			Development of applications for Mobile GOU Container							
			Support MDAs/LGs to review/re-engineer their processes and also in the development of e-solutions	9.491	1.898	1.898	1.898	1.898	1.90	NITAU

		services online	Change Management, Awareness Creation and Capacity building targeting the general population									
			Establishment of Regional eGovernment support Service Desk	22.8	4.6	4.6	4.6	4.6	4.40		NITAU	
		ICT needs assessments in key sectors conducted	Carry out ICT infrastructure needs assessment /mapping carried in key sectors of Education, Health, Trade and Industry, Gender and Agriculture	1.20	0	0.6	0.6	0	-		MoICT &NG	
		Unified electronic mail and digital collaboration services rolled out	Acquire UMCS licences and enroll all Government entities to improve communication and public service delivery	23.917	4.784	4.784	4.784	4.784	4.78		NITAU	
			Change Management, Awareness Creation and Capacity building across MDAs/DLGs									
		E-payment gateway in place	Rollout of the e-payment Gateway	14.996	2.999	2.999	2.999	2.999	3.00		NITAU	
			Security Audit of the e-Payment Gateway									
			Change management, Promotion and awareness Creation									
		SMS gateway in place	Rollout of SMS services (USSD, Bulk, Notifications) across MDAs	49.40	9.88	9.88	9.88	9.88	9.88		NITAU	
			Maintain connection (MNO Integrations, USSD)									
		National ICT statistics system	Develop ICT statistics system	2.50	0.5	0.75	0.2	0.75	0.30		MoICT &NG	
		Open data portal developed	Coordinate development of relevant datasets Develop data standards						-		MoICT &NG	
		2.2 Strengthen Cyber Security in the country	National Information Security Framework reviewed and implemented	2.500	0.5	0.5	0.5	0.5	0.50		NITAU	

			across the country								
			National cyber security strategy developed	Develop the Strategy and implement guidelines for subsector CERTs							MOICT &NG
				Coordinate Implementation of the strategy	0.760	0.152	0.152	0.152	0.152	0.15	
			Computer Emergency Response Teams (CERTs) strengthened	Strengthen national CERT/SOC capabilities	4.94	0.987	0.987	0.987	0.987	0.99	NITAU
				Strengthen sectoral CERT/SOC capabilities	17.000	2.500	3.500	4.500	3.500	3.00	UCC
				Technical capacity building and support for priority institutions within key sectors to Reach ISO 27001 or similar cybersecurity certification	7.593	1.518	1.518	1.518	1.518	1.52	NITAU
				Assessment of cybersecurity companies	0.3	0.06	0.06	0.06	0.06	0.06	NITAU
				Development and awareness of the National Cyber threat intelligence platform	0.3	0.06	0.06	0.06	0.06	0.06	NITAU
				Development and awareness of the Responsible Disclosure Framework	0.3	0.06	0.06	0.06	0.06	0.06	NITAU
				Design and implementation of re-tooling program for JLOS on cybercrime matters	0.7	0.14	0.14	0.14	0.14	0.14	NITAU
			Public Key Infrastructure developed and implemented	Development and implementation of the Digital Authentication and Electronic Signatures Platform	13	3.9	3.9	1.729	1.729	1.74	NITAU
				Development of PKI Infrastructure							
		2.3 Develop and implement the Data Protection and Privacy Program	Develop data protection and Privacy regulations	Develop the Data Protection and Privacy Regulation	0.050	0.050	0	0	0	-	MoICT &NG
				Awareness Creation and Sensitization	0.150	0.030	0.030	0.030	0.030	0.03	
											NITAU
		2.4 Leverage the	Services (government)	New auxiliary services introduced for access at postal outlets	0.40	0	0.1	0.1	0.1	0.10	POSTA

		existing Government infrastructure to deliver public and private services	& non-government) provided through the postal outlets	Postal outlets well facilitated with the requisite equipment and systems that transforms them into e-service delivery points	19.60	0	11.2	2.8	2.8	2.80	POSTA
			Service Uganda centers established and equiped.	Establish information and service Uganda centers and digital kiosks	10.40	1.8	2.0	2.2	2.2	2.20	MOPS
			National infrastructure information sharing and coordination platform established	Establish and operationalise a Management and Coordination Tool for a Guided ICT Infrastrucuture roll out in collaboration with utility providers.	5.00		2.5	2.5		-	MoICT &NG
				Establish and operationalise a Management Framework for a National Infrastructure Information Sharing and Coordination Tool	7.00		1.5	1.5	2	2.00	MoICT &NG
			New postal services introduced	Rollout new services that position the Post as an essential infrastructure for the development of the economy	1.80	0	0.6	0	0.6	0.60	POSTA
		2.5 Digitize, archive and commercialize Local Content and data	Platforms for digitization and documentation of ongoing government programmes for MDAs &LGs provided	Develop centralised Archiving systems	12.80	4.8	2.2	2.2	2.2	1.40	UBC
			Digital Repository Infrastructure and Facilities for MDAs & LGs provided	Develop Digital Repository Infrastructure and Facilities for MDAs and LGs	10.80	4	2.2	2.2	1.2	1.20	UBC
			Local content commercially available	Establishment of the regional centre to get additional information Digitize available local content	15.00	3	3	3	3	3.00	UBC

				Nationwide capacity building of local audio visual capacity building of local production industry								
				Implementation of the local content development fund and partnerghips with academia and private sector for commercialization of film products	10.00	2.5	1.5	3	1.8	1.20	UCC	
			Digitization of delivery platforms for special interest groups developed	Digitise delivery platforms for PWDs (sign language, different languages, PWDs digital programmes)	17.00	5	4	3	3	2.00	UBC	
				Developent of Educational platform with Assistive Technologies for all Digital Educational Content	7.00	0.75	1.2	1.5	1.25	2.30	UCC	
				Deployment of Assitive technologies at PWD Institutions	6.25	0.75	1	1.25	1.5	1.75	UCC	
				Development of senstitisation and training programs geared towards enhancing Digital Literacy of PWDs	4.50	0.75	1	0.75	0.65	1.35	UCC	
				Digital Literacy of special interest groups (PWDs, women, youth etc.)							UCC	
										-		
		2.6 Implement the national addressing system	GIS addressing and postcode database developed	Review the national postcode system to upgrade it to a digital layout Training and awareness on the system	92.00	20	32	17	13	10.00	MoICT &NG	
			National Postcode and Addressing system rolled out	Rollout the addressing system to facilitate service delivery (postal, ecommerce, ambulance services, fire brigade, security patrol, tax collection)								

3. Research, innovation and ICT skills development	3. Promote ICT research, innovation and commercialization of indigenous knowledge products	3.1 Develop and support the ICT Research and Innovation ecosystem	An internship and placement framework developed	Develop an internship and placement framework	0.15	0.15	0	0	0	-	MoICT &NG	
			Joint research program between academia and Government									
			ICT research agenda								-	
		3.2 Develop innovation and incubation Centers	National ICT park established	Establish supporting Infrastructure for the National ICT Park which include Internet connectivity, Roads and Utilities (Water, Sewerage, electricity)	75.93	10.2	15.2	17.2	18.2	15.13	NITAU	
			ICT incubation Hubs established	Establish regional ICT incubation hubs	1.00	0.2	0.2	0.2	0.2	0.20	MoICT &NG	
			Privately owned innovation hubs supported								MoICT &NG	
			BPO /ITES centres supported	Extension of connectivity & provision of Bandwidth to the BPO centers	0.500	0.100	0.100	0.100	0.100	0.10	NITAU	

		in the public service	Continous training and assessment of Public Officers	6.00	1.2	1.2	1.2	1.2	1.20	
	4.2 Develop an ICT professionals quality assurance framework	Certification framework to regulate ICT professional standards developed	Certify ICT Products and service providers						-	NITAU
	4.3 Provide digital literacy training	Communities & SMEs trained in digital literacy	Identification and Mobilisation of community groups and SMEs	20.00	3	3.25	5.5	5.5	2.75	UCC
Designing Course manuals, Course scheduling and delivery										
Train communities and SMEs in digital literacy										
			Awareness and empowerment of women and girl child for use of ICT products	7.50	1.25	1.5	1.75	1.5	1.50	UCC
e-training programmes developed			Conduct a needs assessment and develop e-training programmes on digital literacy	7.65	0.75	1.15	1.5	2	2.25	UCC
									-	
Inclusive awareness campaigns on the ICTs and 4IR opportunities and risks			Conduct awareness campaigns on the ICTs and 4IR opportunities and risks Awareness and empowerment of women and girl child for use of ICT products	3.50	0.75	0.8	0.5	0.75	0.70	UCC
			-						-	
4.4 Position UICT as the specialized institution for ICT training	Specialized training programmes conducted at UICT	Conduct specialised ICT training programmes	1.50	0.3	0.3	0.3	0.3	0.30	UICT	
		Pursue representation of UICT on joint admission board								
	Business Development Centre	Business consultancy conducted							UICT	

			Carry out benchmarking activities, regulatory impact assessments to inform the process Develop the e-government law	0.25	0	0	0.2	0.05	-	MoICT &NG	
			Review the ICT policy to address emerging trends	0.20	0	0	0.1	0.1	-	MoICT &NG	
			Develop the national data protection and privacy regulations (stakeholder engagements, drafting, production of reports)	0.08	0	0.08	0	0	-	MoICT &NG	
			Develop a spectrum management policy	0.75	0.05	0.3	0.3	0.1	-	MoICT &NG	
			Review the broadcasting policy	0.30	0	0.2	0.1	0	-	MoICT &NG	
			Develop and implement a National ICT Incubation strategy	0.09	0.06	0.03	0	0	-	MoICT &NG	
			Review the BPO/ ITES strategy	0.200	0.100	0.100	0	0	-	MoICT &NG	
			Develop ICT research, innovation and development policy and strategy	0.20	0	0.15	0.05	0	-	MoICT &NG	
										MoICT &NG	
			Review the Analog to Digital Migration policy	0.25	0.05	0.2			-	MoICT &NG	
			Review ICT related laws to harmonise ICT Infrastructure	0.95	0.05	0.3	0.3	0.3	-	MoICT &NG	
									-	MoICT &NG	
			Develop ICT Standards and Guidelines	139.04	19.5	22.4	28.03	32.04	37.07	UCC	
		5.2 Coordinate and harmonize the implementation of ICT infrastructure and services	Framework for a coordinated rollout of ICT infrastructure and services established	Develop the national strategy for implementation of digital-services	0.07	0	0	0.02	0.05	-	MoICT &NG
									-		
				Develop and implement ICT Infrastructure Master Plan (Assessment of existing infrastructure, development of infrastructure blueprint, identification and plan for existing gaps)	0.30	0.1	0.2	0	0	-	MoICT &NG

			Develop and review of frameworks for broadband as a public utility	0.45		0.15	0.15	0.15		MoICT &NG
									-	
		National internet infrastructure coordinated	Equipment, develop operational and governance frameworks	0.30	0	0	0.1	0.2	-	MoICT &NG
			stakeholder engagements, consultancy, equipments, staff							
		Environment and human safety ensured	Equipment, institutional frameworks/governance established, staff to mana	0.25	0	0	0.05	0.2	-	MoICT &NG
		Environment and human safety ensured	Review the policy and strategy, guidelines and develop and e-waste management framework	0.30	0	0.2	0.1	0	-	MoICT &NG
			stakeholder engagements, drafting							
			Development and maintenance of an e-waste Database							
			Establish collection centres and set up transportation mechanisms							
				0.50	0	0.15	0.25	0.1	-	UCC
				0.90						NITAU
		5.3							-	
		5.4								
				2,408.24	475.027	553.89	496.251	446.7866	435.3844	

Appendix C: Programme Outcomes

Objective	Outcome	Indicators	Baseline FY2017/18	Targets				
				2020/21	2021/22	2022/23	2023/24	2024/25
Development Programme10: Digital transformation								
Development Challenge/Issue: Low utilization of ICT services across the country								
Overall Programme Objective/Purpose: To increase ICT penetration and use of ICT services for social and economic development								
1. Increase the national ICT infrastructure coverage	1. Increased ICT penetration	1.1 Internet penetration	25	30	35	43	46	50
		1.2 Population covered by broadband services (%)	74	79	79	83	87	90
		1.3 Digital Terrestrial TV signal coverage (%)	56	79	79	83	87	95
		1.4 Radio signal coverage (%)	80	85	87	90	95	98
		1.5 Fixed Broadband connectivity (Subscribers)	8,868	11,144	13,038	15,255	17,848	20,882
		1.6 Unit cost of 1Mbps/month of internet	237	200	140	100	90	70
2. Enhance usage of ICT in national development	2. Increased ICT usage	2.1 Proportion of government services online (%)	20	25	40	61	72	80
		2.2 ICT contribution to GDP (%)	2.0	2.67	2.89	3.13	3.40	3.69
		2.3 National broadband coverage with minimum speed of 8 Mbps	31%	41%	51%	61%	71%	90%
3. Enhance ICT research and innovation	3. Reduced costs of ICT services	3.1 Unit cost of low entry smart phones (UGX)	100,000	95,000	87,000	75,000	70,000	60,000
		3.2 Cost of a computer -UGX	1,600,000	1,550,000	1,300,000	1,000,000	900,000	800,000
4. Increase the ICT human resource capital	4. Enhanced efficiency and productivity in service delivery	4.1 ICT Development Index (IDI value)	2.19	2.5	3.2	3.6	3.8	3.9
		4.2 ICT directly created jobs	0	30,000	30,000	30,000	30,000	30,000
5. Strengthen the policy, legal and regulatory framework	Effective legal and regulatory framework ---Secure and vibrant ICT sector	5.1 No. of Legal and regulatory framework developed/ reviewed	0	1	1	1	1	1

Appendix D: Sub-Programme Intermediate Outcomes

Intermediate Outcome Indicators	Performance Targets						
	Base year	Baseline	2021/22	2022/23	2023/24	2024/25	2025/26
Sub-programme 1:							
Sub-Programme 2:							

Appendix E: Programme Results Framework, Output Level

Sub-programme	Objective	Intervention	Output	Indicators	Baseline FY2017/18	Targets					Lead MDA	
							2021/22	2022/23	2023/24	2024/25		
Programme: Digital Transformation												
1. ICT Infrastructure	1. Increase the national ICT infrastructure coverage	1.1 Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last mile connectivity in public service delivery areas leveraging existing infrastructure by government and private sector players	Broadband connectivity extended to parish level	Percentage of Parishes with broadband connectivity							9536	UCC
			National Broadband infrastructure extended	Length of fibre optic network	2424	3,092	3,592	4092	4592	5092		NITAU
			Government service delivery units (schools, post offices, tourism	Number of MDAs connected	119	130	140	154	170	174		
			hospitals, sites,	Number of districts Hq connected	40	40	55	60	65	70		

		police, LGs etc) connected to the NBI	Number of Government units schools, hospitals, post offices, tourism sites, police, LGs etc) connected to the NBI	428	562	696	830	964	1100	
		Digital Terrestrial Transmission sites (DTT) connected to the NBI	No DTTs connected to the NBI	0	18	23	30	35	37	
		Wireless hotspots (MyUg) deployed at strategic locations	Number of wireless hotspots (MyUg)	284	320	370	420	480	531	
			Number of educational Institutions connected to High speed broadband		100	100	100	100	100	UCC
		National Broadband infrastructure extended	Number of assessments/audits undertaken		1	1				MOICT
			Number of DTT transmission sites	4	4	4	1	1	1	SIGNET
	1.2 Expand the Digital Terrestrial Television and Radio Broadcasting network	Existing transmission sites upgraded to ensure redundancy and provision of local regional program stream insertions –	Number of Gap fillers with hybrid power back up system	0	10	10	10	5	5	SIGNET
			Number of existing DTT transmission sites with redundancy	0	9	9	9	9	9	SIGNET
			Number of sites with Local regional program	0	4	4	4	2	2	SIGNET

				stream insertion capability							
			Existing radio transmission sites upgraded to ensure redundancy and provision of local regional program stream insertions.	No. of new radio transmission sites		5	5	2	1	1	SIGNET
				No. of radio transmission sites with redundancy	0	10	8	2	2	2	SIGNET
			Alternative signal transmission	Over The Top and Internet Protocol Tv platforms) for content implemented	0	17	20	3	3	5	SIGNET
			A national DTT/DTH hybrid broadcast system designed and deployed	Number of FTA TV channels with a national or hybrid broadcast license		15	7	5	5	5	SIGNET
			Television and radio studio facilities enhanced	Number of TV studio facilities established	1	4	4	3	2	2	SIGNET
				Number of radio studio facilities upgraded	0	4	4	3	2	2	
		1.3 Establish and enhance national common core infrastructure (data centres, high power computing centers, specialized labs)	Third National Data Centre established	National Data Centre in place					1		NITAU
			Enhancement of usage of National Data Centre (NDC)	Number of applications and systems hosted centrally in the National Data Centre	58	100	150	200	250	300	NITAU
					40	90	100	200	200	250	

				Number of MDAs enrolled in National Data Centre								
2. E-services	2. Enhance usage of ICT in national development and service delivery	2.1 Mainstream ICT in all sectors of the economy and digitize service delivery	Frameworks in place to guide interoperability of Government systems	A framework in place	0	1					NITAU	
										NITAU		
										NITAU		
										MOES		
			A data sharing and integration platform developed to enhance the delivery of services in government and private sector and operationalised	An integration platform in place	0	1						NITAU
				Number of Government and private institutions utilizing the data sharing and integration platform	0	2	10	30	40	50	NITAU	
			Government Public Key Infrastructure (PKI) services developed and enforced	Number of e-services enabled for digital signatures	0	0	4	8	8	8	NITAU	
			e-Citizens Portal enhanced (e-Services added onto the Portal)	Number of public services offered online and accessed through the e-citizens portal	97	100	105	115	120	122	NITAU	
			Public and Private institutions	Number of e-services	0	10	30	50	59	69	NITAU	

		2.6 Implement the national addressing system	GIS addressing and postcode database developed	Geocoded national addressing and postcode system in place	0			1				MoICT&NG	
				Number of regions with digitized and physical addresses captured		0	1 (Central region)	1 (Eastern region)	1 (Northern region)	1 (Western region)			
				National Postcode and Addressing system rolled out	No of districts	0	1	27 (Central region)	44 (Eastern region)	27 (Northern region)	33 (Western region)		
3. Research, innovation and ICT skills development	3. Promote ICT research, innovation and commercialization of indigenous knowledge products	3.1 Develop and support the ICT Research and Innovation ecosystem											
			An internship and placement framework developed	Framework in place	0	1						MoICT&NG	
		Joint research program between academia and Government											
		ICT research agenda											
		3.2 Develop innovation and incubation Centers	National ICT park established	%age of National ICT Park infrastructure developed	0		5	10	20		NITAU		
			ICT incubation Hubs established	Number of Regional Hubs established by GOU	0	1	1	1	1	1	MoICT&NG		

			Privately owned innovation hubs supported	No. of hubs supported							MoICT&NG	
			BPO /ITES centres supported	Number of centres supported	3		4	5	6		NITAU	
			Enterprenuership and Incubation programmes developed	No of Enteteprenuership and Incubation Programmes Developed and Implemented							NITAU	
												NITAU
												NITAU
					10	0	3	3	2	2		UICT
		3.3 Support local innovation and promote export of knowledge products	Local ICT products developed	Number of Innovations supported by Government and commercialized	72	112	152	200	242	282	MoICT&NG	
				Intellectual property awareness								
				No. of innovators hosted in the GOU ICT innovation hubs								
				%age of ICT exports of total exports								
				Local digital media content products	Programming that contains Local content (%)	25	45	50	55	60	70	UCC
		3.4 Promote local manufacturing	Local assembly plants supported	No. of partnerships with manufacturing companies	1		1	1		2	MoICT&NG	

		4.2 Develop an ICT professionals quality assurance framework	Certification framework to regulate professional standards developed	No. of ICT products and service providers certified	239	197	439	281	323	450	NITAU	
		4.3 Provide digital literacy training	Communities & SMEs trained in digital literacy	No. of communities & SMEs trained	45	50	65	75	75	75	UCC	
				No. of participants	15000	20000	20000	20000	20000			
				No. of courses developed	3000	3000	3000	3000	3000			
				No PWD groups trained		30	40	50	60	70	UCC	
			e-training programmes developed	No. of programmes	1	3	2	4	2	1	UCC	
				Inclusive awareness campaigns on the ICTs and 4IR opportunities and risks	No of campaigns conducted		3	5	5	7	7	UCC
			4.4 Position UICT as the specialized institution for ICT training	Specialized training programmes conducted at UICT	No of specialized programs conducted		2	3	3	2	0	UICT
		No. of partnerships					1					
		Business Development Centre operationalised		No. of business consultancies conducted		2	2	2	2	2	UICT	
		4IR lab established		4IR lab		0	1				UICT	

					0					1	MoICT&NG
										1	MoICT&NG
											MoICT&NG
					0			1			MoICT&NG
					0		1				MoICT&NG
											MoICT&NG
									1		MoICT&NG
										2	MoICT&NG
				%age of Stakeholder engagement plan and communication strategy implemented	50	50	50	50	50	50	MoICT&NG
				Number of standards, regulations and guidelines developed			4	4	4	4	UCC
				National strategy for implementation of digital-services		1					MoICT&NG
		5.2 Coordinate and harmonize the implementation of ICT infrastructure and services	Framework for a coordinated rollout of ICT infrastructure and services established	ICT Infrastructure Master Plan	0			1			MoICT&NG
				Framework for deployment of broadband as a public utility in place						1	MoICT&NG
					0					1	MoICT&NG

