



INTERNATIONAL DIGITAL SECURITY FORUM

APPROACH TO DIGITISATION AND SECURITY IN AFRICA: UGANDA'S DIGITAL TRANSFORMATION PROGRAMME

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Agenda



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Introduction

- ❑ In FY 2018, MoFPED began the process of moving toward Programme Based Budgeting (PBB) by implementing the Program Budgeting System (PBS) in order to transform the budget from an output-based to a more result and performance-based approach.
- ❑ NDP III has adopted a Program Planning Approach (PPA) comprising of eighteen programs that are to be aligned to Program Based Budgeting;
- ❑ This is the first time ICT is recognised in NDP as Digital Transformation Programme (DTP)

Why program approach:

- ❑ Enhance synergies across sectors and other actors to reduce a 'silo' approach to implementation
- ❑ Provide a framework for programme based budgeting and implementation



NDP III Strategic Direction



VISION

“A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years”

GOAL

“Increased Household Incomes and Improved Quality of Life of Ugandans”

THEME

“Sustainable Industrialization for inclusive growth, employment and wealth creation”₄



Key NDP III Objectives

Enhance value addition in key growth opportunities

Strengthen the private sector to create jobs

Consolidate and increase the stock and quality of productive infrastructure

Enhance the productivity and social wellbeing of the population;

Strengthen the role of the state in guiding and facilitating development



DTP contributes to the NDPIII Objective 3 & 4 i.e.

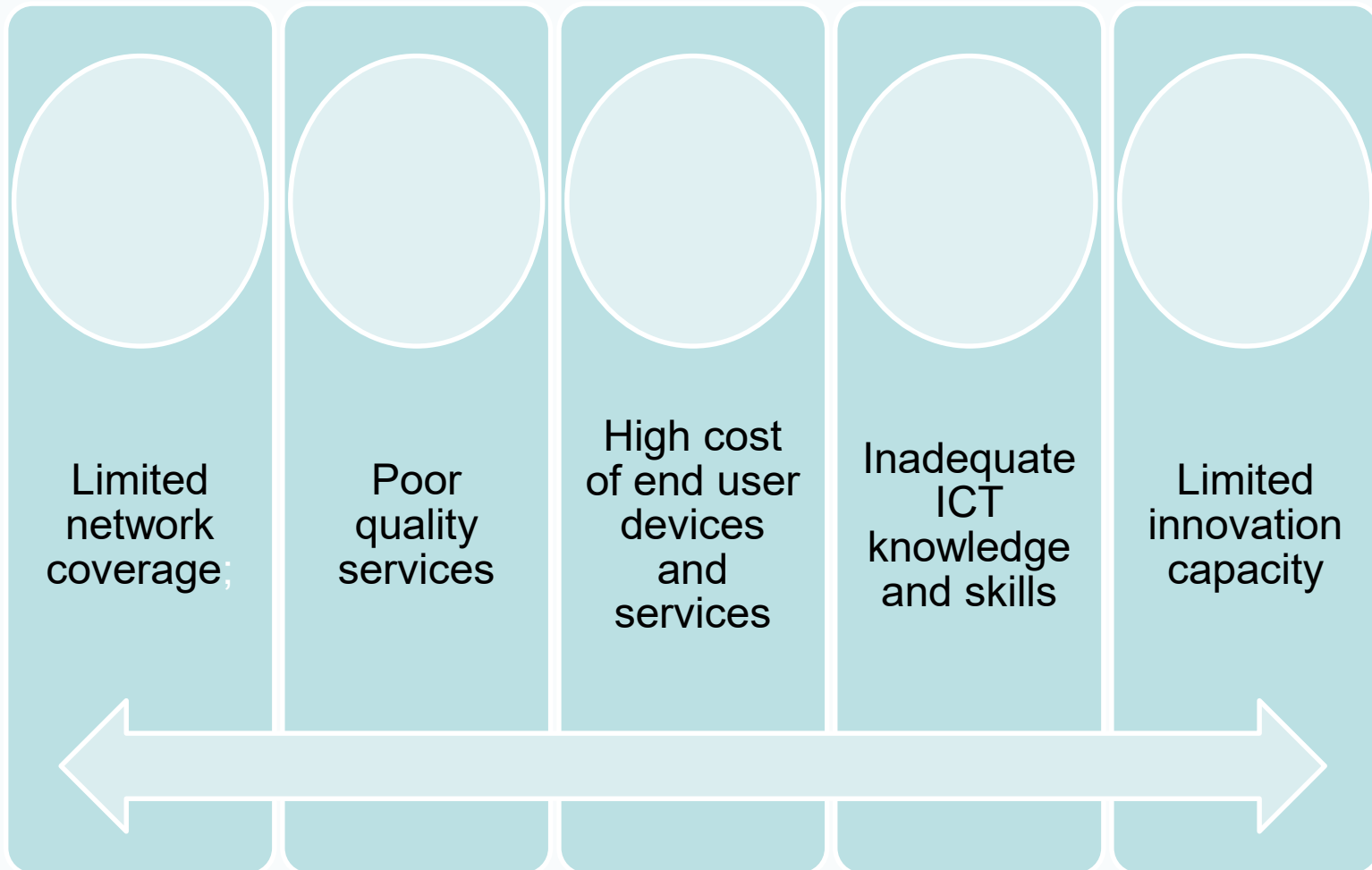
- Consolidate and increase the stock and quality of productive infrastructure;
- Enhance the productivity and social wellbeing of the population;



Digital Transformation Challenges



Limited utilization of ICT services across the country due to:





Programme Goal:

To increase ICT penetration and use of ICT services for social and economic development



Objectives

Increase the national
ICT infrastructure
coverage

Enhance usage of ICT
in national
development and
service delivery

Promote ICT
research, innovation
and commercialisation
of indigenous
knowledge products

Increase the ICT
human resource
capital

Strengthen the policy,
legal and regulatory
framework



Key Expected Results

increasing ICT penetration

reducing cost of ICT devices and services

creating more direct jobs in the sector

increasing ICT incubation

increasing government services online



Specific Programme Results

1. Increase ICT penetration
 - a) Internet penetration from 25 to 50 percent,
 - b) Digital Terrestrial Television signal coverage from 56 percent to 95 percent,
 - c) 70 percent NBI connectivity in Government MDAs/DHq,;
 - d) 90% national broadband coverage with minimum speed of 8 Mbps
2. Reduce the cost of ICT devices and services
 - a) unit cost of 1Mbps /month of internet on the retail market from USD 237 in 2018 to USD 70,
 - b) unit cost of low entry smart phones from UGX 100,000 to UGX 60,000
 - c) cost of a computer from UGX 1,600,000 to UGX 800,000);
3. Create 30,000 direct jobs annually within the ICT sector;
4. Increase local ICT innovation products developed and commercialized from 72 to 282;
5. Provide 80 percent of government services online.



Focus of DTP

Over the next five years, DTP will focus on promoting 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 commercialisation of ICT products;
- vii. Enhancing digital literacy and developing skills;
- viii. Supporting development and uptake of emerging technologies such as Fourth Industrial Revolution Technologies;
- ix. Process re-engineering and automation of end-to-end government business and service delivery



INTERVENTIONS



Objective 1: Increase the national ICT infrastructure coverage

INTERVENTIONS	OUTPUTS
<p>1. Extend broadband ICT infrastructure coverage countrywide in partnership with the private sector and implement last mile connectivity to key areas</p>	<ul style="list-style-type: none">i. National Backbone infrastructure extendedii. Government service delivery units (schools, hospitals, post offices, tourism sites, police, LGs etc) connected to the NBIiii. Wireless hotspots (MyUg) deployed at strategic locationsiv. Digital Terrestrial Transmission sites (DTT) connected to the NBI
<p>2. Expand the Digital Terrestrial Television and Radio Broadcasting network</p>	<ul style="list-style-type: none">i. Existing transmission sites upgraded to ensure redundancyii. Alternative signal transmissioniii. A national DTT/DTH hybrid broadcast system designed and deployediv. Television and radio studio facilities enhanced
<p>3. Establish and enhance national common core infrastructure (data centres, high power computing centers, specialized labs)</p>	<ul style="list-style-type: none">1. Third National Data Centre established2. Enhancement of usage of National Data Centre (NDC)



Objective 2: Enhance usage of ICT in national development and service delivery

INTERVENTIONS	OUTPUTS
1. Mainstream ICT in all sectors of the economy and digitize service delivery	<ul style="list-style-type: none">i. Frameworks in place to guide interoperability of Government systems, A data sharing and integration platform developedii. Government PKI services developed and enforcediii. e-Citizens Portal enhancediv. MDAs supported in automation of processes and delivery services onlinev. E-payment gateway, SMS gateway in placevi. National ICT statistics systemvii. Automation of tracing and tracking of postal items
2. Strengthen Cyber Security in the country	<ul style="list-style-type: none">i. National Information Security Framework reviewed and implemented across the countryii. National cyber security strategy developediii. National Computer Emergency Response Team (CERT) strengthened



Objective 2: Enhance usage of ICT in national development and service delivery

INTERVENTIONS	OUTPUTS
3. Develop and implement the Data Protection and Privacy Program	<ol style="list-style-type: none">i. Develop data protection and Privacy regulationsii. Personal Data Protection Office established
4. Leverage the existing Government infrastructure to deliver public and private services	<ol style="list-style-type: none">i. Services (government & non-government) provided through the postal outletsii. New postal services introduced
5. Digitize, archive and commercialize Local Contents	<ol style="list-style-type: none">i. Platforms for digitization and documentation of ongoing government programmes for MDAs & LGs providedii. Digital Repository Infrastructure and Facilities for MDAs & LGs providediii. Local content commercially availableiv. Digitization of delivery platforms for PWDs developed
6. Implement the national addressing system	<ol style="list-style-type: none">1. GIS addressing and postcode database developed2. National Postcode and Addressing system rolled out3. GIS supported national addressing database developed



Objective 3: Promote ICT research, innovation and commercialization of indigenous knowledge products

INTERVENTIONS	OUTPUTS
1. Develop and implement ICT Research and Innovation ecosystem	<ul style="list-style-type: none">i. ICT research, innovation and development policy and strategy developedii. An internship and placement framework developed
2. Develop Innovation and incubation Centers	<ul style="list-style-type: none">i. National ICT park establishedii. National ICT Incubation strategy developed and implementediii. ICT incubation Hubs establishediv. BPO /ITES centres supportedv. BPO/ ITES strategy reviewed
3. Support local innovation and promote export of knowledge products	<ul style="list-style-type: none">i. Local ICT products developedii. Local digital media content products
4. Promote local manufacturing and assembly of ICT products	<ul style="list-style-type: none">1. Local assembly plants supported2. Provide incentives for local manufacturing



Objective 4: Increase the ICT human resource capital

INTERVENTIONS	OUTPUTS
1. Develop a professional ICT workforce	<ul style="list-style-type: none">i. Develop a National Digital Skills Frameworkii. ICT training for professionally certified courses and specialized short courses carried out at UICTiii. Government ICT officers trained
2. Develop an ICT professional's quality assurance framework	<ul style="list-style-type: none">i. Certification framework to regulate ICT professional standards developed
3. Provide digital literacy training	<ul style="list-style-type: none">i. Communities & SMEs trained in digital literacyii. e-training programmes developediii. Awareness campaigns on the ICTs and 4IRs Module on Digital transformation introduced in the first year at tertiary level education for all students
4. Position UICT as the specialized institution for ICT training	<ul style="list-style-type: none">i. Specialized training programmes conducted at UICTii. Business Development Centre operationalisediii. 4IR lab established
5. ICT practical training enhanced	<ul style="list-style-type: none">i. ICT vocational training including 4IRs supported



Objective 5: Strengthen the policy, legal and regulatory framework

INTERVENTIONS	OUTPUTS
1. Review and develop appropriate policies, strategies, standards and regulations that respond to industry needs	i. Policies, strategies, standards and regulations developed/reviewed
2. Coordinate and harmonize the implementation of ICT infrastructure and services	i. Framework for a coordinated rollout of ICT infrastructure and services established ii. National internet infrastructure coordinated iii. Environment and human safety ensured



DTP Implementation



The implementation of DPT will involve:

- (i) Program planning - Through the Program Working Group (PWG) to set priorities
- (ii) Budgeting - To be drawn from medium-term expenditure framework and be linked to national budgetary processes
- (iii) Implementation - led and coordinated by the MoICT&NG
- (iv) Monitoring and Evaluation - Quarterly and annual programme progress reports will be produced



Implementation Coordination



- ❑ Program Administrative Coordinator: OPM

- ❑ Program Technical Coordinator/Manager: MoICT&NG
 - ❑ PS is the technical head of the Programme Working Group.

- ❑ Lead Implementing Partners: MoICT&NG, NITAU, UCC, POSTA, UICT, UBC, SIGNET
 - ❑ Other IPs: *MEMD, UETCL, UEDCL, COMMUNICATION SERVICE PROVIDERS, UTILITY SERVICE PROVIDERS (MoWE, MoWT), MoSTI, ACADEMIA, MoES, NCDC, NCHE, PRIVATE SECTOR, CIVIL SOCIETY, NEMA, SECURITY AGENCIES, KCCA, DPs, MDAs & LGS, ...ETC*

- ❑ PWG will develop Programme Implementation Action Plans



Implementation Reforms



- ❑ Government to take lead in the coordination of ICT infrastructure development and deployment so as to cure the silo-based approach;
- ❑ Government to digitalise and roll out e-services to all sectors, MDAs and Local Governments to be able to harness the potential of ICT.
- ❑ Rationalize agencies under the ICT sector to remove duplications and overlaps of mandates.



Human Resource Requirements



- Identified human resource gap include DevOps specialists, Graphic Designing specialists, Software Engineering specialists, Software Developers, Software Quality Testing (SQT) Automation specialists;
- MDAs/Sectors and LG will develop respective human resource development ad capacity building plans;



Programme Projects

- ❑ NDP III Core Projects
 - ❑ IT Shared Platform (GOVNET)
 - ❑ National Postcode and addressing Geographic Information System
- ❑ Programme Projects
 - ❑ Transforming postal units into service delivery centres
 - ❑ National ICT Initiatives Support Project NDPIII
 - ❑ Institutionalization of ICT function in MDAs and LGs
 - ❑ Broadband Over Powerline for Rural Schools Internet connectivity
 - ❑ National Internet Exchange Point
 - ❑ E-Waste Management Plant and Collection Centres
 - ❑ Strengthening National Infrastructure Information Sharing and Coordination



THANK YOU