PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA14362

Project Name	Regional Communications Infrastructure Program Phase 5 - Uganda (P130871)
Region	AFRICA
Country	Africa
Sector(s)	Telecommunications (50%), Information technology (35%), Public administration- Information and communications (15%)
Theme(s)	Regulation and competition policy (5%), Rural services and infrastructure (5%), Infrastructure services for private sector developme nt (50%), e-Services (10%), e-Government (30%)
Lending Instrument	Investment Project Financing
Project ID	P130871
Borrower(s)	Republic of Uganda
Implementing Agency	National Information Technology Authority - Uganda
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	10-Apr-2015
Date PID Approved/Disclosed	10-Apr-2015
Estimated Date of Appraisal Completion	08-Apr-2015
Estimated Date of Board Approval	26-May-2015
Appraisal Review Decision (from Decision Note)	The Regional Operations Committee authorized the team to proceed with pre-appraisal. Subject to clearance and disclosure of the safeguards instruments, and addressing issues raised by reviewers the team will seek an authorization to upgrade the pre-appraisal mission to Appraisal.
Other Decision	Authorization to upgrade to appraisal was given on April 7, 2015 following disclosure of the relevant safeguards instruments.

I.   Project Context
Country Context

Like its regional counterparts, Uganda has experienced robust GDP growth, averaging 6% from 2005 to 2013, but poverty reduction, while substantial, has not kept pace. Uganda has a record of prudent macroeconomic management and structural reform which has helped the country to overcome exogenous shocks. However, due to high population growth, real GDP growth per capita averaged only about 3.5 percent over the same period. The poverty rate fell from 56.4% in 1992 to 24.5 percent in 2009, but there is substantial and growing urban-rural and regional inequality. This divide is likewise reflected in access to ICT services.

Uganda will need to address several challenges in order to enable structural transformation of the economy, strengthen competitiveness and sustain high growth. A rapidly growing population is creating challenges for employment and service delivery. Lack of integration with northern Uganda further creates challenges of social cohesion. Governance and value for money need to be strengthened to enhance service delivery, increase the efficiency of infrastructure investments, and to build a clear and transparent institutional framework to ensure that future oil revenues in particular benefit the entire population. Infrastructure gaps and bottlenecks will need to be addressed to promote greater physical and digital connectivity both within the country, the wider region and to the global markets. Agricultural productivity and value addition need to be strengthened to improve the livelihoods of the average citizen. Rapid urbanization will need to be managed carefully and the human capital base will need to be significantly strengthened to take advantage of new market opportunities. ICT has a potential to play a significant role in tackling these challenges, for example through electronic agricultural extension, weather prediction services and online learning platforms.

Uganda's geographic position requires strong regional cooperation and integration to boost its own development and that of its neighbors. As a landlocked country, Uganda is dependent on the good will, infrastructure investments and competitiveness of the logistics and communications sectors of its coastal neighbors. Bordering five countries, Uganda also serves as a strategic transit hub for the region. This position could be further strengthened through deeper trade and investment integration with its neighbors, including customs and regulatory streamlining and harmonization paired with investments to improve its connective infrastructure and measures to increase the efficiency of its domestic logistics and communications sectors. Such a strategy would benefit not only Uganda, but spillover to its neighbors, particularly Eastern DRC, South Sudan, and Rwanda.

Sectoral and institutional Context

Access to and utilization of mobile telephony and mobile based services has increased dramatically in Uganda. The number of mobile phone subscribers in Uganda has grown from just 780,000 in 2003 to approximately 21.6 million in 2014, representing 58% of the population. The cost of both international and domestic calls has fallen sharply. 18.5 million Ugandans used mobile money services in 2014, more than triple the number of traditional bank account holders, with a transaction volume of UGX18 trillion (US$6.2 billion).

In contrast, access to broadband remains low, with poor quality and high prices. Entry level mobile broadband service (500MB per month) costs about 19% of the average Ugandan's monthly income, set against the UN Broadband Commission's target of 5%. The high costs are reflected in low broadband penetration rates of just 1.4% (1% mobile and 0.4% fixed), compared with a regional average of 4.3%. The high costs and low penetration result from a number of factors, including Uganda's position as a landlocked country requiring overland access to submarine cables landing in neighboring countries, previous technical problems of the national backbone network, and perceived limited market opportunity in the short term by private operators given the high rates of poverty and illiteracy in most rural areas.

The Government of Uganda (GoU) has implemented major policy reforms in the communications sector, demonstrating its commitment to the promotion of ICTs. These include establishing an independent regulatory body, the Uganda Communications Commission (UCC), fully liberalizing

the telecommunications market, and implementing a technology-neutral converged licensing framework which resulted in the increase of (mostly mobile) telephony penetration from below 1% in 2000 to 55.1% as of December 2013 .

Likewise, the Government has made substantial investments in telecommunications infrastructure, though significant gaps persist. GoU is investing in development of a National Backbone Infrastructure (NBI) with the aim of bringing reliable, high quality, low cost connectivity to all regions of the country for use by both the Government and the private sector. Phases I and II, comprising over 1,500 km of fiber and funded by a bilateral credit from China, have been completed, with phase III to be completed in 2015. Even with the completion of phase III, large portions of the northeast and northwest of the country will remain without coverage. Initial technical problems with the network have now been overcome, following a technical audit completed in 2011 and subsequent remedial actions. However, additional redundancy, international connections, and more stable power supply at transmission hubs is needed to further improve network performance.

NBI is operated in line with "Open Access" principles, enabling any licensed operator to purchase wholesale capacity on the network on equal non-discriminatory terms. NBI is operated through a management contract by a competitively selected private company (Soliton of Kenya) responsible for maintenance of the network and sale of capacity to licensed operators and Internet service providers (ISP). This successful private management contract will be extended to all future phases of the NBI, ensuring a seamless and inter-operable network. The open access principles apply to regional transit traffic as well, ensuring that lower costs within Uganda translate equally to benefits for neighboring countries, such as South Sudan, which access international connectivity through the NBI.

The private sector is leveraging investments in the NBI to roll out complimentary infrastructure and services in areas where there is strong demand and commercial viability. For example, a Google subsidiary is building a fiber access network in the greater Kampala metropolitan area which enables ISPs and mobile operators to provide broadband services at affordable prices to end users in the area.

However, further investments and incentives are needed to ensure affordable high quality ICT services in all areas of the country and to benefit neighboring countries. Significant private sector investments, such as those in the greater Kampala metropolitan area, are not forthcoming in secondary cities and rural areas where risks are higher and profit margins lower. Extension of the NBI to these areas will help lower the costs and risks of investment to extend commercial services in these areas by private operators. Likewise, additional links to neighboring countries where geography, poverty, fragility and conflict have prevented the private sector from deploying the needed infrastructure on their own can bring huge benefits.

Closing the missing links in NBI and providing new international connections to neighboring countries will improve access to, reliability of, and competitiveness of broadband services both domestically and regionally. The new links to be funded under RCIP would connect currently underserved areas in the Northern and Western regions of Uganda as well as South Sudan and eastern DRC, which face challenges of connectivity, economic opportunity, fragility, and conflict. The new international links will complement the links to Rwanda and Tanzania to be constructed under phase III of the NBI and the existing connections to Kenya and South Sudan. The additional

links will also improve the reliability of NBI benefiting users in both Uganda and in the neighboring countries by creating self-healing loops and position the country as a regional communications transit hub, including laying the groundwork for a backbone connection between the submarine cables on east and west coasts of Africa.

Significant investments and a coordinated strategy are needed to leverage the growth in connectivity and access to ICTs to improve public services. e-Government Services remain highly underdeveloped in Uganda. The 2014 UN e-Government Development Index ranks Uganda 156th out of 193 countries for e-Government development. This ranking also compares poorly with peers in the region. Such underdevelopment presents a missed opportunity to take advantage of increased reach and lower cost of connectivity to develop e-services to boost government efficiency and transparency, to improve service delivery, and to reach the poorest citizens and aspiring entrepreneurs.

II. Proposed Development Objectives

To support the Recipient's efforts to:
(i) Lower prices for international capacity and extend the geographic reach of broadband networks (the connectivity development objective); and
(ii) Improve the Government's efficiency and transparency through e-Government applications (the transparency development objective).

III. Project Description

Component Name

Enabling Environment

Comments (optional)

This component will finance development of new or revision of outdated ICT legislation, regulatory frameworks and technical standards, including a policy and strategy to promote broadband access, legislation related to information security to enable the safe use of electronic services and applications, and standards and guidelines for e-waste management. It will also support change management and capacity building activities such as conducting an ICT skills gap assessment for Government and development and execution of a capacity building program to address deficiencies, developing a strategy for institutionalization of the Chief Information Officer role within the Government and development and execution of a robust awareness and partnerships building program and communications strategy.

Component Name

Connectivity

Comments (optional)

This component will finance pre-purchase of international bandwidth for Government and priority user groups, implementation of missing links to improve regional connectivity and the reach, availability and resiliency of NBI and provision of green energy solutions for all new and existing NBI transmission sites to improve power reliability and extension of the Government Network (GovNet) to provide broadband connectivity to Ministries, Departments and Agencies (MDAs), local governments, schools, etc. It will also support a feasibility study for the Northern loop (implementation beyond the scope of this project), and preparation of required safeguard frameworks and instruments and the implementation of recommendations stemming from them (except resettlement related) as relevant.

Component Name
e-Government
Comments (optional)
This component will finance: Development of ICT standards and frameworks for e-Government, including establishing and implementing a Government Enterprise Architecture (GEA) to achieve interoperability across government ICT systems; A cloud based national datacenter; A shared platform to improve Government ability to deploy e-Services; Information Security as a Service; A whole-of-Government data integration and sharing program; Shared IT services to improve Government efficiency; e-Procurement; and Development of citizen centric e-Services. The project will finance the required hardware and software as well as technical assistance and consulting services related to the implementation of these sub-components.

Component Name
Project Management
Comments (optional)
This component will finance project management related costs including project coordination, procurement, financial management, monitoring & evaluation, and environmental and social safeguards. This will include funding consultancy support for the successful implementation of the project, logistics, consumables, office equipment, as well as incremental operating costs and audits. This component will also fund technical assistance (TA) to support monitoring and evaluation (M&E) and the acquisition of a computerized accounting system.

IV. Financing *(in USD Million)*

Total Project Cost:	85.00	Total Bank Financing:	75.00
Financing Gap:	0.00		

For Loans/Credits/Others	**Amount**
BORROWER/RECIPIENT	10.00
International Development Association (IDA)	75.00
Total	85.00

V. Implementation
The National IT Authority (NITA-U) will be the implementing agency for RCIP Uganda and would have overall responsibility for its implementation. A capable project management team has been appointed, which will be supplemented shortly after project effectiveness with additional staff and consultants to support implementation. Several measures have been taken during project preparation to increase capacity and readiness for implementation. In April 2013 and October 2013, the Bank organized three training sessions on various aspects of procurement of World Bank financed projects. A Procurement Specialist with experience in managing and implementing World Bank and other donor funded projects and with an ICT background has been appointed. An FM assessment has been undertaken and recommendations made to NITA-U to strengthen their systems and human capacity. During implementation, technical assistance will be provided to support Monitoring and Evaluation, through recruitment of an M&E specialist (internal or external). Likewise, social and environmental expertise will be built within NITA-U (internal or external). A Social and Environmental Focal Point (SEFP) will be identified/appointed to help ensure appropriate and timely implementation, monitoring and reporting of social and environmental aspects of the project.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✘	
Natural Habitats OP/BP 4.04	✘	
Forests OP/BP 4.36	✘	
Pest Management OP 4.09		✘
Physical Cultural Resources OP/BP 4.11	✘	
Indigenous Peoples OP/BP 4.10	✘	
Involuntary Resettlement OP/BP 4.12	✘	
Safety of Dams OP/BP 4.37		✘
Projects on International Waterways OP/BP 7.50		✘
Projects in Disputed Areas OP/BP 7.60		✘

Comments (optional)

VII. Contact point

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