



Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 27-Feb-2018 | Report No: PIDISDSC20421



BASIC INFORMATION

A. Basic Project Data

Country Tanzania	Project ID P160766	Parent Project ID (if any)	Project Name Digital Tanzania Program Phase I: Digital Foundations Project (P160766)
Region AFRICA	Estimated Appraisal Date Nov 12, 2018	Estimated Board Date Mar 20, 2019	Financing Instrument Investment Project Financing
Borrower(s) Ministry of Finance and Planning	Implementing Agency President's Office - Public Service Management, Ministry of Works, Transport and Communication (Communication Sector)		

Proposed Development Objective(s)

To increase access to affordable, high quality internet services for government, businesses and citizens and to improve the government's capacity to deliver digital public services.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	127.10
Total Financing	127.10
of which IBRD/IDA	127.10
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	127.10
IDA Credit	127.10



Environmental Assessment Category

B - Partial Assessment

Concept Review Decision

Track II-The review did authorize the preparation to continue

B. Introduction and Context

Country Context

Tanzania is a geographically large, diverse and strategically important country, with a rapidly growing population projected to rise from 54 million to 100 million by 2040. The country borders the Indian Ocean, several large inland lakes and eight neighboring countries, five of which are landlocked¹. It serves as a primary trade, transport and telecommunications gateway to much of East Africa. Real GDP growth over the past decade has averaged 6.6%², with the economy faring relatively well compared with sluggish growth throughout much of Sub-Saharan Africa. However, these gains have not translated into significant poverty reduction, with GDP expansion offset by 3% per annum population growth and disproportionate gains in urban areas and among the higher income brackets. Gross national income (GNI) per capita stood at only \$900 in 2016, with almost half the population living below US\$1.90 per day. Though the country is rapidly urbanizing, 70% of the population resides in rural areas with limited economic opportunities. Despite these challenges, Tanzania is striving to achieve the Sustainable Development Goals (SDGs) and to move to middle-income status by 2025.

Rapid population growth and the lack of economic diversification compound the growing concerns around lack of employment opportunities and access to services, particularly for youth and women. The agriculture sector provides about 70 percent of employment but only 31% of GDP, and its growth rate continues to decline, limiting opportunities for rural households, particularly for women who represent a majority of workers in the sector. Unemployment, particularly for youth, remains a persistent and growing challenge with approximately 800,000 youth entering the labor force every year. Infrastructure development remains a major challenge, with poor roads, inadequate energy generation and distribution networks, and unreliable telecommunication networks. High-skilled jobs have been declining as a percentage of the total labor force over the last two decades, in part because of a failure to adopt digital technologies³. Limited enthusiasm among government leadership for deepening regional integration and trade links with East African neighbors further suppresses opportunities for both domestic and regional economic growth. The country's infrastructure and skills deficiencies, paired with heavy administrative and fiscal burdens, result in a *Doing Business* ranking of 132 out of 190

¹ Uganda, Rwanda, Burundi, Zambia, and Malawi

² <http://databank.worldbank.org/data/reports.aspx?source=2&country=TZA>

³ World Bank. 2016. *World Development Report: Digital Dividends*.



countries surveyed in 2017⁴. They also create challenges for citizens and businesses to access services and markets, both within and outside of the country.

Sectoral and Institutional Context

Tanzania has made significant progress in improving connectivity and access to digital financial services over the past decade. Mobile phone (voice) penetration has risen to 69%⁵, the number of mobile money accounts now exceeds 20 million⁶ and the value of digital financial transactions is equivalent to nearly 50% of total GDP. Access to the internet, particularly mobile broadband has recently begun to take off following the launch of 3G/4G/LTE services in major population centers, rising perhaps as high as 40% penetration at end 2016.⁷ These achievements have been driven by both public and private investments in telecommunications infrastructure and digital service delivery, particularly within the highly competitive mobile telecoms market. The spread of mobile connectivity and financial services is further unlocking opportunities for new services and business models in sectors with significant infrastructure deficits such as energy and transport through rapid growth of distributed solar companies and innovations in drone delivery.

Despite this progress, Tanzania is underperforming its potential for harnessing digital communications and technologies for economic growth, job creation and service delivery. The country ranks 167 out of 175 countries in the International Telecommunication Union's (ITU) Global ICT Development Index⁸. The ICT sector accounts for a mere 2% of GDP, compared with at least 3% (and typically more) in comparator countries, representing a gap of at least US\$450 million for each percentage shortfall. Tanzania lags its neighbors in terms of 3G and 4G mobile broadband services. Despite RCIP's progress in extending rural connectivity, a significant digital divide persists, with some three million people living in areas still without any mobile signal, and more than 30 million people without data coverage, essential to connect to the internet. Territorial coverage is even lower, meaning that extensive areas of the country that could potentially provide useful employment- for instance through tourism, mineral extraction or higher value agricultural activities - are likely to remain unexploited. Even in areas with sufficient signal coverage, mobile broadband services remain unaffordable to much of the population, with tariffs for a basic plan equivalent to 10% of GNI per capita. This is twice the UN-endorsed affordability benchmark of 5% or less (UN Broadband Commission).

A number of interrelated factors are constraining private sector investment and competitiveness critical to closing Tanzania's digital divide and creating a strong foundation for growth of the digital economy. These include:

- i. **Underinvestment in backbone network infrastructure and lack of an effective Open Access Policy.** Low cost, high quality and geographically widespread fiber-optic backbone networks are essential to provision of telecoms services. Recognizing this need, the government has developed the National ICT Backbone (NICTBB) aiming to extend communication infrastructure throughout the vast country, as well as to provide connectivity to submarine cables and the global internet infrastructure for six neighboring countries. The NICTBB provides a wholesale capacity for use by private operators and government, managed by the state-owned Tanzania Telecommunications Company Limited (TTCL). While there is a sound logic to establishing a shared backbone network to lower costs, network expansion and capacity have not kept pace with market developments. To

⁴ World Bank. 2017. *Doing Business 2017: Equal Opportunity for All*

<http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Report.pdf>

⁵ GSMA

⁶ Tanzania Communications Regulatory Authority (TCRA), June 2017

⁷ TCRA, December 2016 (note that the actual rate is likely lower due to double counting of customers using multiple providers/multiple accounts)

⁸ International Telecommunications Union, 2016. <http://www.itu.int/net4/ITU-D/idi/2016/>



date, the NICTBB only has 7,500 km of fiber, far too little in a country of Tanzania's size and the network has too few loops to create sufficient redundancy to protect from cuts, especially for cross-border links. The network reportedly suffers from reliability and capacity issues and lacks a sufficient number of points of presence to meet market demand. Despite these challenges, private operators face significant barriers to investing in their own backbone infrastructure or to complete missing links in the NICTBB.⁹ While prices for wholesale capacity have recently been lowered, they are set by the government rather than in response to market dynamics. Addressing the barriers to private fiber network investment and improving the performance and open, equitable access to the NICTBB are critical to Tanzania's digital development.

- ii. **Constrained regulatory independence and capacity.** The Tanzania Communications Regulatory Authority (TCRA) resides under the authority of the Ministry of Works, Transport and Communications (MWTC), somewhat limiting the independence necessary to effectively regulate a modern and dynamic telecoms sector and digital economy. This challenge is compounded by the ownership of the NICTBB by MWTC and its operation by state owned TTCL which competes as both a wholesale and retail services provider (controlling wholesale backbone connectivity services provided to its retail competitors). TCRA's authority and ability to implement and enforce pro-competitive regulations, quality of service requirements and to regulate dominant market players is challenged by this potential conflict of interest.
- iii. **High levels of sector taxation and onerous compliance burdens for private operators.** Sectoral taxes remain high with Tanzania having the second highest cost of ownership of mobile phones in Sub-Saharan Africa, according to GSMA¹⁰. High prices for rights of way further constrain the roll out of backbone and metro fiber infrastructure. A recent requirement for private operators to list 25 percent of their shares on the Dar stock exchange has proved to be difficult to fulfill, with most operators (including TTCL) still not in compliance and likely deterring future foreign direct investment. SIM card registration rules have proven very difficult to comply with given that many citizens, particularly in rural areas do not have the required official documents, placing operators at risk of fines and reluctant to continue rollout of new services to additional customers in rural areas. High taxes on the import and sale of digital devices (smart phones, tablets, computers) likewise act as a deterrent to access.
- iv. **Low levels of income, digital literacy and domestic market size.** Consumers of ICT services are highly price sensitive given the low levels of average income in Tanzania. This, paired with aggressive competition in the mobile retail market has led to low marginal revenues for service providers and this discourages investment in infrastructure and services in rural areas where there isn't a sufficient customer base to overcome the low margins. The lack of digital literacy among a wide swathe of the population and lack of relevant digital content (online services, marketplaces, information and media, in local languages) likewise limit demand for ICT services and suppress the addressable customer base. Addressing these dual challenges will require interventions to incentivize rollout of services in rural areas, narrowing the digital literacy gap, creating high demand digital public services and fostering a domestic and regional environment/market conducive to creation of locally and regionally relevant digital content.

The Government of Tanzania is seeking to promote digital development as a key enabler of economic growth and

⁹ With the exception of Halotel, which has recently deployed 19,000 km of fiber, primarily in rural areas, whereby a number of fiber pairs on the network will be eventually be made available for use by the NICTBB. There have also been a number of PPP arrangements for the construction of metro fiber loops.

¹⁰ GSMA, 2015. Digital Inclusion and mobile sector taxation in Tanzania. Available at: <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/01/Digital-inclusion-mobile-sector-tax-Tanzania.pdf>.



industrialization, job creation, service delivery and government efficiency. The National Five-Year Development Plan 2016/17-2020/21 recognizes ICT as a “critical enabler of socioeconomic development and transformation” and as such calls for measures to unlock development of the ICT industry and adoption of digital technology and innovation across critical sectors such as agriculture, health and education. The plan also recommends a wide range of investments in digital government platforms and services to improve government efficiency, transparency and accountability and to modernize public service delivery. These goals are further reflected through the National eGovernment Policy 2016, which has guided recent organizational and governance reforms among relevant digital government institutions, investments in strengthening human resources and setting standards and guidelines for rationalizing deployment of IT infrastructure, equipment and services. These efforts are coordinated through the e-Government Agency, established in 2010 as the central coordination agency for government ICT adoption.

Tanzania has made notable strides in the development of digital public services applications and delivery capacity in recent years, but significant gaps and opportunities for leap-frogging remain. The Regional Communications Infrastructure Program (RCIP) facilitated development and piloting of a number of digital services and platforms. These include the national business portal, birth registration system, e-procurement, e-office, telemedicine and a mobile services portal which is hosting mobile phone based services such as utility bill notifications, health insurance verification and tracking, pensions notification, fuel price notifications, voter verification and government job application amongst others. Digital information management and tracking systems have also been deployed for Human Resources, Financial Management, Revenue Collection and Land Management. Nonetheless, the country ranks only 130th of 193 countries in the 2016 UN e-government index, a significant improvement since 2014 (146), but behind regional peers such as Uganda (128) and Kenya (119). Many piloted applications have only recently been completed and are yet to be scaled up to reach a broad range of users. With the increasing access to connectivity there is nearly unlimited scope to increase digital public services offerings. Technological and business model innovations have likewise created opportunities to leverage significant cost savings, reduce the time for deployment and increase impact of new digital services by sharing IT infrastructure, software, data and human resources across all government service delivery entities.

C. Proposed Development Objective(s)

The Project Development Objective (PDO) for *Digital Tanzania Program Phase I: Digital Foundations Project* is to increase access to affordable, high quality internet services for government, businesses and citizens and to improve the government's capacity to deliver digital public services.

Key Results (From PCN)

The proposed PDO-level results indicators include:

- a) Percentage of population covered by data-enabled mobile signal (3G or greater)
- b) Internet users per 100 people
- c) Number of transactions accessing a public service via internet or a mobile phone
- d) People obtaining new digital skills or knowledge under the project
 - Of which, percentage of women and girls obtaining new digital skills or knowledge under the project

D. Concept Description

The Digital Tanzania Program aims to assist the country to harness its digital potential - ensuring that all citizens have access to high quality, low cost connectivity, that public services are easily accessible online, and that the digital economy is driving growth, innovation and job creation. Across the globe, digital technologies are rapidly transforming the way people, businesses and governments communicate and access information and how they transact and deliver



services. Tanzania has the opportunity to embrace this trend, taking proactive steps to ensure that its citizens, businesses and institutions are equipped to participate, innovate and flourish in an increasingly online, digital-first environment. This vision will require a long-term commitment to making the investments and policy reforms needed to increase connectivity, spur private sector ICT investment and innovation, develop a new generation of digital leaders



and creatively using technology to improve the efficiency and impact of public services.

The Digital Tanzania Program Phase I: Digital Foundations Project targets three core enablers of digital development:

(i) Digital Ecosystem: strengthening the laws, policies, regulations, and institutional and human capacity needed to promote ICT infrastructure investment, market competitiveness, digital engagement, job creation, and innovation; (ii) Digital Connectivity: ensuring access to affordable, high quality internet services for all citizens and critical government institutions; and (iii) Digital Platforms and Services: building the technical capacity, institutions, and IT infrastructure for the Government to deliver services to citizens and conduct its own business digitally.

The project components and activities noted below were identified at concept stage, but are subject to further refinement and revision during project preparation and may change accordingly.

Component 1: Digital Ecosystem

The aim of Component 1 is to make Tanzania a more attractive and competitive place for digital investment and innovation, ensuring that the benefits of digital technology are reaching all citizens and helping lay the groundwork for growth of the digital economy. This will be accomplished by strengthening the many interrelated elements that characterize a thriving digital ecosystem—creating and implementing forward-looking laws, regulations and policies; building digital skills and capacity of institutions and youth; developing a critical mass of innovators, entrepreneurs, and support services; and working toward closing the digital divide—ensuring that all citizens benefit from digital development. These goals will be supported through three subcomponents detailed below.

Sub-Component 1.1: ICT Policy, Regulatory and Fiscal Reform and Implementation

Sub-Component 1.1 seeks to foster policy and regulatory reforms aimed at encouraging private sector investment in ICT services, enhancing service quality and affordability, and encouraging innovation. The following priority areas for technical assistance have been identified: (a) a comprehensive review of existing and proposed telecoms and e-transactions regulatory instruments, enforcement mechanisms and institutional capacity; (b) development of an Open Access policy for fiber networks, to ensure that non-facilities based operators have equitable access to dark fiber, and that incentives and licenses are available to allow more investors into the market, alongside TTCL and NICTBB; (c) development of regulations and policies to incentivize sharing of network infrastructure, establishment of a more pro-consumer/pro-competition domestic and regional interconnection and roaming regime for voice, data and mobile money, establishment of a quality of service monitoring and enforcement regime, and adoption of dynamic spectrum management policies and practices to encourage low-cost rollout of services in rural areas (priorities to be verified under activity (a) noted above); (d) a review of the tax burden on the sector, especially with regard to taxes that may be hindering infrastructure investment, such as on rights of way and constraining consumer access; (e) review of the implementation of the CMSA Act, which obliges local operators to list a minimum 25% of shares on the Dar stock exchange, and the impact it has had on FDI in the sector; and (f) capacity building of TCRA staff and management in emerging fields.

Sub-Component 1.2: Cybersecurity, Privacy Protection and Data Exchange

Subcomponent 1.2 will aim to create a more secure environment for critical network operations and digital transactions, ensuring privacy of personal data and enabling data exchange and accessibility. While digital networks, information systems and services offer significant gains in efficiency, productivity and convenience, they also introduce new vulnerabilities to hacking, cyberattacks and misuse of sensitive or personal data. Mitigating these vulnerabilities is



critical to creating the consumer/citizen trust and confidence necessary to undertake digital transactions and share sensitive personal data in exchange for online services. The following priority activities have been identified to support these objectives: (a) Capacity building/awareness raising of cybersecurity risks and best practices among government employees (first and most important line of defense); (b) Capacity building of the National Cybersecurity Emergency Response Team (CERT) to enable sharing of attack and vulnerability information across critical sectors and networked infrastructure (power financial, water, etc.), between government and private sector and between countries of the region; (c) development of a national public key infrastructure (PKI) or equivalent to enable authentication and certification of users and providers of critical online services and information; and (d) development of data privacy, security and exchange legislation and corresponding regulations and procedures. Activity (d) will require a comprehensive and nuanced approach to strike a balance between data protection and privacy considerations on the one hand and the need to make data available and exchangeable to enable digital service delivery, innovation and data analytics on the other.

Sub-Component 1.3: Digital Youth

Sub-component 1.3 will aim to build the skills and experience of Tanzanian youth to become the digital innovators, entrepreneurs and IT professionals of tomorrow. Consultations with industry, government and academia have revealed that formal ICT training programs in Tanzania often do not provide the hands on, practical skills demanded in the market. Likewise, youth with a talent for digital innovation often lack the corresponding business and communications skills needed to commercialize their ideas or establish and run successful enterprises. This component will support the following activities to address these gaps: (a) establishment of a digital youth internship program to place young people within digitally oriented businesses and government MDA/LGA IT departments and digital services units; (b) Support for youth innovation challenges and entrepreneurship/business plan competitions working with local tech incubators and accelerators; (c) support for digital “microwork” opportunities for youth including digitization of government records and registries and digital mapping activities; (d) securing bulk discounts on IT certification courses for youth; and (e) recruitment of a digital youth coordinator to manage the programs, and create partnerships with private partners and foundations to crowd in financial and in-kind support for digital skills development and innovation programs in Tanzania. Specific emphasis will be placed on attracting female participants to the programs noted above to help correct for the longstanding gender imbalance in the sector.

Component 2. Digital Connectivity

The aim of component 2 is to ensure that all Tanzanians have the opportunity to access low cost, high speed broadband connectivity. Widespread, affordable and reliable connectivity is an essential pre-requisite to providing and accessing digital services and to engaging in modern communications and e-commerce. In addition to the measures to boost sector competitiveness and private network investment through regulatory and other ‘soft’ mechanisms supported under Component 1, there is a need for more direct public investment to meet the connectivity needs of government and academic institutions and to create incentives for the private sector to close the digital divide in internet service provision between urban and rural populations. Component two will support the government agendas for industrialization and equitable spatial development, ensuring that all Tanzanians have equivalent access to digital services and opportunities.

Sub-component 2.1: Connected Government

Subcomponent 2.1 will support connection of all currently unconnected Ministries Departments and Agencies (MDAs) and Local Government Authorities (LGAs) to high speed broadband as part of the Government Network (GovNet).



This will build out from the successful GovNet program under RCIP, extending the network to additional MDAs (primarily in Dodoma, due to relocation of government institutions to the capital) and to remaining LGAs in rural areas throughout the country. It is proposed to use a new demand-side mechanism for implementation – demand aggregation across government and advanced purchase of bandwidth and connectivity services - to prime the market and to attract private sector investment. Under this model, commissioning bandwidth for government institutions would not only meet the government’s connectivity needs, but can also provide an anchor client to incentivize private sector network investment. Once a fiber backbone or link is established to serve government, the same infrastructure can be used to serve businesses and individuals. Support will include (a) a feasibility study and PPP transaction advisory consultancy to identify priority institutions for connection based on projected bandwidth demands, location (digital mapping), cost and overall impact, and (b) a competitive tender for internet connectivity and enterprise services, under a public-private



partnership.

Sub-component 2.2: Rural Broadband for Development

Sub-component 2.2 will aim to significantly reduce Tanzania’s digital divide – providing universal connectivity access in rural areas through public-private partnerships. As is the case in both developed and developing countries across the world, there are many areas with low population density and/or very low average incomes in Tanzania that do not provide sufficient returns to drive affordable, private sector mobile broadband services rollout without additional government incentives and coordination. This sub-component will build on the successful rural connectivity program under RCIP to extend data-enabled (3G or higher) network coverage to the three million people currently living in areas that are unserved by any mobile cellular signal and an upgrading of services in areas only served by 2G networks. Under RCIP, public funds leveraged private investment in the ratio of 30:70 and it is expected to achieve a similar ratio again. Support will include (a) financing for least cost subsidy ‘reverse auctions’ to incentivize private sector financing and construction of infrastructure and upgrading to mobile broadband services in targeted rural areas; (b) support for innovation in business models and rural roaming policies to enable retail level competition among providers of services in rural areas; and (c) support for digital content and services targeted at improving livelihoods and agricultural productivity. The program will be carried out by the private sector, in collaboration with the Universal Communication Services Access Fund (UCSAF). The program will be coordinated with the GSMA, an industry association that has been running pilot programs for national roaming and infrastructure sharing in rural areas. Digital innovation challenges and business plan competitions under component 1.3 will be specifically targeted at developing applications and services and targeting development challenges identified by rural populations to take advantage of the increased rural access.

Component 3: Digital Platforms and Services

Increased access to affordable, high-quality connectivity will create an opportunity to transform the way that the Government conducts its business and provides services to citizens using digital technology. The aim of component 3 is to build the core infrastructure and capacity necessary to support digital public service delivery, enhance the efficiency of the government’s internal operations and to rollout priority digital productivity platforms and public services. By establishing a shared digital public service delivery platform, the Government can significantly reduce the cost and time taken to develop and maintain new digital services by centralizing provision of “back-end” IT services and infrastructure for the use by all MDAs/LGAs and enabling seamless data sharing to increase efficiency and innovation. This approach would allow the ministries and agencies to focus on their core business requirements and objectives, rather than issues related to IT infrastructure and having to retain high quality IT personnel at each institution.

Sub-Component 3.1: Shared Digital Public Services Delivery Platform

Sub-component 3.1 will support development of a cloud based, shared public services delivery platform. This is envisioned to streamline digital services delivery across all government institutions - significantly speeding up the deployment of digital services and cutting costs by leveraging a standardized, shared infrastructure and services platform for data storage, hosting, security, data sharing, citizen access, e-payment, professional IT support, and other agency or citizen needs. This will include: (a) development of a Whole of Government (WoG) enterprise and interoperability architecture and implementation plan; (b) enhancement of the shared data hosting solution/government cloud (“Infrastructure as a Service”); and (c) design and deployment of an enterprise service bus to enable seamless data exchange across MDAs/LGAs and to provide access to common digital services enablers such as user authentication, digital ID integration, mobile delivery platform, electronic payment services, SMS notification services, etc;



Sub-Component 3.2: Strengthening Institutional Capacity to Deliver Digital Services

Sub-component 3.2 will support a comprehensive institutional development and capacity building program to strengthen the government’s ability to deliver digital services. Adoption of digital technologies will require an equivalent upgrade of the strategies, policies, institutions and capacity of technical staff and leadership responsible for championing and executing this ambitious agenda. Project support will include: (a) recruitment of a digital government advisor to support strategy, skills development and implementation activities; (b) development of regulations and enforcement mechanisms to support implementation of the e-Government Act; (c) development of e-Government PPP regulations to unlock opportunities for private sector participation; (d) development of the Digital Government Strategy and Action Plan, including an institutional structure and capacity review; (e) development and implementation of data-sharing policies, standards and protocols needed to support cloud based shared government infrastructure; (f) a training program for “Digital Leaders” and IT professionals across government including on all aspects of shared infrastructure; and (g) a change management and outreach program to sensitize stakeholders about government IT policies and the benefits of shared infrastructure and services.

Sub-Component 3.3: Digital Services and Productivity Platforms

Sub-component 3.3 will support development of selected cross-cutting productivity platforms and information management systems for government, as well as priority citizen-facing digital services. Priorities identified for improving government efficiency, transparency and accountability include: (a) extension of the e-Procurement system to all procuring entities within government; (b) development of the remaining modules and roll out of e-Office solution to all MDAs and LGAs; (c) Introduction of biometric enabled access control and time management control system to allow for automatic tracking of attendance and timesheets of government personnel and to eliminate ghost government employees. Priorities identified to support public service delivery for citizens and businesses include: (a) Expansion of the national business portal to provide licenses in high demand sectors (in addition to current general business registration and licensing); (b) rollout of the digital birth and death registration system (BRS4G) from 16 pilot sites to 400; (c) expansion of capabilities of the existing mobile services delivery portal, including by offering additional mobile services in sectors such as agriculture and education; and (d) organization of Digital Government Innovation Competitions to stimulate digital services development by private sector and talented youth.

Component 4: Project Management

Component four will support essential project management functions of the project. This will include support for an overall project coordinator, a digital government services coordinator, a connectivity/ICT technical specialist and specialists in procurement, financial management and safeguards. It will also include funding for strategic communications, monitoring and evaluation, audits, logistics and operational overhead. It will also include capacity building for stakeholders on preparation of bidding documents and contracts specifically for procurement of ICT, which often includes both goods and services in one contract.

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project will be carried out nationwide, with exact site selection not known at this stage (to be identified during



project implementation and through related planning, feasibility and design processes and studies). Tanzania is a land of contrasts, with an extremely diverse and unevenly distributed flora, with over 12,700 plant species (a figure comprising more than one-third of the total plant species in Africa). Furthermore, Tanzania has a relatively large land surface area devoted to resource conservation (29%), including national parks, game reserves, and game-controlled areas, covering a total of 240,000 km². There are 540 forest reserves covering 132,000 km², as well wetlands that cover about 10% of the country. In view of the sensitivity of the natural resource base, and the fact that the actual sites of some of the infrastructure development is still unknown, the following Bank policies are also triggered at this stage and will be confirmed during preparation of safeguards documents: OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitats), OP/BP 4.36 (Forests), and OP/BP 4.12 (Involuntary Resettlement).

Project activities may involve digging of land of linear lines for fiber optics, the installation of cellular towers and shelter, construction of access roads and structures for housing equipment and energy sources. As far as possible, existing right-of- ways will be used. However, in some rural areas, the creation of new rights of way may involve some land acquisition. Potential environmental and social impacts likely to be generated are, nevertheless, generally low, temporary and easily managed with the application of environmental, health, social and safety mitigation measures. As such, the project is categorized as “B”. As the exact locations of the activities are not yet known, a frameworks based approach will be adopted at this stage, with relevant plans to be developed after site identification and prior to undertaking civil works or other actions whereby safeguards policies would apply.

B. Borrower’s Institutional Capacity for Safeguard Policies

The Project will gain from the experience and lessons learned from implementation of the prior RCIP 3 project. Based on the RCIP III experience it has been determined that there is a need to strengthen the safeguards expertise and oversight under the Digital Tanzania project through recruitment of either a combined or separate environmental and social safeguards expert as part of the Project Implementation Unit rather than relying on central government provision of safeguards expertise as was done under RCIP and which proved inadequate to the needs of the project.

C. Environmental and Social Safeguards Specialists on the Team

- Mary C.K. Bitekerezo, Social Specialist
- Shri Vasantt Kumar Jogoo, Environmental Specialist
- Jane A. N. Kibbassa, Environmental Specialist
- Naima Abdallah Besta, Social Specialist
- Jacob Omondi Obongo, Social Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The risks associated with the type of infrastructure development being proposed under this project are generally low, temporary and easily managed with the application of environmental, health and safety mitigation measures. As far as possible, existing right-of- ways will be used. However, in rural areas, there



are good chances that new right-of-ways have to be created. In any case, the ecological footprint will be very limited. Environmental Assessment OP/BP 4.01 is nevertheless triggered, and Category “B” assigned to the project.

In view of the fact that the DTP will be implemented nation-wide, and the exact locations of physical interventions are not precisely known at this stage, an Environmental and Social Management Framework will be prepared, consulted upon and disclosed. Once the network’s details and specific locations for the construction of associated infrastructures have become known, specific Environmental and Social Management Plans (ESMPs) will be prepared as necessary during project implementation, in line with the ESMF. For the rural connectivity component, standardized ESMP templates will be developed to be used by the private sector operators when establishing new mobile tower sites and associated infrastructure (to be modified in line with any non-standard conditions specific to the individual site or situation and in line with the ESMF)

Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	Yes	As mentioned previously, the natural resource base of Tanzania is very sensitive. As the actual sites of some of the infrastructure development is still unknown, the Policy on Natural Habitats is triggered at this stage and will be confirmed during preparation of the ESMF. The ESMF will likewise include relevant procedures and guidelines intended to protect the natural resource base.
Forests OP/BP 4.36	Yes	Due to the fact that there are 540 forest reserves covering 132,000 km2 across the country, the Policy on Natural Habitats is triggered at this stage. This will be confirmed during preparation of the ESMF, with relevant procedures and guidelines included. Sites will be identified during project implementation and through related planning, feasibility and design processes and studies and subject to relevant provisions of the ESMF if falling within the forest reserves.
Pest Management OP 4.09	No	No activities under this project are expected to involve use of chemicals.



Physical Cultural Resources OP/BP 4.11	No	The activities will have very limited ecological footprints and the likelihood that they disturb physical cultural resources is insignificant.
Indigenous Peoples OP/BP 4.10	No	This policy is not triggered as the project will be in areas that have been broadly determined to be without IPs. As far as possible, existing right-of- ways will be used.
Involuntary Resettlement OP/BP 4.12	Yes	This policy is triggered because the planned improvement of network infrastructure involving the laying of fiber optic cables, construction of masts and associated impacts with their operation, construction of access roads and structures for housing equipment and energy sources will likely require land to be acquired. This may result in physical and / or economic displacement. To ensure that these impacts are avoided and / or managed, the borrower is expected prepare a Resettlement Policy Framework (RPF) to adequately deal with issues of stakeholder consultation, land acquisition and physical and economic displacement of persons. A framework will be prepared because the specific project sites have not yet been determined. The RPF will be duly consulted upon cleared by the Bank and adequately disclosed both in country, and at the InfoShop prior to appraisal. The RPF will provide guidance to the preparation of site specific RAPs or their equivalent.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Apr 13, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

ESMF and RPF preparation are expected to be completed by end March, 2018. The ESMF and RPF from the previous RCIP project will be updated to take into account project scope and changes in Government and World Bank rules, guidelines and best practices since preparation of the RCIP project. Disclosure of documents is expected by April 6, 2018.



CONTACT POINT

World Bank

Casey Torgusson, Timothy John Charles Kelly
Senior Operations Officer

Borrower/Client/Recipient

Ministry of Finance and Planning
Mr. Doto M. James
Permanent Secretary
ps@mof.go.tz

Mr. John Rubuga
Commissioner – External Finance
jrubuga@mof.go.tz

Implementing Agencies

President's Office - Public Service Management
Dr Laurean J. Ndumbaro
Permanent Secretary
ps@utumishi.go.tz

Priscus Kiwango
Director, ICT Services and Project Coordinator
priscus.kiwango@utumishi.go.tz

Mulembwa Munaku
Coordinator - EGovernment Agency
mulembwa.munaku@utumishi.go.tz

Ministry of Works, Transport and Communication (Communication Sector)
Dr. Maria Sasabo
Permanent Secretary
ps@mst.go.tz

Peter Philips
Director, ICT Services and Project Coordinator



peter.mwasalyanda@mst.go.tz

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

Task Team Leader(s):	Casey Torgusson, Timothy John Charles Kelly
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Approved By

Safeguards Advisor:	Nathalie S. Munzberg	27-Feb-2018
Practice Manager/Manager:	Boutheina Guermazi	02-Mar-2018
Country Director:	Preeti Arora	31-Oct-2018

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