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ICT FOR EDUCATION – MOZAMBIQUE, TANZANIA

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MINISTRY OF COMMUNICATION, SCIENCE AND TECHNOLOGY

Investment in ICT in Tanzania

By

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The Role of Government in Providing Broadband

- Service ICT Infrastructure:
- The National ICT Broadband Backbone (NICTBB)
- Science and Technology Higher Education Project (STHEP)
- Regional Communications Infrastructure Program (RCIP).
- Metro Fiber Infrastructure in Urban Areas Project (PPP)

Improving Service Availability Countrywide:

- Connectivity Service Availability The National ICT Infrastructure Development Program:
 - NICTBB a national Agenda -To avoid duplication of efforts
 - Integrated Project Planning Focused Capex
 - Each Ministry, Department and Agency (MDA)/Higher
 Learning Institution (HLI) to be Connected to the NICTBB a
 competitive advantage
 - We continue investing ahead of Demand in all sectors of our economy: a strategic Developmental Move.



National ICT Broadband Backbone

Project Cost: Investment in ICT Infrastructure Develoment

✓ NICTBB: USD 170m + TZS 30billion from GoT.
 • Phase I: USD70m:TZS17billion
 • Phase II: USD100m:TZS13billion
 ✓ Metro (PPP): USD 80m.
 ✓ RCIP: USD 100m
 ✓ HERIs: USD 7m

NICTBB

Project Schedule

National ICT Broadband Backbone

2004 **Decision**: Decision: 2005 Feasibility Study I: 2005 Feasibility Study II: 2007 **Technical Agreement I:** 2007 **Financial Agreement II:** 2008 **Phase I Effective Date:** 1st Feb. 2009, delivered in June 2010. 1st Aug. 2010, to be delivered Phase II Effective Date: in March 2012.

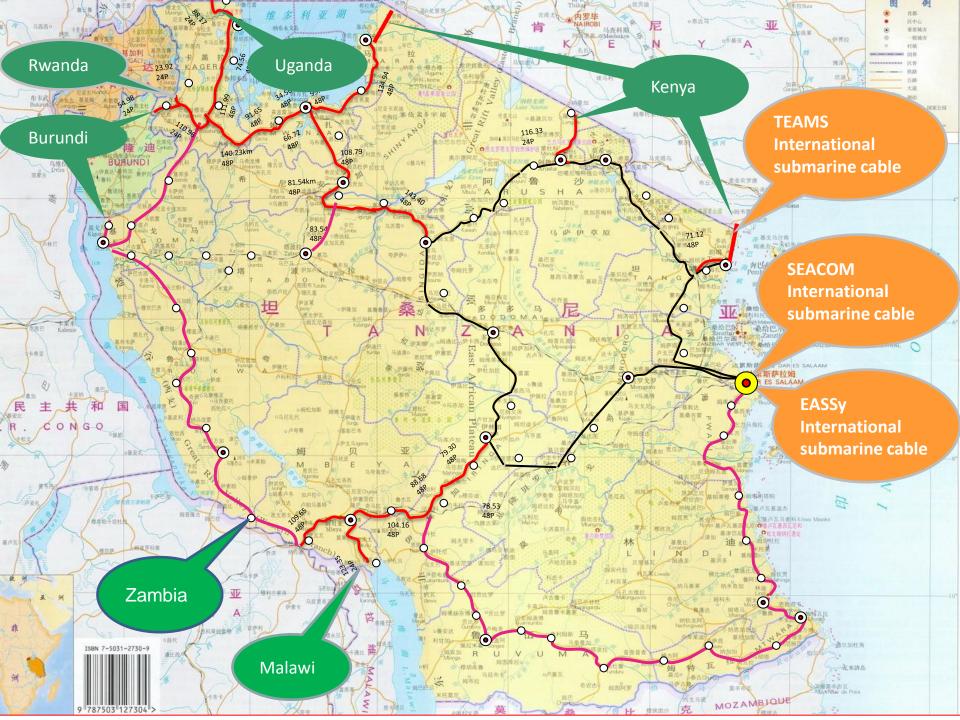


National ICT Broadband Backbone

Project Specifications

NICTBB

- National coverage 10,000km (All Districts & Regional HQs)
- Cross-border connectivity to neighbours (8 countries)
- Adequate super-highway capacity (10G x 40 lambdas/pair)
- Reliable and resilient (Ring-based, Mesh-based)
- **Speedy connection at global level** (3 sea cables = SEACOM, EASSy, TEAMS)
- Switching Capabilities (DWDM,IP,SDH)
- Secure and high availability: A three ring topology
- **Easily accessible:** open access, non discriminatory terms to all service providers.
- Affordable services (STM1s, ...STM64s, FE, GE)
- **Utilization** (last mile Broadband connectivity)





National ICT Broadband Backbone

Impact @Speed of Thought:

Redefining Everything we Know....

✓ e-Government
 ✓ e-Education, e-Learning
 ✓ e-Health,
 ✓ e-Medicine, Tele-Medicine
 ✓ e-Agriculture
 ✓ e-Banking
 ✓ e-Commerce, e-Business
 ✓ e-Tourism

Metro Fiber Infrastructure Project

- A 90 km Metro Optic Fiber Infrastructure Project in Urban areas to complement the NICTBB.
- ✓ USD 80 million Investment between the Government and Consortium of Telco Operators (TIGO, ZANTEL and AIRTEL).

 The project is implemented by the Consortium of Telco Operators.

Science and Technology Higher Education Project (STHEP):

- The long term objective- to enhance Tanzania's capacity to apply knowledge to economic activities through strengthening the higher education system.
- Coordinated by Ministry of Education and Vocational Training (MoEVT) and Ministry of Communication, Science and Technology (MCST).
- Laying ICT Infrastructure network to connect Higher Education and Research Institutions (HERIs) in Tanzania. A \$7 million financing by IDA for ICT Infrastructure.

•The RCIP – Tanzania is aimed at catalyzing private sector investment to improve connectivity within and outside Tanzania and it is intended to achieve the following objectives:

- (i) Connectivity development
- (ii) Transparency development
- The objectives are in line with the National Development Vision 2025, MDGs of 2015 and the National ICT Policy (2003) that envisage Tanzania to become a Regional HUB OF ICT INFRASTRUCTURE AND SOLUTIONS

- •RCIP Tanzania is a five-year Project with US\$ 100 Million credit funding from IDA.
- RCIP Tanzania Project Components:
- (i) Component 1 Enabling Environment :

To build and strengthen internal capacity for the formulation and review of policy, regulatory environment, and promote further sector reform; review and improve on institutional arrangements for the implementation and operation of the National ICT Broadband Backbone network.

- (ii) Component 2 Connectivity : Facilitate the connectivity and requirements for cross-border facilities and services at all Tanzanian border points. Support the operationalization of the Universal Communications Access Fund (UCAF).
- (iii) Component 3 e-Government Applications : This will facilitate the implementation of e-Government applications of: National Business Portal ; Pilot exercise on e-Procurement for Medical Stores Department (MSD); Telemedicine system; National Vital Registration System; and Enhancing accessibility to the public of Land Records.

- (iv) Component 4 Project Management Support
 Strengthen the institutional arrangement; and provide support to the coordination of the implementation of the project in relation to Project Management.
- Project implementation is coordinated by MCST and the President's Office-Public Service Management.

Mitigating ICT adoption Challenges:

Connectivity- Service Availability
 Electricity- Energy to Power ICTs
 Affordability - Service Tariff
 Capability - The HR Function
 Security- Cyber Crimes

ICT As a Public Staff Number Multiplier:

- Mational Teachers/Doctors
- Zonal Teachers/Doctors
- Regional Teachers/Doctors
- District Teachers/Doctors
- Division Teachers/Doctors
- Ward Teachers/Doctors

Teachers/Doctors tied to an
 Institution (School, college, Dispensary,
 or Hospital,) teachers/Doctors

✓ Increase of No. of Teachers/Doctors?

 ✓ Access to Quality Services?

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