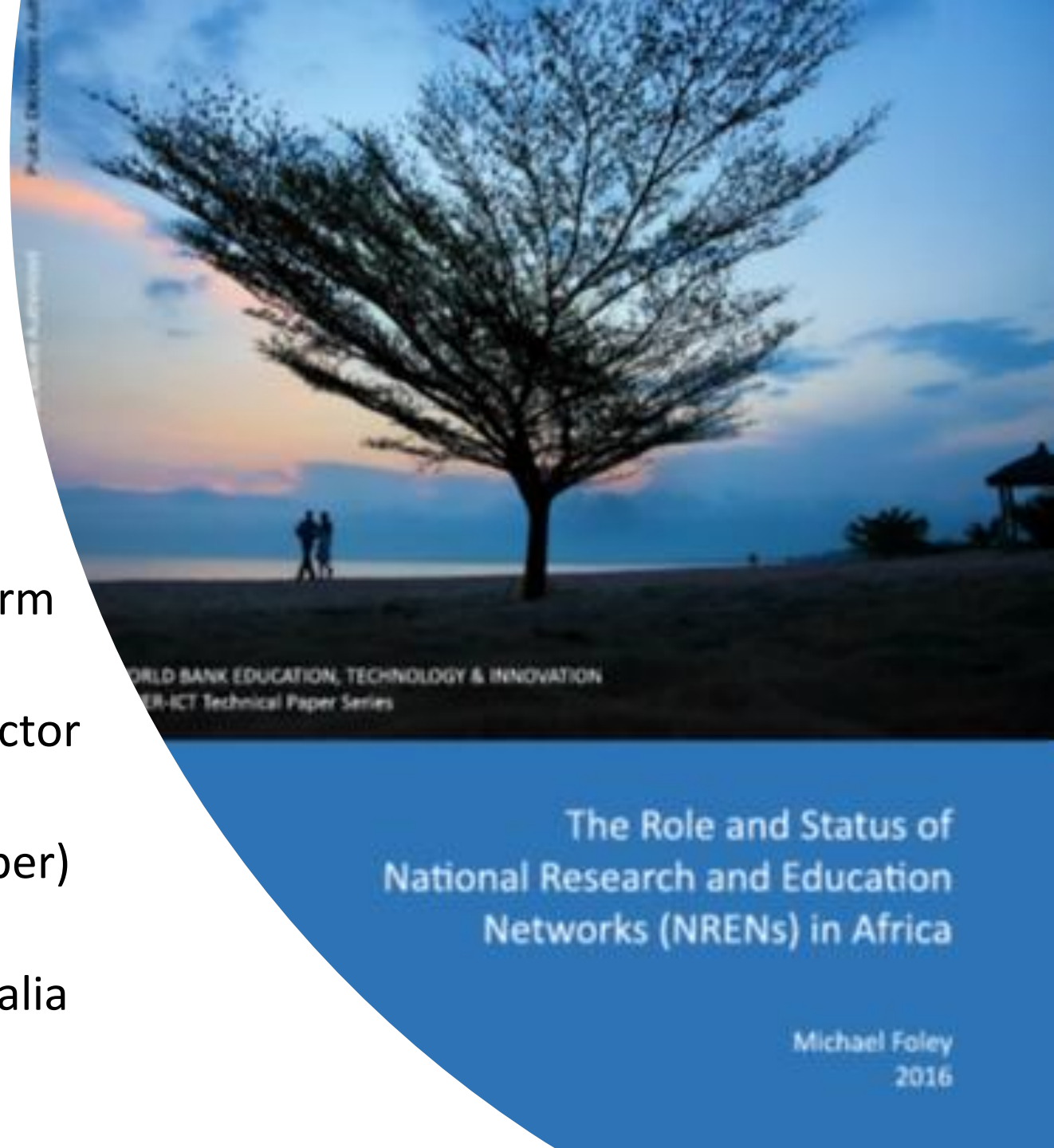# How the World Bank can assist RENs:
Examples from Ghana, Malawi, Somalia and elsewhere

Dr Tim Kelly, Lead ICT Policy Specialist, World Bank Group
WACREN, Ghana, 14 March 2019

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Digital Development

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BEYOND NETWORKS:
APPLICATIONS AND SERVICES

How the World Bank supports RENs in Africa

- Regional lending programs (eg, RCIP, WARCIP, CAB etc)

- National lending programs (eg eTransform Ghana, Digital Malawi etc)

- Technical assistance program (eg ICT Sector Support in Somalia)

- Research (eg NRENs in Africa status paper)

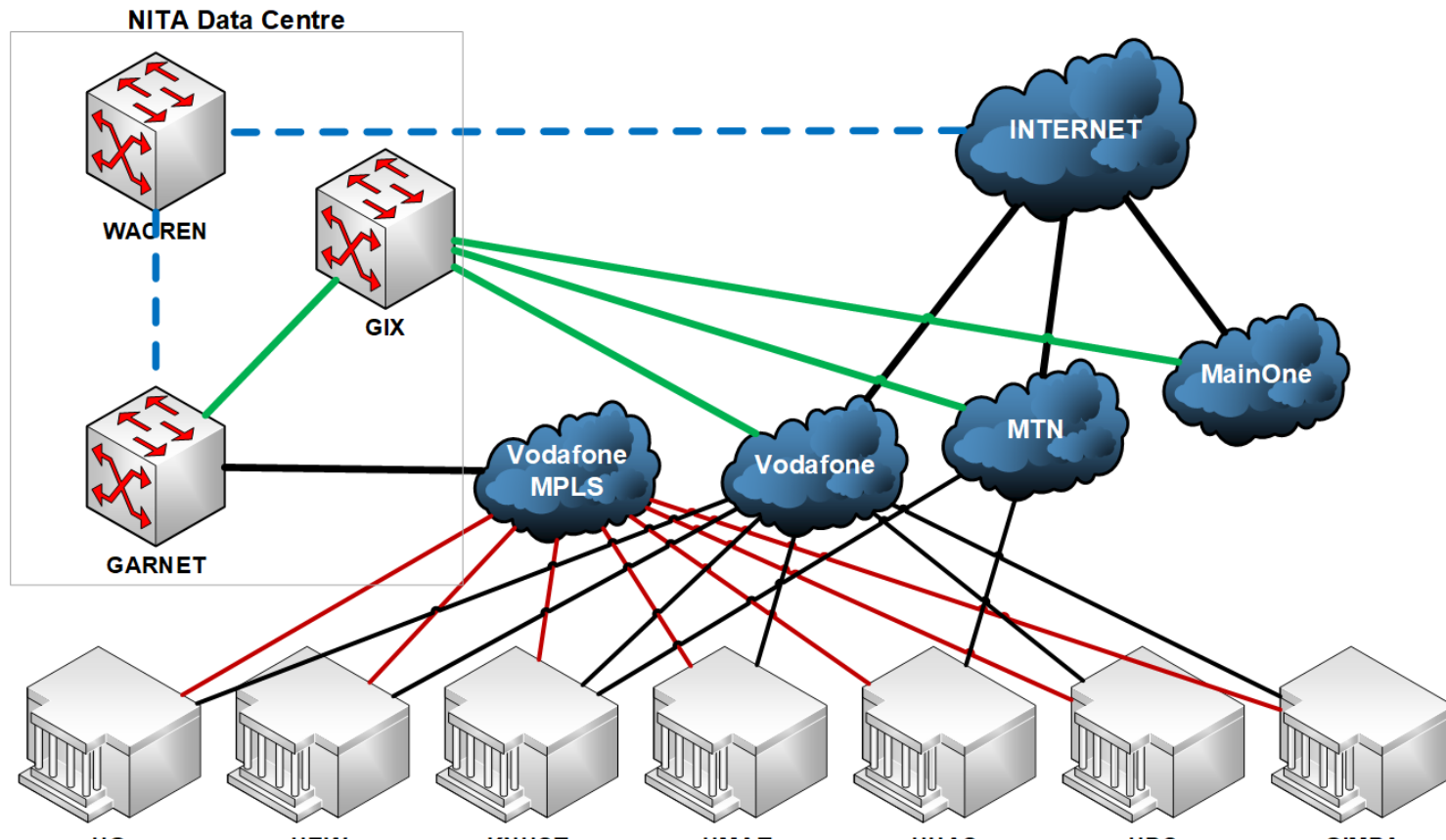- Partnerships (eg collaboration with EU AfricaConnect2 program in Ghana, Somalia etc)

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ER-ICT Technical Paper Series

The Role and Status of
National Research and Education
Networks (NRENs) in Africa

Michael Foley
2016

eTransform Ghana program

GARNET network

- US$97m IDA credit, active 2014-2020
- Tertiary Insitutions Access Program (US$3.4m)
  - Campus networks in eight universities, benefitting 100k students
  - Proposal to expand to two additional universities (UHAS, UENR)
- Pre-payment of AfricaConnect 2 membership fees for GARNET
  - Substantial upgrade in capacity, to 10 Gbit/s Int'l and 1 Gbit/s access
  - GARNET structure formalized with Board of Directors and membership fees
  - GARNET licensed as ISP and connected to GIX
  - Equal treatment of public and private universities
- Proposed scale up

Support to Somali REN

Concept

- Promote access to international bandwidth and open educational resources, at affordable prices

Process

- ICT Sector Support Program (funded by Multi-Partner Fund)
- Cooperation between World Bank, EU AfricaConnect2 and UbuntuNet (pre-payment of membership fee)
- International consultant (Tusu Tusubira) to assist SomaliREN with business model and governance structure
- Construct PoPs and acquire routers

Challenges

- Network ownership
- Where to connect (via ZANTEL, but discriminatory pricing)
- Scaling up to whole country

SomaliREN signs MoU to join UbuntuNet and AfricaConnect program, Maputo, Nov 2015

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Support to MAREN: Digital Malawi Program

Concept

- Promote access to international bandwidth and open educational resources, at affordable prices
- Campus network development
- Institutional support for MAREN

Process

- Digital Malawi IDA Credit (US$72m, 2017-22)
- Cooperation between World Bank, EU and UbuntuNet (pre-payment of membership fee for AfricaConnect3)
- Additional pre-payment of bandwidth and network buildout
- Competitive recruitment of CEO and CTO for MAREN
- Campus networks

Challenges

- How to promote sustainable MAREN business model?
- Reconciling more commercial approach with University rules
- Capacity development

View over Blantyre, where MAREN POP and IXP are located

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Support to KENET and MoRENet: RCIP

Kenya:

- Objective: Address connectivity challenges to enable the KENET member Universities and institutions to share information with each other and also with other educational and research institutions around the world.
- Key Activities:
  - Support purchase of bandwidth (2xSTM4s)
  - Network Operating Center,
  - upgrading of KENET network and connecting to other National Research and Education Networks internationally
  - Some 114 KENET members benefitted from support

Mozambique

- Objective: Support Govt with the preparation of a Business Plan.

- Key Activities:
  - Support to procure consultancy services to develop business plan
  - Financed connectivity for 1st year of service for all 72 member institutions
  - Wireless campuses for first to join
  - Equipment to first universities to sign up to membership

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Thank You

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