

# **Partnering with Utility Companies to advance Broadband Access**

## **A4AI NIGERIA BROADBAND INFRASTRUCTURE FORUM**

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# THIS IS NIGERIA

**Mobile Penetration 116 SIM cards/100 inhabitants**

**Internet Penetration 50.2%**

**Avg monthly income of middle class  
US\$480 and \$645**

**Cost of data – 1.59% of national  
income**

**Highest performing lower-middle income  
country in SSA**



# THIS IS ALSO NIGERIA

**Unique Subscribers - 49%**

**Broadband penetration - 12%**

**US\$80/month for internet**

**40% of Nigerians earn below avg monthly income  
of \$164 (2017 GDP/capita of \$1968)**

**Broadband speed - 3.15Mbps**



# Is there a problem behind the Numbers?

- 51% of Nigerians may not have access to good mobile connectivity
- Broadband Prices – Depends which stats: Cable.co.uk ranks Nigeria one of the most expensive countries at US\$80/month for internet
- BB penetration – Again depends which stats: BTN 12%-22%

# Is there a problem behind the Numbers?



- **SPEED MATTERS** - 3.15Mbps
  - Ranks 7<sup>th</sup> (of top 12 in Africa)
  - OFCOM estimates minimum 10Mbps to fully participate in a digital society
- Madagascar and Kenya only countries in Africa with 28.87 & 10.11 Mbps respectively

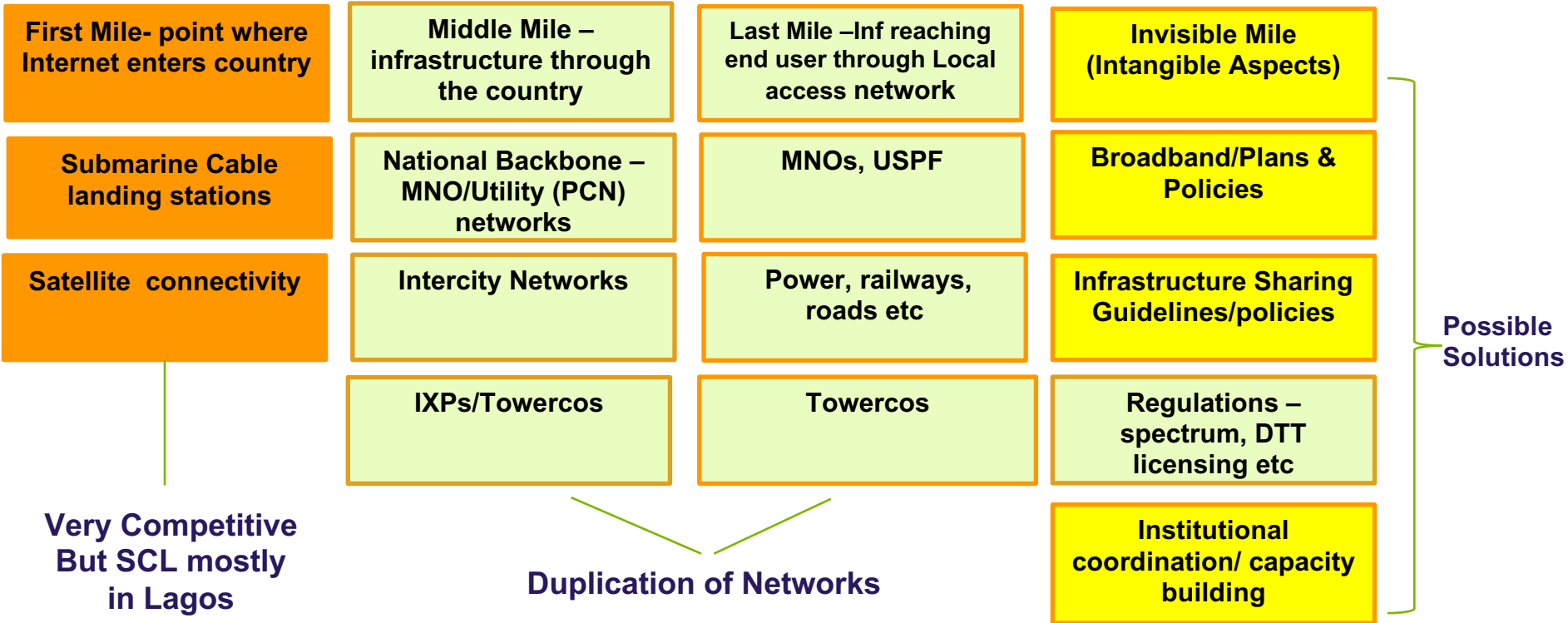
# Is there a problem behind the Numbers?

- **AND COST MATTERS** – For the bottom 40%
- High Income Inequality limiting digital dividends – esp. for RURAL, NORTHERN CITIZENS



# Broadband Supply Chain

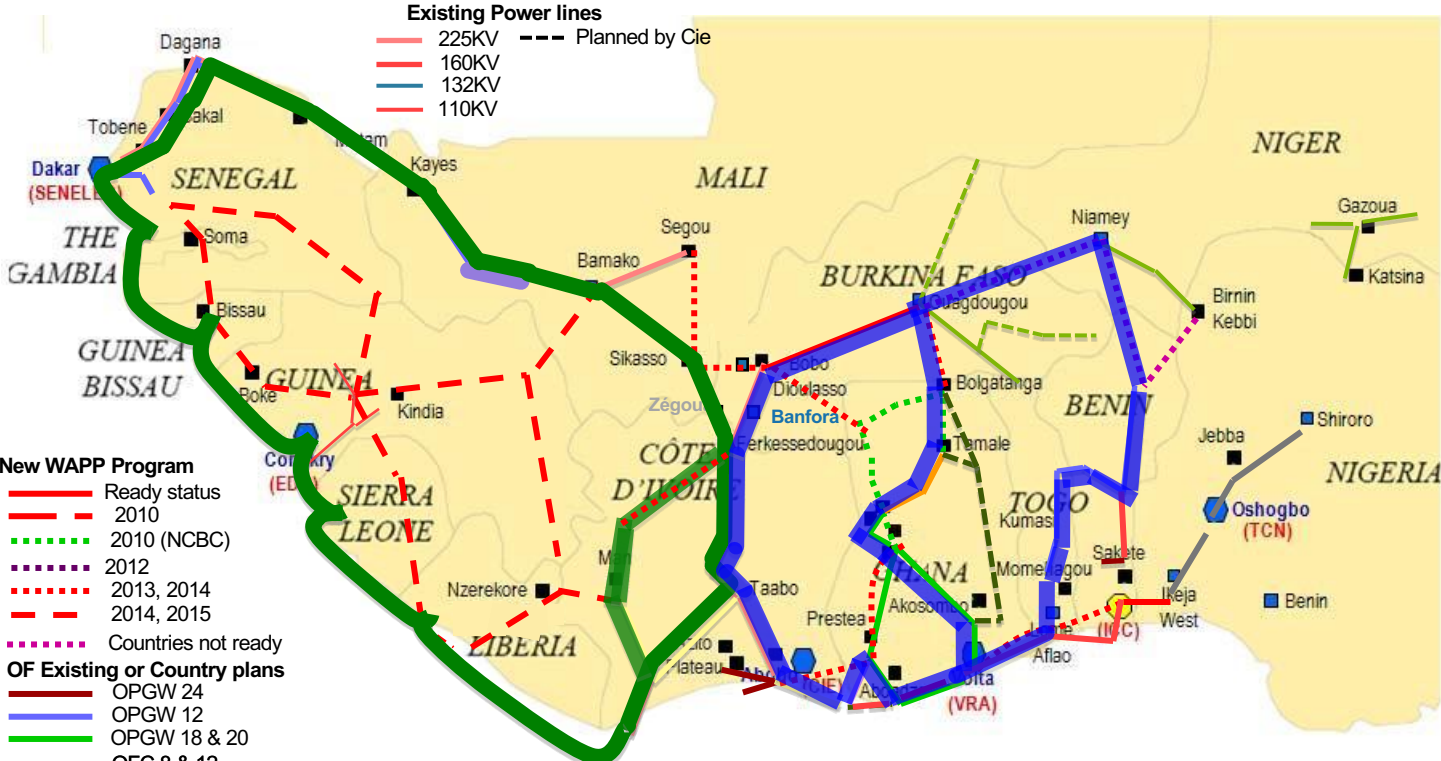
Problem on any of these *miles* results in disparate networks and poor delivery of services



# Options for improving BB access – leveraging Fiber in Power Transmission Lines (Regional and National)




# FIBER ON WAPP – POTENTIAL REGIONAL BACKHAUL



Current discussions now active for Burkina Faso, Ghana and Togo

2 regional ring structures to ensure redundancy and reliability of an integrated regional communications network

# Leveraging Power Transmission Lines At National Level – Different Models

The image shows the national flag of Gabon, which consists of three horizontal stripes of green, yellow, and blue. The flag is displayed with a slight wavy texture, suggesting it is a photograph of a physical flag.

**Gabon** – Tripartite agreement in 2017 b/n. State, Groupe Vivendi Africa, and power company SEEG to leverage latter's fiber for BB internet through FTTH

# Leveraging Power Transmission Lines At National Level – Different Models



**Ghana** – GRIDTel - Strategic Business Unit of GRIDCo, with licence to provide open access communication services to Telcos in Ghana. Current clients include MTN, Vodafone

GRIDTel looking to partner with ECG (Distribution Network) and Railways for more robust network with nationwide coverage

# Win-Win for All



- **Reduced cost for operators** - Estimated Site acquisition costs/ expenses for civil works account for up to 40% of initial investment
  - **Increased competition**= Reduced price and improved access for Consumers
  - **Protects environment**
  - **More resilient network** - overhead fiber more reliable than underground or buried; improves redundancy
  - **New source of revenue for Utilities**
  - **Efficient utilization of existing infrastructure** - MNOs in Nigeria have abt 52,000 km of terrestrial fiber; length of TCN's network: 12,300 km; 11 Dist Cos: 224,838 km
- 
- Well structured partnerships could be **game changer** in Nigeria's broadband narrative – **ESPECIALLY FOR RURAL COMMUNITIES**

# Recommendations



**1. Strengthen Policy and Regulatory Frameworks that support infrastructure sharing**

**2. Publish guidelines for infrastructure sharing**

**3. Improve capacity to structure/negotiate commercial partnerships with private sector**