

A global coalition working to make broadband affordable for all



24th August 2018

Key Highlights & Recommendations from Study



A4AI- Ghana The infrastructure and Open Access Working group: Focus and objective

TODAY: 50% of the world is offline. For various reasons including cost & availability, policy & regulatory direction, many people are still not connected

OUR AMBITION: Rationalised infrastructure sharing, which facilitates greater sharing, more efficient CAPEX, greater environmental sustainability, more inter-sectoral collaboration between government agencies and a more incentivized private sector
 => Fast, reliable, affordable access for everyone

KEY STAKEHOLDERS: Ministry of Communications, NCA, NITA, GIFEC, Service Providers, the Consuming public



Agenda

- 08:30 09:00 Registration & Networking
- 09:00 09:15 Welcome Messages
- 09:15 09:30 Ghana Infrastructure Study Highlights & Recommendations- *Estelle Akofio-Sowah and Eleanor Sarpong*
- 09:35 10:15 Moving from Recommendations to Implementation: Global and Best Practices- *Mavis Ampah*, *Consultant* & *CEO Stinsad Consult*
- 10:15 10:35 Refreshments Break & Group Photo
- 10:35 11:30 Breakout Group Discussions The 5 Solution Challenge
- 11:30 12:00 Wrap Up and Next Steps

Group's Key Output:

"Ghana Infrastructure Sharing & Open Access Study"



July 2016: published an RFP to engage a consultant August 2016: we selected VdA and Eleanor Sarpong

- Special thanks to Mrs Teki Akuetteh Falconer, Former ED of the Data
 Protection Agency for her assistance in evaluating the submissions received
- Emphasis on the skills & qualifications of team members & their experience undertaking infrastructure sharing policy & open access policy & regulatory work; by a team that includes or is led by a Ghanaian consultant

September & October 2016: Public Consultations

November 2016: Completion & submission of final report

Dec 2016: National elections

Jan 2017: New sector Minister and heads of various government agencies commence work

March 2017: Report Outdoored by Hon Minister Ursula Owusu- Ekuful

June 2017:- Follow up engagement with NCA on recommendations of report



Participating Stakeholders

| Mobile Network Operators | National Communications Authority | Ministry of Communications | Chamber of Telecommunications |
|---------------------------------|--|--------------------------------------|---|
| | | | |
| TowerCos | ISPs | Ghana Infrastructure Trust Fund | Ghana Data Protection Commission |
| | | | TART To Consider the con- |
| A4AI Ghana Tax Working Group | A4AI Ghana National Coordinator and Deputy | A4AI Consumer Advocacy Working Group | A4AI Infrastructure Sharing and Open Access Working Group |
| | | | |
| Environmental Protection Agency | MainOne | National IT Agency (NITA) | American Tower Company (Parent company of ATC) |
| | | | |
| | Google/CSquared | GIFEC | |







Stakeholder Views

Stakeholder views on infrastructure sharing in Ghana- I



Need for new Ghana infrastructure sharing policy

Some participants in the workshop held stated that a new broadband policy is a priority for Ghana, being instrumental in revising penetration and innovation targets and in introducing FTTH (fibre-to-the-home).

Possible TowerCo model regulation

The main issue was transparency and communication on price. TowerCos mentioned that a lot of variables go into the determination of the applicable price, including significant costs associated with acquiring sites and building the passive infrastructure.

Backbone sharing

Backbone sharing was considered desirable for Ghana and should be viewed under a regional and national approach.

Stakeholder views on infrastructure sharing in Ghana- II



Deployment bottlenecks / one-stop-shop

Existing bottlenecks cut down on time to market, result in revenue loss and discourage roll-out.
Roll-out should be streamlined under a "1 application, 1 fee" principle:

Coverage

- Suggested allocation of GIFEC funds for this purpose, since the unserved/underserved areas are not profitable for operators.
- Having a national infrastructure planning office with an official mandate and budget, responsible for coordinating public works, managing construction and anticipating industry shifts and trends in this scope.

Eastern/Western Fibre Corridor-Last mile

The main challenge is last mile coverage. This could be done by ensuring connections between main structure and district capitals and reference points (schools, health facilities, public institutions, internet cafés).

Stakeholder dialogue

Essential,. This can be carried out through establishing different forums for communication and discussion across sectors such as Transport, Utilities, Communication and Environment.





Recommendations

Recommendations



Policy Level

- Revision of current National TeleCommunications Policy
- New Infrastructure Sharing Policy?
- New Broadband Policy?

Legal Level

- Additional cross-sector sharing obligations
- Coordination between different legal instruments
- Legal principles on active/passive sharing, possible models
- New Licensing templates

Regulatory Level

- Price regulation
- Enforcement Actions
- Stakeholder dialogue

- Technical standards uniformisation
- One-stop-shop
- Backbone sharing

Policy Level Recommendations



B. Approval of/adjustments to current policies

- Recommendation 1: Adjusting 2005 National Telecommunications Policy to reflect the principles arising from these recommendations, including mandatory cross-sector passive sharing
- Recommendation 4: Promote consultation of the market on major topics (for example, active
 infrastructure sharing (spectrum/fibre, among others), pricing/operational models,
 backbone project capitalization and infrastructure sharing in the context of the inland
 connections for existing submarine cables)

Legal & Regulatory Recommendations I



C. Approval of/adjustments to current laws

- Recommendation 1: Adjustment to Electronic Communications Act to clarify that passive
 infrastructure sharing is mandatory for all players (eventually, including TowerCos), to
 existing and future passive infrastructure, on a cross-sector basis active infrastructure
 sharing possible approached following market analysis
- Recommendation 2: Adjustment to National Communications Authority Act of 2008 nr. 769, mandating imposing sharing and sanctions for breach
- Recommendation 3: Adjusting Ghana Investment Fund for Electronic Communications (GIFEC)'s legal framework to (i) establish GIFEC as an authority aimed solely at financing infrastructure sharing and construction, with no independent infrastructure construction

Legal & Regulatory Recommendations II

A4AI

D. Regulatory Aspects

- Recommendation 1: Reinforcing "one-stop-shop" principle through "one fee, one licence" mechanism; current formalities towards municipal, tax, environmental, aviation and urban planning authorities replaced by single application submitted to NCA
- Recommendation 2: mandatory rules applicable to infrastructure sharing pricing
- Recommendation 3: any entity operating passive infrastructure must publish and send to NCA a reference offer, under NCA's mandatory technical, financial and operational criteria
- Recommendation 4: relevant entities (NCA, Ministry of Communications, GIFE, NITA) must publish information on their websites regarding industry data, including availability of infrastructure for sharing per region/area

Legal & Regulatory Recommendations III



C. Approval of/adjustments to current laws, continued

- **Recommendation 4**: Establishing a specific legal regime for PPPs between telecom stakeholders and utilities authorities and providers
- Recommendation 5: Adjusting National Information Technology Agency (NITA) Act 771, mandating infrastructure sharing between NITA and other stakeholders (also on a cross-sector basis)
- Recommendation 6: Adjustment to Electronic Communications Act to include description of procedure applicable to NCA intervention in terms of dispute settlement (specific forms for submitting the request to NCA, reply and defence actions, possible outcomes of NCA decision)

Specific Recommendations (Institutional)



A. Set-up of adequate institutional/coordination framework

- Recommendation 1: Capacity-building initiatives (training sessions, workshops and courses) for relevant authorities Ministry of Communications/NCA/GIFEC
- Recommendation 2: Coordination between GIFEC (activity to be aimed solely at financing, not building) and NCA (competent to monitor, enforce and regulate)
- Recommendation 3: Set-up of general coordination committee/body representative of all types of stakeholders aimed at coordinating interaction between relevant authorities
- Recommendation 4: Ensure technology-neutral infrastructure sharing provisions, in order to accommodate developments and characteristics of various sectors and players





Moving from Recommendations to Implementation: Global and Best Practices

Mavis Ampah, Consultant & CEO Stinsad Consult

STATUS OF CONNECTIVITY



Mobile

- % Penetration 130 SIM cards
 per 100 inhabitants
- Cost price per minute fell from about US\$0.15 to US\$0.05 between 2007 and 2013
- <u>% Unique Subscribers 67</u>

Internet

- Penetration 36%
- Cost 1 GB of data 4% of national income (2016)
- Target 2% of average monthly
 Income

What is the problem?



- STILL LONG WAY FROM ACHIEVING SDG 9c UNIVERSAL, AFFORDABLE INTERNET ACCESS BY 2020
- SOME BLACK SPOTS REMAIN ESPECIALLY IN RURAL, NORTHERN PARTS OF GHANA
- INTERNET BACKBONE STILL UNDERDEVELOPED
- MORE MOBILE PHONES AND MOBILE DEVICES MEAN MORE BASE STATIONS
- IMPROVING INTERNET BACKBONE MEANS MORE INVESTMENT IN NATIONAL BACKBONE
- SIGNIFICANT COST IMPLICATIONS IN BOTH ABOUT 40% OF OPERATORS COST

Where is the problem? Connectivity Supply Chain



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

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|---|---|---|---|--|--|
| First Mile- point where Internet enters country | Middle Mile – infrastructure through the country | Last Mile –Inf reaching end user through Local access network | Invisible Mile (Intangible Aspects) | | |
| Submarine Cable landing stations | National Backbone – MNOs, Utility cos, NiTA network | MNOs, GIFEC | New/Revised Policies | | |
| Satellite connectivity | Intercity Networks Google/Csquared, Gridco etc | Gridco, railways etc | Infrastructure Sharing Guidelines/policies | | |
| | IXPs/Towercos | Towercos | Regulations – spectrum 4g, DTT licensing etc | | |
| Very Competitive | | Biggest Challenge | Institutional capacity building | | |

What is the problem?



- MORE EFFICIENT UTILIZATION OF EXISTING INFRASTRUCTURE INFRASTRUCTURE SHARING
- COMPLETION OF MISSING LINKS RURAL, LESS POPULATED, MARGINALIZED AREAS EFFECTIVE USE OF UNIVERSAL ACCESS FUND/PPPs TO ADDRESS LEAST COMMERCIAL AREAS

WIN-WIN FOR ALL

- REDUCED COST FOR OPERATORS –
- *Eg1. Estimated* Site acquisition costs and expenses for civil works account for up to 40% of initial investment to the fixed assets;
- Eg. estimated that cost for space and energy reduces by about 20% for both telecom service providers when towers are shared
- SUBSIDIES THROUGH USF IMPROVE AFFORDABILITY AND ACCESS (Almost US\$8m in 2016)
- BOTH FASTEST ROUTE TO ACHIEVING SDG GOALS

How do we get there? – Summary of recommendations I



NOTE: IMPORTANT TO CONTINUOUSLY RETHINK/REFRAME ALL POLICIES/REGULATIONS AS PART OF DIGITAL ECONOMY STRATEGY – PUTTING USERS FIRST INSTEAD OF SUPPLIERS

- 1. National Telecoms Policy '05 (Broadband) review: to include
- incentives for infrastructure sharing
- spectrum sharing terms
- better definition of the role of Government in infrastructure sharing
 ***If a review of the Policy is not possible in the short term, a specific infrastructure sharing policy should be established
 - 2. Electronic Communications Act 2008/Amendment 2009
 - review: to clarify the passive infrastructure sharing is mandatory
 - 3. Review of NITA Act 771 2008: to include mandating infrastructure sharing between NITA and other stakeholders

How do we get there? – Summary of recommendations II



4. Review of GIFEC functionality:

• establish GIFEC as an authority aimed solely at financing infrastructure sharing and construction, with no independent infrastructure construction

5. Centralised administration [one-stop]:

for all tax, permits, RoW

Stakeholder dialogue/Institutional capacity building:

- improved communication across sectors including Transport, Utilities,
 Communication and Environment
- maximise transparency around existing infrastructure
- host workshops that promote sharing



Resources and Timing needs

- EARLIER POLICIES/ACTS THROUGH WORLD BANK/MINISTRY OF COMMUNICATIONS/NATIONAL COMMUNICATIONS AUTHORITY REQUIRE COLLABORATION & FUNDING
- NEED TO CONSIDER CHANGE OVER A PERIOD OF ABOUT 2 YEARS
- NEW DEVELOPMENTS DIGITAL DEVELOPMENT STRATEGY/POLICY
- POSSIBLE FUNDING OPTIONS FOR NEW ONES -
- POLICIES, LEGAL/REGULATORY REVIEWS?
- INSTITUTIONAL CAPACITY BUILDING TELECOM CHAMBER, NCA, MOC?



Thank you!



Facilitators:
Eleanor Sarpong
Estelle Akofio-Sowah
Mavis Ampah