A4AI Ghana Broadband Infrastructure Roundtable 2018

24th August 2018

Key Highlights & Recommendations from Study
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

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<tr>
<th>Mobile Network Operators</th>
<th>National Communications Authority</th>
<th>Ministry of Communications</th>
<th>Chamber of Telecommunications</th>
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<td>TowerCos</td>
<td>ISPs</td>
<td>Ghana Infrastructure Trust Fund</td>
<td>Ghana Data Protection Commission</td>
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<td>A4AI Ghana Tax Working Group</td>
<td>A4AI Ghana National Coordinator and Deputy</td>
<td>A4AI Consumer Advocacy Working Group</td>
<td>A4AI Infrastructure Sharing and Open Access Working Group</td>
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<td>Environmental Protection Agency</td>
<td>MainOne</td>
<td>National IT Agency (NITA)</td>
<td>American Tower Company (Parent company of ATC)</td>
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<td>Google/CSquared</td>
<td>GIFEC</td>
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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).
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

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
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
• % Unique Subscribers – 67

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

First Mile - point where Internet enters country
Submarine Cable landing stations
Satellite connectivity

Middle Mile – infrastructure through the country
National Backbone – MNOs, Utility cos, NiTA network
Intercity Networks Google/Csquared, Gridco etc

Last Mile – Inf reaching end user through Local access network
MNOs, GIFEC
Gridco, railways etc

Invisible Mile (Intangible Aspects)
New/Revised Policies
Infrastructure Sharing Guidelines/policies

IXPs/Towercos
Towercos

Regulations – spectrum 4g, DTT licensing etc
Institutional capacity building

Very Competitive

Biggest Challenge
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