Infrastructure Sharing & Open Access

A4AI Nigeria Work Group
<table>
<thead>
<tr>
<th>OUTPUT</th>
<th>DEADLINE</th>
<th>PARTNERS</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policy statement driving implementation of infrastructure sharing initiatives</td>
<td>AUG 2015</td>
<td>NEC</td>
<td></td>
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<tr>
<td>2. Monitoring and evaluation framework to assess the National Broadband Plan Progress</td>
<td>JUN 2015</td>
<td>National Broadband Council</td>
<td></td>
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<td>3. Recommended strategy for the development and establishment of shared community broadband networks</td>
<td>JUN 2015</td>
<td>LGA, State Govt</td>
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<tr>
<td>A4AI Output based on work plan</td>
<td>Proposed quick win activities for the work group</td>
<td>Likelihood of producing quick win by end of 2015 (1 being highly likely and 5 highly unlikely)</td>
<td>Target audience</td>
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<tr>
<td>Coalition Meeting held in Lagos</td>
<td>1 Work Group</td>
<td>1</td>
<td>Nigeria Communications Commission (NCC), CSOs, Telecoms operators and the wider public.</td>
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<tr>
<td>Assess Smart State Initiative and its progress, gaps, remaining challenges.</td>
<td>1</td>
<td></td>
<td>Lead-</td>
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<tr>
<td>Assess current policy and regulatory instruments, if any, that promote and incentivize infrastructure sharing</td>
<td>1</td>
<td>General public</td>
<td>Lead-</td>
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<tr>
<td>Develop policy recommendations to promote and incentivize implementation of the above options</td>
<td>1</td>
<td>NCC, FMCT</td>
<td>Lead-</td>
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<tr>
<td>Submit the recommendations to FMCT and State Authorities</td>
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<td>NCC, FMCT, STATE</td>
<td>Lead-</td>
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</table>
Smart State Initiatives

5 States signed up to the Program

• Lagos: via ALTON
• Abuja: via FCT infrastructure sharing
• Cross Rivers: via ROW Swap agreement
• Bayelsa: via Smart State MOU
• Anambra: via Smart State MOU
• Delta, Edo, and Ondo expressed interest

Source: The Broadband Council
Policy Statements: FG

Via the National Broadband Plan

The Government shall therefore promote a seamless interconnectivity regime and an Open Access Infrastructure sharing agreement among operators.

- Promote transparency of pricing and reduction of build-out costs by encouraging an increased level of infrastructure sharing and interconnections and introducing price caps where necessary or when market forces fail.

16. Encourage infrastructure sharing by
   c. Creating a working group with operators, service providers, municipalities, local authorities to implement infrastructure sharing.

Source: The Broadband Council
Policy Statements: FG

Via the National Broadband Plan and Federal Ministry of Works “Guidelines for Grant of Access on Federal Highways Right of Way to Information and Communication Technology Service Providers (ICTSPs):

it is hereby noted:

a) That right of way on a Federal Highway is a public resource controlled by the Federal Government through the Federal Ministry of Works and as a result, right of way is granted to the grantee for public benefit and may not be used contrary to public policy or for any purpose that shall be harmful to the good of the general public.

b) That the principle of infrastructure sharing is mandated in the grant of these rights of way to reduce incidents of multiple excavations on the Federal Highways, which increase the likelihood of damage to other highway infrastructure.

Source: The Broadband Council
Policy Statements: FG

Via the Nigerian Communication Commission (NCC) “Legal Guidelines Technical Specifications for the Installation of Telecoms Masts and Towers”

3. SITING OF TOWERS AND MASTS

(1) The siting of masts and towers shall take cognisance of provisions of the Act and be guided by provisions of the Collocation and Infrastructure Sharing Guidelines of the Commission in such a way as to minimise their number, protect and promote public safety, and mitigate adverse visual impacts on the community. To reduce the visual impact of towers and antennas structure, Stealth and/or camouflage design of towers and antennas are encouraged.

(f) Encourage operators to pursue a cost-oriented policy with the added effect of a reduction in the tariffs chargeable to consumers.

Source: The Broadband Council
Policy Statements: FG

Via the Nigerian Communication Commission (NCC) “Legal Guidelines Technical Specifications for the Installation of Telecoms Masts and Towers”

(7) Shared Use of Towers & Masts

(a) The design, construction and installation of towers over 25 metres, shall be done in such a way as to accommodate a minimum of three service providers using the same structure.

(b) Owners of towers shall in furtherance to sub-paragraph (a) above, provide written certifications to the Commission that such towers are available for use by other telecommunications service providers on a reasonable cost and non-discriminatory basis, and modalities and conditions for such shared usage.

(c) Where any serious disagreement or dispute arises that threatens the shared use of facilities, the Commission shall arbitrate over the dispute and any decision so reached by the Commission shall be final.

(d) For the avoidance of doubts, the sharing of towers and masts in these guidelines shall be subject to the provisions of the Collocation and Infrastructure Sharing Guidelines of the Commission.
Policy Statements: FG

To what level is Infrastructure Sharing & Open Access being implemented with respect to:

4. Types of Infrastructure Amenable to Sharing

(1) Infrastructures amenable to sharing are those that can be shared without an attendant risk of lessening of competition.

(2) The Commission shall encourage and promote the sharing of the following infrastructures:

   (a) Rights of way.
   (b) Masts.
   (c) Poles.
   (d) Antenna mast and tower structures.
   (e) Ducts.
   (f) Trenches.
   (g) Space in buildings.
   (h) Electric power (public or private source).

Source: The Broadband Council
Data Report Wish list

• Total No of Base Stations per State?
• No Single User vs Multiple User Towers?
• No of Km of Long Haul Fibre
• % of Long Haul Fibre that is shared or Open Access
• No of Km of metro fibre per state
• No of fibre duct that is OA / shared
Approx 25,396 towers in Nigeria

85% of towers will be owned or operated by independent towercos by 2016

Approx. 14,222 owned by IHS and 1,300 by HTN Towers in total.

- 4000 IHS self-owned towers
- 9,151 towers MTN to IHS
- 2,136 towers Etisalat to IHS
- 4,800 Airtel Nigeria towers to American Towers
- Globacom towers remain self managed
- SWAP and others manage the rest
Tower Breakdown Nigeria

- IHS, now including Etisalat towers: 6,540
- HTN: 4,000
- SWAP: 1,300
- Smaller Nigerian towercos: 700
- Airtel: 600
- Remaining towers, primarily belonging to Glo: 200
- Etisalat's retained towers: 5,000

Source: TowerXchange research
Data Report

• Approximately 50,000 more Base stations needed for Improved coverage and Quality of Service
Fibre Infrastructure is Unclear
Draft Policy Statement by A4AI

There exists a significant amount of policy statements aimed at driving open access and the sharing of infrastructure.

The Open Access work group recommends that each State shall have a working group: that oversees the implementation of the open access and infrastructure sharing agenda (Ref slide 5).

And shall provide monthly inputs into the National Broadband Council.

The group further recommends that monthly reports be provided to the council depicting the level of utilisation of shared resources across the country.
Key Takeaways

• 3 minimum service providers per tower to be enforced
• An additional 50,000 towers to be installed by 2018
• More (approx. 33,000km) long haul and metro-fibre to be put under Open Access regime and price capped*.

*Ref slide 7 awaiting publication of NCC pricing analysis done in 2015