## ALLIANCE FOR AFFORDABLE INTERNET



# Infrastructure Sharing & Open Access

A4AI Nigeria Work Group



## IS & OA Work Plan – champion Jinmi A4AI

OUTPUT	DEADLINE	PARTNERS	STATUS
1. Policy statement driving implementation of infrastructure sharing initiatives	AUG 2015	NEC	
2. Monitoring and evaluation framework to assess the National Broadband Plan Progress	JUN 2015	National Broadband Council	
3. Recommended strategy for the development and establishment of shared community broadband networks	JUN 2015	LGA, State Govt	



S&OA Quick win for N  A4Al Output based on work plan	Proposed quick win activities for the work group	Likelihood of producing quick win by end of 2015 ( 1 being highly likely and 5 highly unlikely)	Target audience	Possible timeline			<b>A4</b> Key
				Oct	Nov	Dec	responsib
Policy statement to incentivize the implementation infrastructure sharing initiatives  Draft proposed regulatory instrument(s) to support the implementation of infrastructure sharing initiatives.	Coalition Meeting held in Lagos  Assess Smart State Initiative and its progress, gaps, remaining challenges.	1	Work Group  Nigeria Communications Commission (NCC), CSOs, Telecoms operators and the wider public.				Lead-
	Assess current policy and regulatory instruments, if any, that promote and incentivize infrastructure sharing	1	General public				Lead-
	<b>Develop policy recommendations</b> to promote and incentivize implementation of the above options	1	NCC, FMCT				Lead-
	Submit the recommendations to FMCT and State Authorities	1	NCC, FMCT, STATE				Lead-



## **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





#### 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.

#### Encourage infrastructure sharing by

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





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.





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

#### 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.





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 hfrastructure Sharing Guidelines of the Commission.



## 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 towerstructures.
  - (e) Ducts.
  - (f) Trenches.
  - (g) Space in buildings.
  - (h) Electric power (public or private source). Source: The





## **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

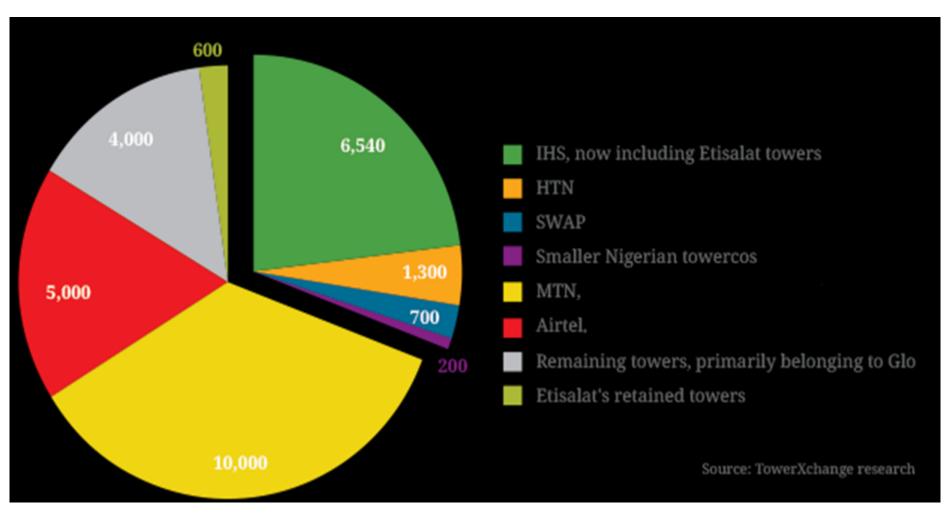
85% of towers will be owned or operated by independent towercos by 2016

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





## **Data Report**

Approximately 50,000
 more Base stations
 needed for Improved
 coverage and Quality of
 Service



### Fibre Infrastructure is Unclear

#### Network Philosophy Enterprise Data Center/ Carrier Hotel Education/ Government Tower Allied Fiber Cell Tower & Long-Haul • Fiber Colocation Hut Short-Haul Fiber with Intermediate Access Points Subsea Landing Point



## **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\*.

<sup>\*</sup>Ref slide 7 awaiting publication of NCC pricing analysis done in 2015