Affordable Internet for All
Driven by Open Access & Infrastructure Sharing
The Nigerian Experience

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Alliance for Affordable Internet (A4AI) Meeting
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The transformative benefits of Internet for all include improved learning, increased job creation, better community and civic engagement, improved trade and commerce, and a positive impact on GDP.

It is acknowledged that for Nigeria to become one of the world’s leading economies by year 2020, high-speed Broadband networks that will provide every Nigerian with fast, reliable and affordable internet access is a fundamental requirement.

The policy goal of Government therefore seeks to ensure that the infrastructure necessary to provide ubiquitous Broadband services are available and accessible to all citizens at affordable rates.

Positive policy actions in support of wireless Broadband can contribute NGN190bn to Nigeria’s GDP in 2015 – GSMA, 2011
• 150mn population.
• Over 133mn active lines [Up from <0.3mn in 1999]
• Population and multi-SIMing realities create huge growth opportunities - over 150mn projection by 2015.

• Falling bandwidth costs enhancing connectivity.
• Mobile Internet Traffic surging – Nigeria topping Africa mobile web Traffic with over 30mn users.
• Nigerian entrepreneurs keying in to provide services – news, mobile commerce, banking, job search, etc

• 2.5G base -upgraded from 2G.
• 3G in key cities & growing rapidly
• 4G upcoming
• Landing of international submarine Cables in 2011 enhancing international connectivity.

It is acknowledged that Data, Internet and Broadband are the next big boom for the industry.
Some Challenges

Infrastructure
Deployment & expansion hampered by constraints with:
• Planning & Development Approvals & Controls
• Right of Way (RoW) Approvals & Controls

Service Uptime
Frequent operational disruptions occasioned by:
• Facility shutdowns by MDAs
• Community actions

Operational Costs
High operational costs cascaded to customers:
• Regulatory Fees
• Infrastructure Duplication

National Broadband Plan (NBP), Open Access & Infrastructure Sharing could help address the challenges.
## Broadband Roadmap

Strategic Goals of the National Broadband Plan, 2013 (NBP)

<table>
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<tr>
<th>Internet Penetration</th>
<th>Fibre Optic Infrastructure</th>
<th>Wireless Infrastructure</th>
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<td><strong>Target</strong></td>
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<td>More than a fivefold increase in Internet and broadband penetration figures over the period 2013 – 2018.</td>
<td>All state capitals &amp; urban cities to have metro fibre infrastructure installed.</td>
<td>On a national scale, facilitate full rollout by operating companies of 3G networks as a minimum on all base stations by 2015.</td>
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<td><strong>Presently</strong></td>
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<td>Internet penetration in Nigeria: 38% (Global Internet Report, 2014)</td>
<td>Rollout driven by commercial viability and limited to major towns and cities in Nigeria.</td>
<td>2G/3G coverage - 87.15% population &amp; 74.56% landmass</td>
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<td>Mobile and Fixed Broadband Penetration: 6.1% - NCC, 2014</td>
<td>Lack of coordinated plan resulting in duplication on some routes</td>
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Mobile Broadband

Broadband Spectrum
Digital dividend spectrum migration & release of more LTE spectrum by 2015

New Cell Sites
To be LTE-compliant by 2014.

Spread 3G/LTE
50% of population by 2015; 70% by 2017; 80% by 2018

Progressive grant of spectrum for mobile broadband, encouraging, viz:
2300 MHz spectrum auctioned in 2014.
2600 MHz spectrum auction in progress for licensing in 2015.
700 MHz spectrum grant planned for 2015.
Ongoing licensing of 7 Regionally focused InfraCos (for Lagos, NC, NE, NW, SE, SS & SW) intended to provide metropolitan dark fibre and wholesale bandwidth on an open-access & price-regulated basis in support of fixed broadband development.
Infrastructure Sharing
Impact on Internet Access

Drives down network infrastructure and rollout costs to facilitate internet access.

Supports speedy service roll out and effective coverage thereby widening consumer choice (e.g. Smile).

Encourages healthy competition towards service innovation among telcos (e.g. bundled voice and data offerings).

Driver for affordable internet offerings to the consumers.
Infrastructure Sharing
Industry Situation

Guidelines on Collocation & Infrastructure Sharing, 2006

Can be Shared
- Antenna Mast & Towers
- Rights of way
- Poles
- Ducts & Trenches
- Masts & Poles
- Space in Buildings
- Electric Power

Can't be Shared
- Complete network structures
- Switching Centres
- Radio network controllers
- Base station

Industry Players

Telcos [Cell Sites]
- Majors: Airtel, Etisalat, Glomobile & MTN
- Multilinks, etc

Infrastructure Service Providers [Cell Sites, Ducts & Fibre]
- 31 Licensees as at 1 May 2014
- 3 prominent players - HIS, Helios & Swap - Cell Sites
- Huawei (Original Equipment Manufacturer), the most recent entrant expected to become a major player in future - Ducts

InfraCos [Fibre]
- When licensed
Infrastructure Sharing Trends

2006 - 2011
- **Reciprocal Site Share**: 1-for-1 swap between Telcos - no financials
  - 222 Sites - Airtel & MTN
- **Site Lease**: Lease from Infrastructure Sharing Service Providers
  - 304 sites
- **Lease Rental**: USD5,000 per month

2012-to-date
- **Site Lease**: Reciprocal share migrated to lease. Increased footprint of Infrastructure Sharing Service Providers
  - Over 4,000 sites
- **Divestment by Telcos**: IHS acquired over 2,000 & 9,000 sites from Etisalat and MTN respectively.
  - Airtel to divest about 3,000
- **Lease Rental**: USD4,000 per month

Future
- **Further Divestment by Telcos**: More sites to be acquired, owned and managed by IS Service Providers.
- **Enhanced Sharing**: Progression from passive to active infrastructure sharing

*Infrastructure Sharing catching on but constrained by present regime which limits potentials offered by technological advances in equipment capabilities*
Ministry of Communications Technology’s SSI engaging State Governments to get the relevant State MDAs to streamline processes, fast-track approvals and reduce regulatory fees in support of telecom facilities deployment.
Positive policy actions in support of wireless Broadband can contribute NGN190bn to GDP in 2015 – GSMA, 2011.

Government (at all levels) should take the lead to drive internet Access/Broadband development in the country by developing industry-friendly policies and initiatives.

The Federal Ministry of Communication Technology is leading a laudable nationwide Smart State Initiative targeted at streamlining processes, fast-track approvals and reduce fees by around 60% in support of telecom facilities deployment.

Telcos committed to partnering with Government for expedited Broadband delivery.
THANK YOU