Affordable Internet for All

Driven by Open Access & Infrastructure Sharing: The Nigerian Experience

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Outline

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- Some Challenges
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Introduction

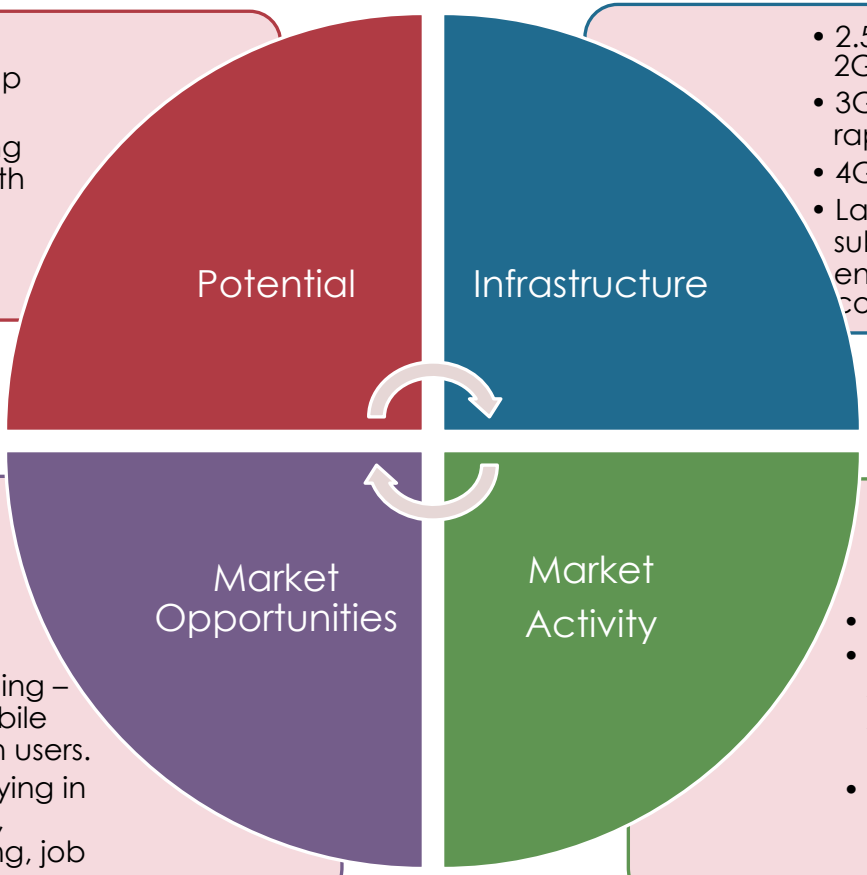
The transformative benefits of Internet for all include improved learning, increased job creation, better community and civic engagement, improved trade and commerce, and a positive impact on GDP.

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

Industry Dashboard



- 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.

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

- 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

- Renewed competition.
- Increasing user sophistication driven by service bundles, social media and mobile devices.
- Data and Broadband making serious inroads.

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)

Internet Penetration

Target

More than a fivefold increase in Internet and broadband penetration figures over the period 2013 – 2018.

Presently

Internet penetration in Nigeria: 38% (Global Internet Report, 2014)

Mobile and Fixed Broadband Penetration: 6.1% - NCC, 2014.

Fibre Optic Infrastructure

Target

All state capitals & urban cities to have metro fibre infrastructure installed.

Presently

Rollout driven by commercial viability and limited to major towns and cities in Nigeria.

Lack of coordinated plan resulting in duplication on some routes

Wireless infrastructure

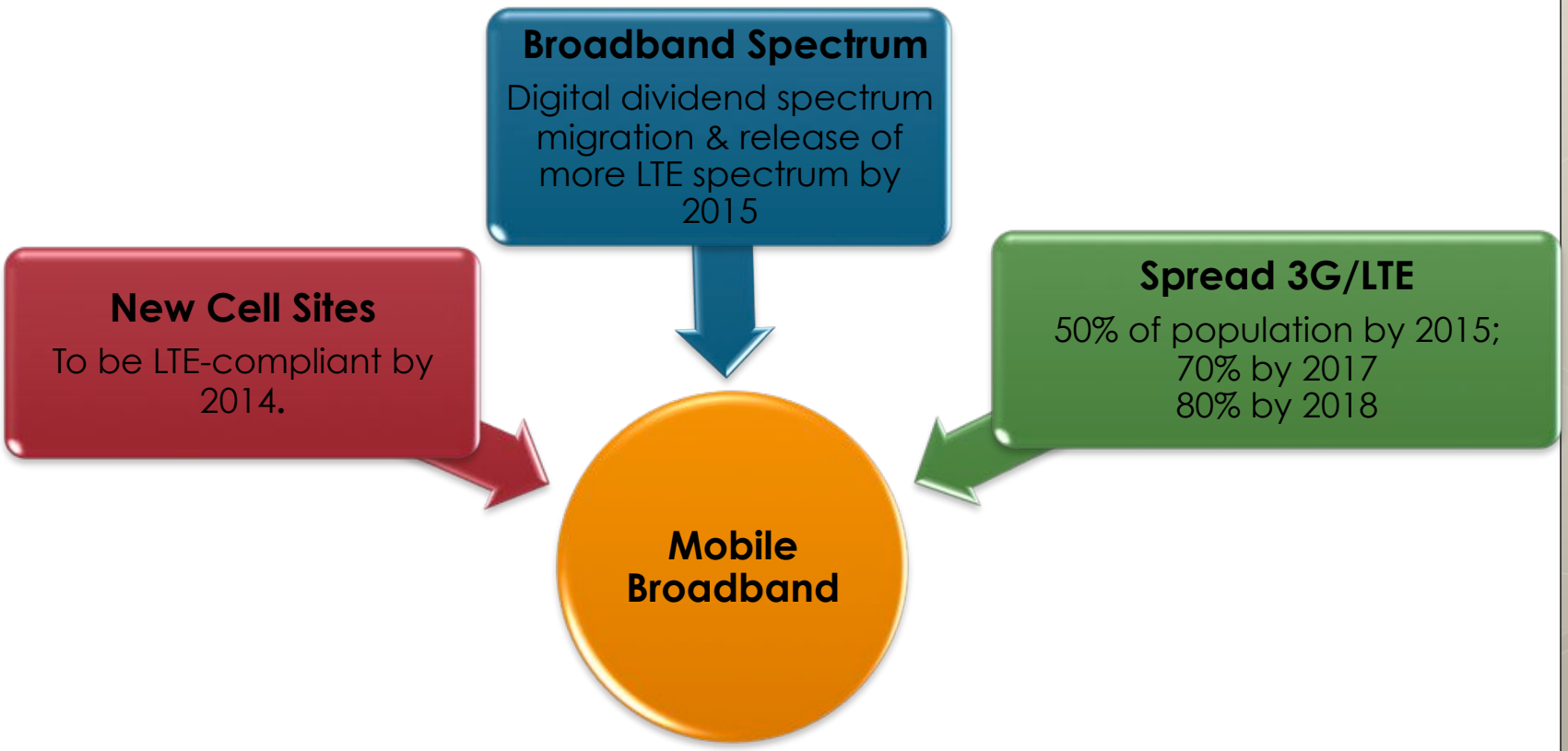
Target

On a national scale, facilitate full rollout by operating companies of 3G networks as a minimum on all base stations by 2015.

Presently

2G/3G coverage - 87.15% population & 74.56% landmass

Broadband Roadmap
Mobile Broadband, NBP

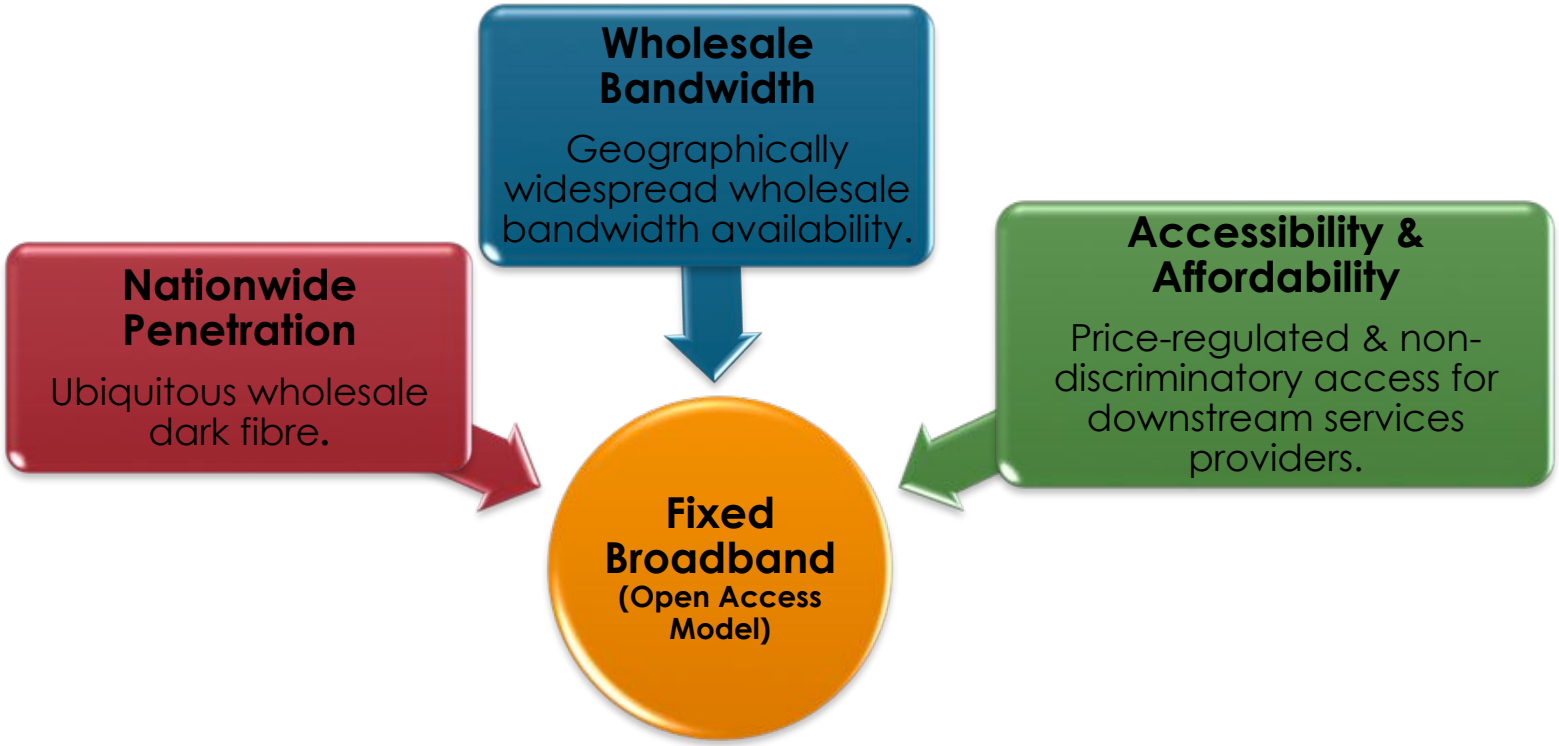


Progressive grant of spectrum for mobile broadband, encouraging, viz:

2300 MHz spectrum auctioned in 2014.
2600 MHz spectrum auction in progress for licensing in 2015.
700 MHz spectrum grant planned for 2015.

Broadband Roadmap

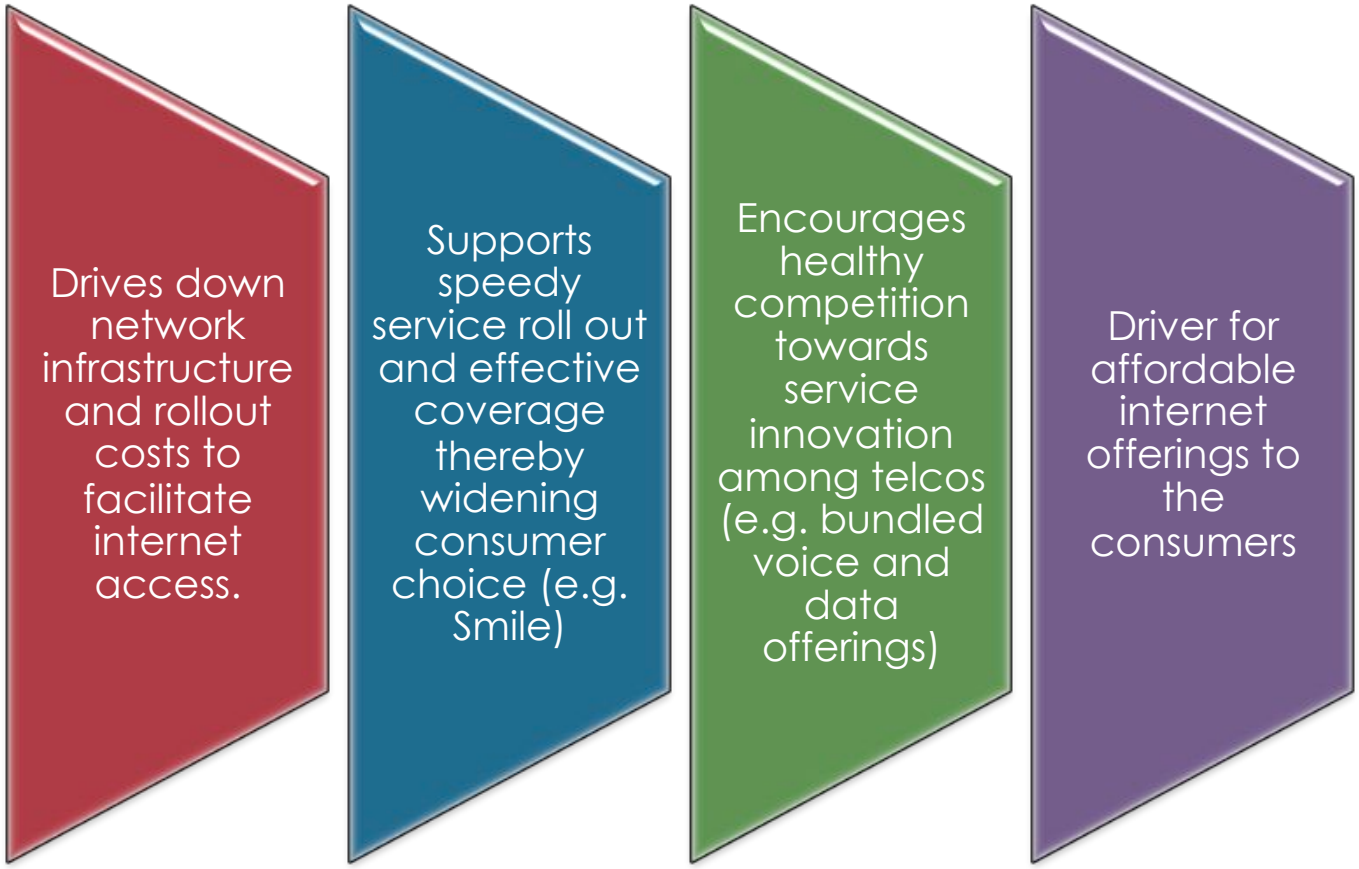
Fixed Broadband – Open Access NGN Model



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



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

0ver 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

Expectation

Infrastructure
Institute structured and favourable

Service Uptime
Take action to curtail operational disruptions

Operational Costs
Commitment to

Planning & Development Approvals & Controls

Right of Way (RoW) Approvals & Controls

Facility shutdowns by MDAs

Community actions

Minimize Regulatory Fees, eg Spectrum fees

Amend the Guidelines on Colocation & Infrastructure Sharing, 2006 to allow active Infrastructure Sharing

Smart States Initiative (SSI)
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.

Conclusion

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