



# **BROADBAND – THE NEXT REVOLUTION**

**BEING A PAPER DELIVERED BY THE EXECUTIVE VICE CHAIRMAN/CHIEF EXECUTIVE OFFICER OF THE NIGERIAN COMMUNICATIONS COMMISSION, DR. EUGENE JUWAH, AT THE 2ND SOUTH – SOUTH ECONOMIC SUMMIT 2012 AT CONVENTION CENTRE, ASABA, DELTA STATE ON THURSDAY, APRIL 26, 2012.**

**His Excellency, President Goodluck Ebele Jonathan, GCFR.**

**Mr. Chairman,** Your Excellencies, Distinguished, and Honourables Members of the National Assembly, Hon Members of the State Assemblies, My Lords, Special Guests, Gentlemen of the Press, Ladies and Gentlemen.

Let me begin by expressing my deep appreciation to the organizers for inviting me to be part of this very important summit. It is always gladdening to speak to decision makers of this nature on issues of vital national importance as it relates to telecommunications and I am delighted to be here.

The summit is also coming at a time when issues related to telecommunications and ICT development are getting more attention, globally and also Nationally. The summit therefore provides a good opportunity to address salient issues as it relates to telecommunications in the South - South zones in particular, and Nigeria in general.

**‘Broadband – The Next Revolution’**, which I am about to share with you, is a very compelling topic which I am also delighted to address. Considering the revolution that has already taken place in the Nigerian telecommunications industry in the last ten years on the side of basic voice telephony, it is logical that the Nigerian Communications Commission is now focused squarely on the area of broadband.

## **NIGERIA IS RIPE FOR BROADBAND**

Let me start by refreshing our memories when we say that we have conquered voice telephony. Currently, more than 90 million active lines are available for the population compared with about 400,000 some ten years ago. This is why the growth of the last ten years has been variously described as a revolution.

By the International Telecommunications standards, this is a huge performance at 64.98 % teledensity compared with some 0.44% in 2001. This is why Nigeria is adjudged one of the fastest growing telecommunications nations of the world, and indeed, the fastest in Africa.

The world has taken voice telephony as basic while moving fast into the new world of data transmission that defines the speed with which businesses are conducted in the cyberspace – the Internet. Broadband is simply characterised by the speed at which the Internet highways transmit data from one end of the world to another, or from one computer to another. With the allusion to the fact that Internet has become an infrastructure within which all kinds of information or data in whatever formats, or volume can be shared, broadband becomes the ultimate Internet.

## **GLOBAL ASPIRATION FOR BROADBAND**

It is not only Nigeria, or the developing world that aspires to enjoy the broadband revolution. President Barrack Obama, on June 28, 2010, sent a memo to the Heads of the Executive Departments and agencies in his administration titled: *Unleashing the Wireless Broadband Revolution*. One paragraph in that memo that has captured the thoughts of some of us who are dedicated to pursuing the broadband revolution reads:

*“Expanded wireless broadband access will trigger the creation of innovative new businesses, provide cost-effective connections in rural areas, increase productivity, improve public safety, and allow for the development of mobile telemedicine, telework, distance learning, and other new applications that will transform Americans' lives.”*

The statement above represents the veritable offerings available in any country that has pervasive broadband availability.

## **ECONOMIC IMPACT**

The economic impact of broadband penetration has been found to be quite impressive, World Bank studies show, quite conclusively, that in low and middle –income countries,

every 10% percentage point increase in broadband penetration accelerate economic growth by 1.38 percentage points.

This impact is greater than in high-income Countries and equally greater than the impact of any other telecommunication service.

In an alternative perspective, doubling the broadband speed for the economy increases its GDP by 0.3 percentage points. This is according to a report conducted jointly by Ericsson, Arthur D. Little and Chalmers University of Technology. The report quantified the isolated impact of broadband speed.

The above percentage points may appear small but if you apply them to the Nigerian GDP at 40 trillion Naira you obtain an increase of more than half a trillion naira in the first instance and N120 billion in the second.

## **STABLE REGULATION, CHALLENGING ENVIRONMENT**

While the regulatory environment in the Country has remained stable and attractive to the global investment community, there still remain a number of challenges.

One of the most difficult challenges to wide scale broadband infrastructure deployment is the issue of right of way. While this issue seems intractable, there are obvious solutions. State Government could move away from the current practice of imposing one off charge for right of way, based on distance to a new regime of periodic revenue streams from their right of way assets.

One way to realize these stream is to contribute the assets as participation in the project. Alternatively, State government may choose to barter their right of way assets for a specialized service from infrastructure operator. For example, access to right of way can be traded for a security surveillance network provided from the infrastructure.

Another challenge comes from Government institutions themselves in form of multiple regulation and multiple taxation. A third challenge is vandalisation of infrastructure.

Finally, legacy infrastructure deployments in Nigeria are characterised by operational issues such as monopoly ownership, exorbitantly high pricing and discriminatory access.

## **STRATEGY FOR IMPLEMENTATION OF BROADBAND SERVICES**

It is in response to addressing the above peculiarities existing in the Nigerian environment, that we have adopted as means of our regulatory intervention an inclusive process we call

“Open Access Model” for broadband deployment. This is a model that provides a framework for sophisticated infrastructure sharing. Using this model, the broadband infrastructure market structure will be unbundled into three layers - the passive, the active and the retail layers. This structure will ensure vibrancy in the market and prevent dominance as no company will be allowed to play in more than two of the service layers.

In this model, bandwidth will be provided by the active infrastructure providers to the retail service providers on a fair and non-discriminatory basis. The active Infrastructure providers will buy bulk bandwidth from the submarine cable companies, which are then delivered via optical fiber owned by the passive infrastructure provider.

Implementation of this model will bridge the gaps in broadband deployment, eliminate last mile issues, reduce the price of bandwidth for end users and unlock the market for massive broadband usage in Nigeria.

The Commission will issue licenses in the passive and active layers while price caps will be implemented in these layers using cost based pricing. In the retail service layer, multiple licenses will be issued, with pricing to end users determined by market forces.

To enable service delivery to under-served and un-served areas of the Country where it may not be economically viable to deploy fiber, the Government will offer financial incentives to the infrastructure providers to enable them operate reasonably profitably. In addition, the Government through the Commission will facilitate agreements and engage in dispute resolution among the various stakeholders.

In terms of implementation, we have already concluded preliminary studies that will enable cost effective deployment. In this process, we have developed a model for the deployment, and have engaged reputable internationally acclaimed consultants to drive strategy and design the processes for achieving our goals.

Our overall plan also received quality advice and guide from the International Telecommunications Union, the global telecom regulatory agency which, holds the Nigerian regulatory processes in a very high esteem given our globally acclaimed transparency, fairness, expertise and the consultative disposition that attend our processes.

## **POTENTIALS AND OPPORTUNITIES FOR THE SOUTH SOUTH STATES**

The proximity advantage of the South-South geopolitical zone to the continental shores, which is already home to intercontinental submarine cables, gives it a unique advantage to

experience broadband opportunities and potentials. To unlock these potentials, the government and civil society of the zone must provide a very conducive environment for foreign direct investments. The capital intensity requirements for deployment of telecommunications infrastructure, whether for broadband or for other telecommunications services generally, are often substantial, hence, the need to attract investments outside of the locality.

The issue of difficulties in securing the right of way, that of imposition of multiple taxation, creating a secured environment as well as creating more employment for our teeming youth are more demanding at the state government level.

There is also a need to create a new stream of entrepreneurs to drive the development of state.

With broadband availability, the states and local governments can make a lot of difference, and with the potentials and opportunities that abound within the intercontinental shelf of the South-South zones, in Nigeria, state and local governments can surely accelerate developments and empower its citizens using broadband availability. This is why this zone stands out in the realization of the broadband – the next revolution.

His Excellencies, distinguished ladies and gentlemen, I thank you most sincerely for listening.

**Dr. Eugene Juwah**

*Executive Vice Chairman/CEO, NCC*

***April 26, 2012.***