**Customer type: Government** 

Country/Region: Nigeria, Africa

**Application: Government Building Complex** 



### The customer

The National Assembly of the Federal Republic of Nigeria is comprised of a 109-member Senate and a 360-member House of Representatives. The Nigerian National Assembly Complex contains general assembly areas, meeting rooms, and offices, which house hundreds of legislators, officials, and support staff.

The national assembly required internet connectivity to all of the offices in the government campus. Netlink Technologies, a leading provider of wireless broadband data services in Nigeria, was given the project.



### The challenge

The Nigerian National Assembly complex is comprised of a number of multiple floor buildings with hundreds of offices and senator suites. The main challenge was to create high quality broadband service without having to run new wiring through the building. For this purpose, a wireless Wi-Fi network solution that could provide indoor coverage from the outside was required. The other requirements were:

- Coverage hundreds of users located in multiple buildings.
- Throughput broadband connectivity throughout the campus to ensure effective work conditions.
- Security limit access only to authorized personnel.
- Installation easy to install and nonobtrusive in the National Assembly campus

## Highlights

#### **The Customer**

The National Assembly House of Nigeria and other buildings located in National Assembly campus in Abuja.

#### The Challenge

Creation of a Wi-Fi network for the Nigerian National Assembly campus, to be installed without the need to run new wiring inside the buildings.

#### The Solution

The Wavion WBS-2400 spatially adaptive beamforming Wi-Fi base station provided exceptional indoor coverage and cost effective solution for campuses broadband service.

#### The Result

A Wi-Fi network based on Wavion base stations, offering connectivity throughout Nigerian National Assembly facilities.





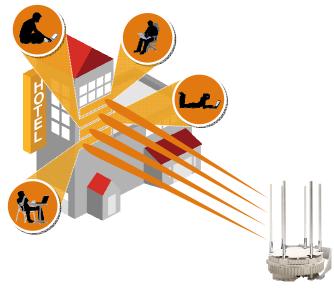
## The solution

Netlink Technologies selected Wavion's base stations after extensive trials of leading access points from various vendors.

"We are proud to be able to deliver wireless Internet access to the Nigerian National Assembly," said Dumebi Kachikwu, CEO of Netlink Technologies. "Thanks to Wavion's technology and the Netlink network, we're able to bring the benefits of wireless broadband access to the National Assembly complex and provide internet access to all its offices and meeting rooms."

Netlink Technologies were able to provide high quality and cost-effective coverage of the National Assembly building, comprising of 4 floors and over 200 senator suites, with only 4 Wavion base stations. The base stations were mounted on light poles located outside the building.

The WBS-2400 spatially adaptive base station is enabling indoor coverage from outside the building. The indoor penetration is provided by the powerful beamforming technology, which leverages 6 radios and antennas to focus the energy to and from the client. The adaptive beamforming algorithms exploit the multipath and optimize the performance on a per-packet basis, thus providing the client the best possible quality of service.



**Building Coverage using Wavion Base Station** 

# Why Wavion

Wavion's base stations were selected for a number of key reasons:

- Deep indoor penetration allowing indoor coverage with outdoor base station installations
- Coverage with Wavion base stations, Netlink Technologies was able to provide the required coverage with about a third of the number of access points typically required by conventional access points.
- Interference mitigation the powerful beamforming technology is able to provide broadband wireless service even in noisy environments.

The extended range and high quality coverage provided by Wavion WBS-2400 base stations, provided Netlink Technologies with a cost effective solution with saving of 50% in both the initial deployments and maintenance costs.

### **Future Expansion**

Netlink Technologies is continuing to expand their network in Nigeria outside the capital of Abuja. The WBS-2400 is the basis of Netlink Technologies Wi-Fi infrastructure in both business and residential applications.



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