Abstract

The arrival of new Information and Communication Technologies (ICTs) has significantly enhanced our capabilities to collect, process and distribute information. As a result of these developments, many developing countries, including Ghana, are realizing the role ICT can play in the Governance sector. The National Information Technology Agency (NITA), which is the body charged in Ghana to provide technological advice and policy frameworks for Electronic Governance (e-Government) service delivery, has deployed a pilot e-Government network with WiMAX in parts of Accra and Tema municipality in order to facilitate access to services, including email, web services, data warehousing, government domain name administration, etc. This pilot e-Governance network which is technologically simple is drastically changing the way information is distributed in Ministries, Departments and Agencies (MDAs) in Ghana. This paper discusses the clear, comprehensive layout and network architecture for the e-Government model using WiMAX. Measurement results for traffic generation which were taken from four departments on the e-Government network before the WiMAX deployment are compared with field trial measurement done after WiMAX deployments and results presented.
A Performance Case Study of Electronic Governance Implementation in Ghana with WiMAX Technology

References


Index Terms

Computer Science

Wireless
Keywords

Information and Communication Technology  Electronic Government  WiMAX
Network Simulation
Field Measurement