

Global Summit and Expo on **Multimedia & Applications**

August 10-11, 2015 Birmingham, UK

Performance evaluation of hybrid Wi-MAX WI-FI video surveillance systems

Smart C Lubobya, M.E Dlodlo, G.De Jagar and A.Zulu

University of Cape Town, South Africa

University of Zambia, Zambia

Traditional surveillance systems are mainly Closed Circuit Television (CCTV) type; mainly depends on analogue cameras, heavy wiring and are limited both in coverage distance, video quality and nature of terrain. Hybrid WiMAX-Wi-Fi video surveillance systems are proposed to mitigate the above constraints as either a complimentary or alternative to the CCTV. Notwithstanding the cost of WiMAX IP cameras, WiMAX has the advantages of wide coverage, guaranteed quality of services, high data rate among others. Wi-Fi has the advantage of providing connectivity to a wide range of customer devices, cheaper Wi-Fi cameras but has limited range. The advantages of WiMAX and Wi-Fi are being exploited to implement hybrid WiMAX-Wi-Fi video surveillance systems which can be deployed in developed and developing countries in order to minimise crime in bus and train station, airports, schools, stadia, organisations and other public places. Performance of such wireless systems are analysed and compared to the wired.

Biography

Smart C Lubobya received the BE degree in Electrical Engineering from the Copperbelt University, Zambia and the MSc degree in Electrical Engineering from University of Cape Town, South Africa. He has worked as Telecom Engineer for Zambia Telecommunication Company Ltd., Manager Research and Development for Zambia Communication and Technology Authority. He is a Research Fellow at the University of Zambia and currently a PhD candidate in Electrical Engineering at the University of Cape Town. His research interests include wireless communication, video compression and streaming, radio engineering and computer networking.

lbbsma001@myuct.ac.za

Notes: