Regional Seminar on Fixed Mobile Convergence and New Network Architectures for the Arab Region, Tunis, Tunisia, 21-24 November 2005

Topic: Application of WiFi in supplementing Fixed, GSM and CDMA Networks in the last mile

Presenter: Jared Baraza, Snr. Transmission Consultant, Esap Engineering Networks, Kenya

## Abstract:

WiFi is a technology that uses spread spectrum in the ISM bands of 2.4 and 5.8 GHz. The technology has become very popular across Europe and America because it does not require a frequency license and offers high bandwidth to the users for just a few hundred dollars. This is the technology that can be very useful in Africa especially in rural areas where there are no telephone lines in the communities and villages. WiFi systems could be used for the last mile to extend fixed or mobile services to the remote areas and give the rural populations access to voice and Internet access. WiFi systems can also support the following applications

- Telemedicine
- Distant Learning
- Rural Community Telecenters
- School networks
- Public pay phone services

The paper will introduce WiFi technology and illustrate how they can be rolled out and also highlight some applications that are useful for remote areas in African continent.

Jared Baraza, Nairobi September 05