Regional Seminar on Fixed Mobile Convergence and New Network Architectures for the
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Topic: Application of WiFi in supplementing Fixed, GSM and CDMA Networks in the last
mile

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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