



Introduction

The two most common types of wireless phone technology in use in Kenya are:

GSM (Global System for Mobile Communication) and CDMA (Code Division Multiple Access). 73% of the global market uses GSM technology, and 14% uses CDMA.

GSM technology

GSM uses three frequency bands: 900 MHz, 1800 MHz and 1900 MHz. Dual-band phones operate on two out of three of these frequencies, while tri-band phones operate on all three frequencies. GSM offers: wide international coverage; ease of switching between different handsets and higher 'talk-time'.

CDMA technology

CDMA (Code Division Multiple Access) technology allows multiple users to share common access to the network. It offers; wider coverage than GSM and better coverage in remote areas.

3G technology

Third generation (3G) mobile-phones and networks offer higher data rates, wider bandwidth and increased capacity. They also support a wide range of mobile-phone services.

Satellite mobile-phones

Mobile Satellite phones use satellite transmission, are generally more expensive and but provide improved geographic coverage.

Wireless technology features

Optimum coverage

Both CDMA and GSM networks provide extensive metropolitan coverage.

'Roaming'

All the GSM networks in Kenya allow for 'roaming' within East Africa. CDMA phones have not yet been enabled to 'roam' in East Africa.

Background-noise suppression

CDMA phones suppress background noise efficiently and thus ensure clear signal-transmission.



Compatibility with hearing aids

CDMA phones are more suited to use with hearing aids.

Wireless phone features

Features include:

Colour screens: for optimum display of pictures/games/web pages.

Predictive text: which enhances the speed of text exchange and reduces the risk of thumb-strain.

Polyphonic ring-tones: which are 'tunes', which can be down-loaded direct to the mobile-phone.

Services: include: current news/weather updates/sports news.

Camera phones: combine the features of a mobile-phone and a digital camera (or sometimes a video camera). Images can be transmitted to other similarly enabled phones.

Talk time: 'Talk time' refers to the maximum duration of time (using a fully-charged battery and operating under optimum conditions) for which a mobile-phone will sustain a conversation before its battery runs out.

Other wireless phone features

'Bluetooth' technology: enables similarly-enabled electronic devices to communicate with each other within a small radius without any physical links. Infra-red-enabled phones have similar capabilities, but tend to provide slower line-of-sight connections.

EDGE: Enhanced Data-rates for GSM Evolution (EDGE) refers to a faster (up to 384 Kbps) version of the standard GSM wireless data service.

GPRS: General Packet Radio Service (GPRS) is a packet-based wireless communication service, which allows 2G mobile phones to connect to the Internet.

MMS: Multimedia Messaging (MMS) is used to send messages that include multimedia data. Sending of MMS messages requires that both the phone and network are MMS-enabled.

WAP: Wireless Application Protocol (WAP) refers to the standards that enable 2G mobile-phones to access the Internet. WAP pages have been adapted for display on small mobile phone screens and typically offer information that include; news; sports and retail information.

WiMAX: Worldwide Inter-operability for Microwave Access (WiMAX) refers to technology that is capable of transmitting wireless data over long distances.