GLOSSARY OF CELLULAR TERMS

**Air Interface:** It is the operating system of a wireless network.

**Airtime:** The amount of time a person spends talking on their cellular device.

**AMPS:** Advanced mobile phone service represents the original technology system used for wireless networks.

**Android:** When Google joined the cellular phone market, they created Android, their first smart phone operating system. Android is not only an OS but a software platform.

**ARPU:** Average Revenues per user.

**Bluetooth:** Radio technology that enables devices such as computers, mobile phones and hands-free kits to be connected without cables up to 30 feet away.

**Broadband:** A term used when describing the bandwidth or capacity needed to carry multiple voice, video or data channels simultaneously.

**Carrier:** The Carrier provides the customer the means of making a call by establishing a network of cell towers which transmit calls through the various telephone networks throughout the world.

**CDMA:** Code Division Multiple Access better known in the cellular world as CDMA, is a technology that is used to transmit wireless calls.

**Cell:** The basic geographic unit of wireless coverage. Short for cellular, a cell is used to break down a cities wireless network into smaller sections. A region is divided into smaller “cells”, each equipped with a low-powered radio transmitter/receiver.
Cell Site: This is considered the location where a wireless antenna and network communication equipment is placed in order to provide wireless service in a geographic area.

Cell Splitting: A process completed to help increase the capacity of a wireless system. It is completed by subdividing one cell into two or more smaller cells.

Digital: Technological approach that converts signals (including voice) into the binary digits ‘0’ and ‘1’. This data is compressed, and then transformed into electronic pulses for a wired network, optical light waves for fiber optic networks or radio waves for wireless networks.

Electronic Serial Number (ESN): Assigned by the wireless manufacture, an ESN is a unique serial identification number programmed into your mobile device. Each time a call is placed, the ESN is transmitted to a nearby base station so the wireless carrier can validate the call. The ESN is electronically monitored to help in fraud prevention.

FDMA: Frequency division multiple access

General Packet Radio Service (GRPS): A packet-switched technology that enables high-speed wireless, internet and other data communications. GPRS is considered a 2.5G technology.

Global Positioning System (GPS): A system of satellites, computers and receivers that is able to determine the latitude and longitude of a receiver on Earth by calculating the time difference for signals from different satellites to reach the receiver.

Global System for Mobile Communications (GSM): A technological approach also based on dividing wireless calls into time slots. GSM is most common in Europe, Australia and much of Asia and Africa.
Local Area Network (LAN): Local Area Network (LAN) is a small data network covering a limited area, such as a building or group of buildings. Most LANs connect workstations or personal computers.

Mobile identification Number (MIN): The MIN, more commonly known as a wireless phone number, uniquely identifies a wireless device within a wireless carrier’s network. The MIN is dialed from other wireless or wire line networks to direct a signal to a specific wireless device.

Multimedia Messaging Service (MMS): A further extension of SMS and EMS. MMS is designed to make use of newer and quicker mobile transmissions to messages, such as video and sound.

Number Portability: This is a service that makes it possible for consumers to keep their existing cellular telephone number when changing service providers in a specific area.

Operating System (OS): Which controls the operation of your mobile device.

Personal Identification Number (PIN): An additional security feature for wireless phones, much like a password. Programming a PIN into the Subscriber Information Module (SIM) on a wireless phone requires the user to enter that access code each time the phone is turned on.

Protocol: A standard set of definitions governing how communications, are formatted in order to permit their transmission across networks and between the two networks.

Roaming: When traveling outside their carrier’s local service area, roaming allows users to continue to make and receive calls when operating in another carrier’s service coverage area. Many of the major carriers now offer national coverage making roaming charges avoidable.
**Short Messaging Service (SMS):** SMS allows mobile device users to send and receive short text messages.

**SIM:** Subscribers identity module; A smart card which is inserted into a mobile phone to get it going.

**Smart Phone:** Wireless devices that come equipped with much more advanced data features than most. What makes the phone “smart” is its ability to manage and transmit data in addition to voice calls.

**Spread Spectrum:** A method of transmitting a radio signal by spreading it over a wide range of frequencies. This reduces interference and can increase the number of simultaneous users on one radio frequency band.

**Third-Generation (3G):** A general term that refers to technologies which offer increased capacity and capabilities delivered over digital wireless networks.

**Time Division Multiple Access (TDMA):** A technological standard that permits the transmission of information by dividing calls into time slots, each one lasting only a fraction of a second. Each call assigned a specific portion of time on a designated channel. By dividing each call into timed ‘packets’, a single channel can carry many calls at once.

**Transmission Control Protocol/Internet Protocol (TCP/IP):** A protocol permitting communications over and between networks, the TCP/IP protocol is the basis for the internet communications.

**Voice over Internet Protocol (VoIP):** VoIP, also known as Broadband phone service, uses your high-speed Internet connection to place and receive phone calls.

**Wi-Max:** A wireless technology based on the IEEE 802.16 standard providing metropolitan area network connectivity for fixed wireless access at broadband speeds.
**Wireless Application Protocol (WIP):** Wireless Application Protocol is a set of standards that enables wireless devices, such as phones, pagers and palm devices such as phones, pagers and palm devices, to browse content from specially-coded Web pages.

**Wireless Fidelity (WiFi):** The popular term for the 802.11b wireless Ethernet standard.

**Wireless Local Loop (WLL):** WLL is a system that connects wireless users to the public switched telephone network (PSTN) using wireless technology and other circuitry to complete the “last mile” between the wireless user and the exchange equipment.

**Wireless Private Branch Exchange (PBX):** Equipment that allows employees or customers within a building or limited area to use wireless devices in place of traditional landline phones.