

## Glossary of Terms

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V  
| W | X | y | z

802.11

IEEE standards for wireless LANs with specs for 1, 2, 11 and 24 Mbps.

802.15

IEEE standards for wireless PANs (WPAN).

10Base2

Ethernet and IEEE 802.3 network cabling which uses thin coaxial cable for carrying data at 10 megabits per second.

10Base5

Ethernet and IEEE 802.3 network cabling which uses thick coaxial cable for carrying data at 10 megabits per second.

10BaseT

Ethernet and IEEE 802.3 network cabling which uses unshielded twisted-pair cables for carrying data at 10 megabits per second.

1G

First generation wireless: analog cellphones.

2.5G

2G plus faster data services.

2B1Q

Two binary, one quaternary. The transmission line code for the ISDN basic interface.

2G

Second generation wireless: digital cellphones.

2-Wayfarer Mobile Communications System

A two-way truck communications and tracking system. Using radio signals, it is able to locate the position of trucks as well as enabling the drivers and dispatchers to communicate via satellite.

3G

Third generation wireless: digital plus high speed data and global roaming.

Known as IMT 2000 by the ITU and implemented in Europe as UMTS and cdma2000 in North America. Goals are high quality multimedia and advanced global roaming (inhouse, cellular, sat

3GPP

3rd Generation Partnership Project. A cooperation of standards organizations (ARIB, CWTS, ETSI, T1, TTA and TTC) throughout the world that is developing the technical specifications for IMT-2000.

Access Point

Base station that plugs into Ethernet hub or server. Like a cellular phone system cell, users can roam between access points.

ACL

Asynchronous Connectionless - Used for data transmission only.

AE

Authenticating Entity

AIN

Advanced Intelligent Network. The Telcordia/Bellcore version of the "intelligent network," which is the public switched telephone system (PSTN). The AIN provides enhanced voice, video and data services and dynamic routing capabilities by using two different networks. The actual voice call is transmitted over a circuit-switched network, but the signaling is done on a separate packet-switched network known as SS7.

Air Interface

Air modulation scheme, equivalent to physical layer in OSI model.

AMPS

Advanced Mobile Phone Service. The standard for analog cellular telephones, which uses a frequency-modulated transmission and frequency spacing to separate user transmission. AMPS operates in the 800 MHz band.

AMPS modem

A wireless modem designed for analog cellular phones.

ANSI

American National Standards Institute. A membership organization founded in 1918 that coordinates the development of U.S. voluntary national standards in both the private and public sectors. It is the U.S. member body to ISO and IEC. Information technology standards pertain to programming languages, EDI, telecommunications and physical properties of diskettes, cartridges and magnetic tapes.

AP

Access Point. A base station in a wireless LAN. Access points are typically stand-alone devices that plug into an Ethernet hub or server. Like a cellular phone system, users can roam around with their mobile devices and be handed off from one access point to the other.

API

Application Programming Interface

ARDIS

Established, nationwide packet data system from American Mobile. Provides 19.2 Kbps.

ASE

Application Service Element

AUC

Authentication Centre  
Authentication

Process of verifying the identity of the user at the other end of a link. Authentication is accomplished by using a link key stored in the device memory or by a user PIN (called pairing).

#### Authorization

Process of deciding if a requesting device is allowed to have access to a service on another device. Authorization always includes authentication.

#### Baseband

Describes the specifications of the digital signal processing part of the hardware which carries out the baseband protocols and other low-level link routines.

#### BASIC authentication

A function that verifies the identity of a person accessing a server by demanding input of ID and password

#### BCCH

Broadcast Control CHannel

#### BCP

Basic Call Process

#### BCSM

Basic Call State Model

#### BellSouth Intelligent Wireless

Nationwide packet network at 8 Kbps from BellSouth Wireless Data. Formerly RAM Mobile Data.

#### Bluetooth

Wireless personal area network (PAN) standard geared for home and office. Uses 2.4GHz band at 720 Kbps within 30 foot range.

#### BNF

Backus-Naur Form. Also known as Backus normal form, it was the first metalanguage to define programming languages. Introduced by John Backus in 1959 to describe the ALGOL 58 language, it was enhanced by Peter Naur and used to define ALGOL 60.

#### Bond

A link key which is exchanged between two devices. This key will be used for future authentication between the devices.

#### Bonding

The creation of a semi-permanent (or permanent) relationship between two devices. The relationship is established when the user enters a passkey with the explicit purpose of creating a bond between two devices. This procedure is different from authenticating using a passkey in which the user is requested to enter a passkey during the establishment of a link.

#### Broadband Wireless

Wireless transmission at high speed. Wireless transmission is slower than wireline speeds, thus, whereas land-based broadband is generally at T1 rates and above, wireless might be considered broadband at 250 Kbps and above.

BSS

Base Station Subsystem

Bytecode

Content encoding where the content is typically a set of low level opcodes and operands for a targeted hardware (or virtual) machine.

CAN

Customer Access Network

Card

Basic unit of WML navigation or user interface.

CBC

Cell Broadcast Center

CBE

Cell Broadcast Entity

CBS

Cell Broadcast short message Service

CCAF

Call Control Agent Function

CCF

Call Control Function

CCITT

Consultative Committee on International Telegraphy and Telephony

CCS7

Common Channel Signaling No.7

CDMA

Code Division Multiple Access QUALCOMM's spread spectrum air interface method. It codes each conversation expanding it 128 times, which makes it easy to decipher at receiving end.

cdma2000

3G CDMA evolution from cdmaONE supported by cdmaONE operators. Now known as the 1x Multi Carrier mode (1x MC) in an overall standard for 3G

CDMA.

cdmaONE

2G CDMA (IS 95).

CDPD

Cellular Digital Packet Data. A digital wireless transmission system that is deployed as an enhancement to the existing analog cellular network. Based on IBM's CelluPlan II, it provides a packet overlay onto the AMPS network and moves data at 19.2 Kbps over ever-changing unused intervals in the voice channels. If all the channels are used, the data is stored and forwarded when a channel becomes available. CDPD was developed as a wireless extension to an IP network and uses the four octet (0.0.0.0) address for connections. CDPD networks cover most of the major urban areas in the U.S. and has been deployed by AT&T, Ameritech, GTE, BellAtlantic Mobile and

other carriers. By the late 1990s, incompatibility issues had been worked out, and roaming agreements and interoperability between carriers is generally nationwide. CDPD modems are available on PC Cards for laptop and handheld computers.

CER

Call Event Record

CFB

Call Forward Busy

Character Encoding

Refers to the conversion between a sequence of characters and a sequence of bytes. WML document character encoding is captured in transport headers, attributes, meta information placed within a document, or the XML declaration.

cHTML Gateway

A cHTML gateway is a software entity within the mobile network. It connects to the Internet or an Intranet in order to allow content and applications to be sent to WAP or cHTML enabled devices. Such gateways are expected to be able to handle a number of different markup languages.

CIC

Carrier Access Code

CID

Call Instance Data

CLI

Calling Line Identification

Client

A device or application that initiates a request for connection with a server.

CLIP

Calling Line Identification Presentation

CLIR

Calling Line Identification Restriction

CM

Call Model or Call Management

CM (SMS)

Call Management

CNM

Customer Network Management

Compact HTML (cHTML)

Subset of HTML 2.0, HTML 3.2, and HTML 4.0 specifications designed for limited hardware information appliances

Content

Data that is stored or generated at the origin server. It is usually displayed or interpreted by a user agent in response to a user request.

Content Encoding

Act of converting content from one format to another. It is can also specify a particular format or encoding standard or process.

Content Format

Actual representation of content.

Converged Network

The integration of the telephone system with IP-based data networks.

Convergence

The act of bringing the Internet to devices that previously couldn't access it. This could include the merging of the Internet with television, cellular phones or even kitchen appliances.

CPE

Customer Premises Equipment

CPI

Calling Person Identification

CS

Capability Set

CS (SMS)

CauSe

CSM

Call Segment Model

CSS

Customer Support System (Systems)

CSTA

Computer Supported Telecommunications Applications

CTI

Computer Telephony Integration

CTIA

Cellular Telecommunications Industry Association

CVSD

Continuous Variable Slope Delta Modulation

DA

Destination Address

DCS

Data Coding Scheme

DCS1800

Digital Cellular (1800Mhz)

Deck

A collection of WML cards. A WML deck is also an XML document.

DECT

Digital Enhanced Cordless Telephony is a European cordless telephone standard. Designed for wireless PABX connections, this provides voice and data services using TDMA techniques.

Device

Network entity capable of sending and receiving packets of information and has a unique device address.

DFP

Distributed Functional Plane

DI

Dialogue Identifier TCAP

Dispatch Radio

Two way radio used for taxis, trucks and fleets. Always on.

DP

Detection Point

DSL

Distributed Service Logic

DSS1

Digital Subscriber Signalling No.1 protocol

DTMF

Dual Tone Multi-Frequency

Dual Mode Handset

Cellphone that switches from analog to digital or from land based to satellite or from cordless to cellular.

ECMA

European Computer Manufacturer Association

EDGE

Enhanced Data rates for Global Evolution. Increased data throughput in GSM and TDMA systems to 384 Kbps.

EDP

Event Detection Point

ETR

ETSI Technical Report

ETSI

European Telecommunications Standards Institute

FCC

Federal Communications Commission

FE

Functional Entity

FEA

Functional Entity Action

Firewire

Originally developed by Apple, this is an increasingly popular, and very fast, external bus for transferring data between devices. Also known as IEEE 1394 for the name of the standard it engendered.

FMC

Fixed Mobile Convergence

FMI

Fixed Mobile Integration

FNN

Full National Number

Gateway

A hardware and software combination that runs on the OSI application layer and allows dissimilar protocols to communicate by filtering communications through industry-standard protocols. Examples of protocols a gateway might use are TCP/IP, X.25, and SNA.

GFP

Global Functional Plane

Globalstar

Second major LEO based global communications system. Initially for voice, it was launched in late 1999.

GMSCA

Gateway MSC Address

GOS

Grade of Service

GPRS

General Packet Radio Service allows packet rather than circuit switch connections on cellular networks. This allows high speed mobile access and the ability to only connect to the mobile network when internet access is required.

GPS

Global Positioning System. A system of 24 satellites for identifying earth locations, launched by the U.S. Department of Defense. By triangulation of signals from three of the satellites, a receiving unit can pinpoint its current location anywhere on earth to within a few meters.

GSL

Global Service Logic

GSM

Global System for Mobile Communications. Digital cell phone system used throughout Europe based on TDMA. Introduced SIM card and short messaging (SMS). GSM has a maximum data transfer rate of 9.6 Kbps

HDML

Handheld Device Markup Language. Forerunner of WML.

HDR

High Data Rate. High speed CDMA data technology from QUALCOMM for existing cdmaOne voice networks or new data networks. Provides 2.4 Mbps/384 Kbps asymmetric operation.

HIPERLAN

European wireless LAN standard at 24 Mbps in the 5GHz band. Similar to Ethernet but with quality of service (QoS).

HLR



Home Location Register

HomeRF

Wireless personal area network (PAN) from HomeRF Working Group. Uses 2.4GHz band at 1 or 2 Mbps within 150 foot range.

HSCSD

High Speed Circuit Switched Data affords dramatically increased mobile network bandwidths.

HTML

HyperText Markup Language [HTML4]

HTML 1.0

iMode compatible HTML which supports all iMode terminals

HTML 2.0

iMode compatible HTML which supports only the NTTDoCoMo 502i series terminals

HTTP

HyperText Transfer Protocol [RFC2068]

IANA

Internet Assigned Number Authority

iDEN

Integrated Digital Enhanced Network. Wireless system from Motorola that integrates voice, data, short messages and dispatch radio. Used by Nextel and others.

i-Mode

Packet based information service for mobile phones from NTT DoCoMo (Japan). First to provide Web browsing from cellphones.

IMSI

International Mobile Subscriber Identity

IMT 2000

3G wireless from the ITU. International Mobile Telecommunications 2000 also known as the Third generation mobile systems

IN

Intelligent Network. The public switched telephone network architecture of the 1990s, which was developed by Bellcore (now Telcordia) and the ITU. It was created to provide a variety of advanced telephony services such as 800 number translation, local number portability (LNP), call forwarding, call screening and wireless integration. While Bellcore named its version AIN (Advanced Intelligent Network) for use in North America, there are a variety of proprietary versions throughout the world based on the ITU standard. The IN uses the SS7 signaling protocol in which voice calls (or modem data) travels through circuit-switched voice switches, while control signals travel over an SS7 packet-switched network.

INAP

Intelligent Network Application Part. An IN (Intelligent Network) protocol used in a European SS7 network that is used to query databases for a variety of functions not related to call setup and tear down. INAP uses the ASN.1 standard for defining message content.

INCM

Intelligent Network Conceptual Model

INDB

Intelligent Network Data Base

INDBMS

IN Data Base Management System

INFA

Intelligent Network Functional Architecture

IP

Internet Protocol. The IP part of the TCP/IP communications protocol. IP implements the network layer (layer 3) of the protocol, which contains a network address and is used to route a message to a different network or subnetwork. IP accepts "packets" from the layer 4 transport protocol (TCP or UDP), adds its own header to it and delivers a "datagram" to the layer 2 data link protocol. It may also break the packet into fragments to support the maximum transmission unit (MTU) of the network.

IP address

Internet Protocol address. The address of a computer attached to a TCP/IP network. Every client and server station must have a unique IP address. Client workstations have either a permanent address or one that is dynamically assigned to them each dial-up session. IP addresses are written as four sets of numbers separated by periods; for example, 204.171.64.2.

IrDA

Infrared Data Association, Walnut Creek, CA. A membership organization founded in 1993 and dedicated to developing standards for wireless, infrared transmission systems between computers. With IrDA ports, a laptop or PDA can exchange data with a desktop computer or use a printer without a cable connection. IrDA requires line-of-sight transmission like a TV remote control. IrDA products began to appear in 1995. The LaserJet 5P was one of the first printers with a built-in IrDA port. IrDA is comprised of the IrDA Serial IR physical layer (IrDA-SIR), which provides a half-duplex connection of up to 115.2 Kbps. This speed allows the use of a low-cost UART chip; however, higher non-UART extensions for 1.15 and 4 Mbps have also been defined. IrDA uses the Infrared Link Access Protocol (IrLAP), an adaptation of HDLC, as its data link protocol. The Infrared Link Management Protocol (IrLMP) is also used to provide a mechanism for handshaking and multiplexing of two or more different data streams simultaneously.

IrDA port

A transmitter/receiver for infrared signals

Iridium

First LEO based global communications system backed by Motorola. Primarily for voice, it was launched in 1998 and went into Chapter 11 in 1999.

IS-136

Second generation TDMA in 1994. Also called "Digital AMPS" or "D AMPS."

IS-54

First generation TDMA in 1991.

IS-95

First generation CDMA (cdmaONE).

ISCTX

Integrated Services CenTreX

ISDN

Integrated Services Digital Network

ISM band

Industrial, Scientific and Medical band. Unlicensed spectrum typically in the 900MHz, 2.4GHz and 5.7GHz bands. Requires spread spectrum techniques at 1 watt.

ISPBX

Integrated Services Private Branch eXchange

ISUP

ISDN Signaling User Part (signaling)

ITU

International Telecommunications Union

IVR

Interactive Voice Response

IWU

Interworking Unit

Jack

A socket, hole or opening mounted on a wall, switchboard or panel, into which a plug connector can be inserted to complete a connection.

Java

An object-oriented programming language developed by Sun Microsystems that creates applications that work on multiple operating systems.

JavaScript

Programming Language used to add dynamic behavior to HTML documents.

JINI

Based on Java, this is a Sun system for easily connecting any type of devices, including a Net device, to a network.

L2CAP

Logical Link Control and Adaptation Protocol - Adapts upper layer protocols over the baseband. L2CAP is only defined for ACL links even though the Baseband Protocol is defined for ACL and SCO links.

LC

Link Controller - manages the link to the other Bluetooth devices and is the low-level baseband protocol handler.

LCD

Liquid crystal display, such as the screen found on an iMode cellular phone used for reading emails and accessing the Internet

LE

Local Exchange

LM

Link Manager - the software entity carries out link setup, link authentication, link configuration, and setup of other protocols.

LMDS

Local Multipoint Distribution Service. Licensed spectrum above 20GHz. Range is about four miles.

LMP

Link Manager Protocol - responsible for link set-up between Bluetooth devices which includes security issues and controlling power modes of the Bluetooth Radio device.

LSB

Least Significant Bits

Mac Address

A 3-bit address used to distinguish units within a piconet. 3 bits allows for only 8 unique address, thus the limit on the number of devices allowed to participate in a piconet.

MAL

MSIsdn-Alert

MAP

Mobile Application Part

Master Unit

This is the device within a piconet whose clock and frequency-hopping sequence is used to synchronize all slave units within the piconet.

MDS

Multipoint Distribution Service. Licensed spectrum in the 2.1GHz band.

Microbrowser

A Web browser specialized for a smart phone or PDA. It is optimized to run in the low-memory and small-screen environment of a handheld device.

MMDS

Multipoint Multichannel Distribution Service. Licensed spectrum in the 2.5 2.6GHz band. Range is 30 miles or more.

MML

Man Machine Language

MMM

Mobile Media Mode is an icon that identifies Web content optimized for smart phones and handhelds.

MMS

More Messages to Send

MoU

Memorandum of Understanding

MR

Message Reference

MS

Mobile Station

MSA

Metropolitan Service Area. An urban area with at least 50,000 people plus surrounding counties. There are 306 MSAs and 428 RSAs in U.S.

MSB

Most Significant Bits

MSC

Mobile Switching Centre

MSCA

MSC Address

MSI

Mobile waiting Set Indication

MSIsdn

Mobile Station ISDN number

MSM

More Short Messages

MSRN

Mobile Station Roaming Number

MT

Message Type

MTBF

Mean Time Between Failure

MTBR

Mean Time Before Repair

MTI

Message Type Indicator

M-WorldGate

Logica's proposed cHTML gateway

MWS

Message Waiting Set

NAP

Network Access Point

NE

Network Element

Nextel

Nationwide wireless operator that acquired numerous SMR companies.

NFA

Network Functional Architecture

NMT

Nordic Mobile Telephone System. First analog cellphone system in 1979 in Scandinavian countries.

NO

Network Operator

NSN

National Significant Number

NTP

Network Termination Point

NTT DoCoMo

Wireless division of Nippon Telegraph and Telephone, Japan. A Japanese cellular provider and chief developer of i-Mode.

OA

Originating Address

OBE

Object Exchange Protocol

OC

Operation Code

OMS

Operations and Maintenance System

OpenAir

Wireless LAN standard from WLIF. Based on Proxim's RangeLAN2 products.

Origin Server

Server on which a given resource resides or is to be created.

OSS

Operational Support System

PABX

Private Automatic Branch Exchange

Packet

A piece of data transmitted over a packet-switching network such as the Internet. A packet includes not just data but also its destination.

FACTS

Public Access Cordless Telecommunication Service

PAN

Personal Area Network

Parked Units

Those devices within a piconet which are synchronized but do not have a MAC address.

PBX

Private Branch Exchange

PCI

Protocol Control Information

PCN

Personal Communications Network

PCS

Personal Communications Service. New digital cellphone systems in 2GHz range. Mostly GSM.

PDA

Personal Digital Assistant. Handheld computer or personal organiser device.

PDC

Personal Digital Communications. Digital cellphone system in Japan.

PDC (2)

Personal Digital Cellular System Phones using the PDC, which is an international cellular system that uses both full, and half rate speech code (5.6 kbps) and allows high speed transmission at 9.6 kbps to ensure efficient spectrum utilization

PDI

Protocol Discriminator

PHS

Personal Handyphone System

PIC

Point In Call

Piconet

A network of devices connected using Bluetooth wireless technology. A piconet may consist of two to eight devices. In a piconet, there will always be one master while the others are slaves.

PID

Protocol Identifier

PIN

Personal Identification Number

P-Java

Personal Java. Java API and specification for running Java applications on small devices.

PLMN

Public Land Mobile Network, cellular network

PM

Personal Mobility

PMTS

Public Mobile Telephone System

PN

Personal Number

Pocket PC

A handheld Windows-based computer that runs the Pocket PC operating system (formerly Windows CE). The Pocket PC operating system (Version 3.0

of Windows CE) adds a new interface along with greater stability, Pocket Office applications (Internet Explorer, Word and Excel), handwriting recognition, an e-book reader, wireless Internet and longer battery life. The Pocket PC was designed to compete more directly with the popular Palm devices.

POI

Point of Interconnect

POR

Point Of Return

POTS

Plain Old Telephony Service

PRI

PRiority

PSTN

Public Switched Telephone Network

PSTS

Public Switched Telephone Service

PTNX

Private Telecommunication Network eXchange

PTO

Public Telecommunication Operator

QEAN

Quick Entry Access Number

QoS

Quality of Service

RAM network

Earlier name for BellSouth Network.

RangeLAN2

Wireless LAN geared for office from Proxim.

RCT

ReCeption Time

REA

REcipient Address

Resource

A network data object or service that can be identified by a URL.

RFC

Request For Comments

Ricochet

A wireless Internet service from Metricom, Inc., Los Gatos, CA. It uses approximately 100 small "microcell" radio transceivers attached to utility poles within a 20-square mile cell. Each cell has one wired access point, which is a T1, frame relay connection to the Internet. Each microcell bounces digital signals from the mobile devices to other microcells and eventually to its



wired access point. The transceivers in this MicroCellular Data Network (MCDN) employ 162 frequency-hopping channels in the 902-928MHz band from user to microcell. The 2.4GHz band is used in the rest of the system, and licensed spectrum in the 2.3GHz band is used for its high-speed service. Ricochet modems attach to laptops and other handhelds via the serial port. Ricochet 1 provides 28.8 Kbps service with access primarily to stationary users, while Ricochet 2, introduced in 2000, offers 128 Kbps for the commuter in transit. First deployed in Washington, DC, Seattle and Silicon Valley, coverage in more than 40 urban areas is expected by 2002.

RL

ReLay function

RP

Reply Path

RPOA

Regulated Private Operating Agency

RSA

Rural Service Area. There are 428 RSAs and 306 MSAs in the U.S.

SAPI

Service Access Point Identifier

SC

Service Centre

SCA

Service Centre Address

Scatternet

Two or more independent, non-synchronized piconets.

SCC

Service Control Customization

SCE

Service Creation Environment

SCEAF

Service Creation Environment-Access Function

SCEF

Service Creation Environment Function

SCEP

Service Creation Environment Point

SCF

Service Control Function

SCO

Synchronous Connection-Oriented - Used for audio only or a combination of audio and data transmission.

SCP

Service Control Point

SCTS

Service Centre Time Stamp

SDF

Service Data Function

SDK

Software Development Kit

SDMA

Space division multiple access A variation of TDMA and CDMA that potentially will be used in high-bandwidth, third-generation wireless products.

SDP

Service Data Point

SDT

Service Data Template

Server

Device or application that passively waits for connection requests from one or more clients.

SF

Service Feature

SGML

Standardized Generalized Markup Language. This is a general purpose language for domain specific markup languages.

Short Messaging

Sending small text messages to cellphones. GSM pioneered Short Message Service (SMS), now used in all digital cellphones.

SIB

Service Independent building Block

SIM

Subscriber Identity Module

SIM card

Smart card that gives GSM phone its user identity. Lets phones be easily rented or borrowed.

SIO

Services In Operation

SIP

Session Initiation Protocol An emerging protocol that simplifies connections over the Internet for uses such as telephony and videoconferencing. Has the potential to lead to new classes of Net devices.

SL

Service Logic

Slave Units

Any unit within a piconet that is not the master unit.

SLCP

Service Logic Control Program

SLMP

Service Logic Management Program

SLP

Service Logic Processing program

SLPI

Service Logic Processing program Instance

SM

Short Message

SMAF

Service Management Agent Function

SM-AL

Short Message Application Layer

Smart Phone

A digital cellular phone that has text messaging, Web access and other data services along with voice.

SMC

Security Management Centre

SME

Short Message Entity

SMF

Service Management Function

SMI

Short Message Identifier

SM-MO

Short Message Mobile Originated

SM-MT

Short Message Mobile Terminated

SMP

Service Management Point

SMR

Specialized Mobile Radio. Dispatch radio for taxis, trucks and fleets. Nextel aggregated many SMR companies.

SM-RL

Short Message Relay Layer

SMS

Short Messaging Service. GSM coined the phrase, but similar text messaging used in most digital cellphone systems.

SMS-GMSC

Short Message Service Gateway MSC

SMS-IWMSC

Short Message Service Interworking MSC

SM-TL

Short Message Transfer Layer

SMTP

Simple Mail Transfer Protocol

SN

Service Node

Sniff Mode

This mode describes the ability of synchronized devices within a piconet to enter power-saving mode which lowers device activity.

SoR

Status of Report

SQL

Structured Query Language

SRF

Specialized Resource Function

SRI

Status Report Indication

SRR

Status Report Request

SS7

Signaling System 7. The protocol used in the public switched telephone system (the "intelligent network" or "advanced intelligent network") for setting up calls and providing services. SS7 is a separate signaling network that is used in Class 4 and Class 5 voice switches.

SSCP

Service Switching and Control Point

SSD

Service Support Data

SSF

Service Switching Function

SSP

Service Switching Point

ST

STatus

STD

Subscriber Trunk Dialling

STI

Service Trigger Information

STP

Signaling Transfer Point

SWAP

Shared Wireless Access Protocol. Protocol used in HomeRF.

Symphony

Wireless LAN geared for the home from Proxim.

TACS

Total Access Communications System. Analog cellphone system in Europe based on AMPS.

TCAP

Transaction Capability Application Part

TCP/IP

Transmission Control Protocol/Internet Protocol. A communications protocol developed under contract from the U.S. Department of Defense to interconnect dissimilar systems. Invented by Vinton Cerf and Bob Kahn, this de facto UNIX standard is the protocol of the Internet and has become the global standard for communications. TCP provides transport functions, which ensures that the total amount of bytes sent is received correctly at the other end. UDP is an alternate transport that does not guarantee delivery. It is widely used for realtime voice and video transmissions where erroneous packets are not retransmitted. IP provides the routing mechanism. TCP/IP is a routable protocol, which means that all messages contain not only the address of the destination station, but the address of a destination network. This allows TCP/IP messages to be sent to multiple networks within an organization or around the world, hence its use in the worldwide Internet. Every client and server in a TCP/IP network requires an IP address, which is either permanently assigned or dynamically assigned at startup.

TCS

Telephony Control Specification - A bit-oriented protocol which defines the call control signaling for the establishment of audio and data transmission.

TDD

Time Division Duplex

TDMA

Time Division Multiple Access. Air interface for digital cellphones that interleaves data in time slots and provides multiple access to a small number of wireless frequencies. It is a component of GSM.

TDP

Trigger Detection Point

Teledesic

Broadband LEO based global communications system expected in 2004.

Terminal

Device providing the user with user agent capabilities. Also mobile terminal or mobile station.

TID

Transaction Identifier

TM

Terminal Mobility

TMA

Terminal MoveAbility

TMN

Telecommunication Management Network

Trusted device

A device that has been authenticated

Two-way paging

The ability to receive and send data to the Internet by way of the paging network. Also often called interactive paging.

UCS

Universal Multiple Octet Coded Character Set

UD

User Data

UDL

User Data Length

UI

User Interface

UMTS

Universal Mobile Telecommunications System. Is a new generation technology for rapidly moving data and multimedia over wireless devices. The European implementation of the 3G wireless phone system. UMTS provides service in the 2GHz band and offers global roaming and personalized features. Designed as an evolutionary system for GSM network operators, multimedia data rates up to 2 Mbps are expected eventually in VPN's.

UPT

Universal Personal Telecommunication

URI

Uniform Resource Identifier. The addressing technology from which URLs are created. Technically, URLs such as HTTP:// and FTP:// are specific subsets of URIs, although the term URL is mostly heard.

URL

Uniform Resource Locator [RFC2396]. The address that defines the route to a file on the Web or any other Internet facility. URLs are typed into the browser to access Web pages, and URLs are embedded within the pages themselves to provide the hypertext links to other pages. The URL contains the protocol prefix, port number, domain name, subdirectory names and file name. Port addresses are generally defaults and are rarely specified. To access a home page on a Web site, only the protocol and domain name are required.

User

Person who interacts with the user agent to view, hear, or use a resource.

User Agent

Any software or device that interprets WML, WMLScript, or other resources.

UTF

UCS Transformation Format

UWC-136

3G data rates for TDMA

VAS

Value Added Service

VLR

Visitor Location Register

VMB

Voicemail Box

VMP

Voicemail Platform

VP

Validity Period

VPF

Validity Period Format

W3C

World Wide Web Consortium. An international industry consortium founded in 1994 to develop common standards for the World Wide Web. It is hosted in the U.S. by the Laboratory for Computer Science at MIT.

WAE

Wireless Application Environment

WAP

Wireless Application Protocol. Determines how wireless devices utilise internet content and other services.

WAP gateway

Software that takes raw WML data and compiles it for the microbrowser and vice versa.

WBMP

Wireless BitMap. Image format used in the Wireless Application Protocol.

WCDMA

Wideband-CDMA. A 3G technology that increases data transmission rates in GSM systems by using CDMA instead of TDMA. W-CDMA has become the Direct Sequence (DS) mode in the ITU's 3G specification, which includes the 1x Multi-Carrier mode (1x MC) and 3x Multi-Carrier mode (3x MC). 1x MC (formerly known as cdma2000) and 3x MC comprise the 3G upgrade path for carriers already using CDMA (cdmaOne).

WCS

Wireless Communications Service. Licensed spectrum in the 2.3GHz band.

Web clipping

Extracting relevant information from a Web page for display on a smart phone or PDA.

Web Server

Network host that acts as an HTTP server. A computer that provides World Wide Web services on the Internet. It includes the hardware, operating

system, Web server software, TCP/IP protocols and the Web site content (Web pages).

WIN

Wireless Intelligent Network. Transaction processing infrastructure for wireless systems.

Windows CE

A streamlined version of Windows from Microsoft for handheld PCs (HPCs) and consumer electronics devices. It runs "Pocket" versions of popular applications such as Microsoft Word and Excel as well as many applications that are geared specifically for the smaller platform. As of Version 3.0, Windows CE was changed substantially and renamed Pocket PC.

Wireless Bridge

A device used to transmit and received radio frequencies over the air between two LANs.

Wireless Modem

A modem and antenna that transmits and receives over the air. Wireless modems come in several varieties, including units for CDPD, ARDIS, Mobitex, Ricochet, 802.11, OpenAir, BellSouth Intelligent Wireless Networks and other proprietary products.

Wireless Portal

A Web site that supports a user with a smart phone or alphanumeric pager. It may offer a variety of features, including providing a springboard to other (WAP based) wireless sites, the ability to select content to be pushed to the user's device as well as providing a point of entry for anyone to send the user a message.

WLAN

Wireless LAN. A local area network that transmits over the air typically in an unlicensed frequency such as the 2.4GHz band. A wireless LAN does not require lining up devices for line of sight transmission like IrDA. Wireless access points (base stations) are connected to an Ethernet hub or server and transmit a radio frequency over an area of several hundred to a thousand feet which can penetrate walls and other non-metal barriers. Roaming users can be handed off from one access point to another like a cellular phone system. Laptops use wireless modems that plug into an existing Ethernet port or that are self contained on PC cards, while stand-alone desktops and servers use plug-in cards (ISA, PCI, etc.).

WLIF

Wireless LAN Interoperability Forum. Membership group that endorses products that are interoperable with major standards. Supports OpenAir and 802.11.

WLL



Wireless Local Loop. Providing communications to the home or office via wireless transmission. It is a "last mile" system that does not use copper cable or even fiber-optic cable.

WML

Wireless Markup Language. A markup language for devices using WAP. It is based on the Handheld Device Markup Language (HDML). Ordinary web browsers cannot read WML.

WMLS (WMLScript)

Wireless Markup Language Script. A subset of JavaScript, used to program mobile devices.

WPAN

Wireless Personal Area Network. A wireless network that serves an individual user.

WPBX

Wireless PBX. A PBX that supports cordless telephone calls.

WSP

Wireless Session Protocol. This protocol sends smaller amounts of data than HTML/HTTP.

WTA

Wireless Telephony Application. A framework for accessing the telephony related functions in a mobile terminal.

WTAI

Wireless Telephony Applications Interface

WTLS

Wireless Telephony Layer Security

WTP

Wireless Transport Protocol

WWW

World Wide Web

XML

Extensible Markup Language. An open standard for describing data from the W3C. It is used for defining data elements on a Web page and business-to-business documents. It uses a similar tag structure as HTML; however, whereas HTML defines how elements are displayed, XML defines what those elements contain. HTML uses predefined tags, but XML allows tags to be defined by the developer of the page. Thus, virtually any data items, such as product, sales rep and amount due, can be identified, allowing Web pages to function like database records. By providing a common method for identifying data, XML supports business-to-business transactions and is expected to become the dominant format for electronic data interchange