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**19<sup>th</sup>**

Updated, Improved and Expanded Edition  
by Harry Newton

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## **NEWTON's TELECOM DICTIONARY**

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the caller, a hefty bill for that personalized service. Until recently, person-  
ce was only offered by AT&T. Now it's offered by most phone companies.  
the main, are not regulated. And some companies charge an arm and a leg.

**800 Number** Several long distance companies are now offering  
numbers, which are basically party line 800 numbers with call routing. The  
is as follows: You dial a number, e.g. 800-484-1000. A machine answers  
beep. You punch in four or five digits on your touchtone pad. A voice  
at the other end hears the digits, says "Thank you for using MCI" and dials  
distance number which might be 212-691-8215 (mine). The long distance  
charging under \$5 a month and 15 to 25 cents a minute for the service. The  
charges are more expensive than normal 800 lines. One company, MCI, is also  
NOW ME 800 which allows you to change the routing of your personal 800  
only with one phone line.

**Agent** A personal agent is a piece of software on your personal computer  
bidding. It may answer your emails (or at least some of them). It may find  
web you're looking for. It may schedule appointments for you. The concept  
has a secretary anymore. So why not program your computer to do your  
said than done. A software agent is software in the making.

**Area Network** See 802.15.1 and PAN.

**Authentication Device** P.A.D. A portable or fixed device which  
identification and validation of each user. Used in fraud prevention and  
access. Also called a "token".

**Central Office Trunk Line** Also known as a "private line."  
behind a PBX to access a central office trunk line dedicated to him; also  
to call him directly, bypassing the PBX. Such a private line can appear on a  
station on an electronic PBX phone, or can terminate on a separate phone. As  
bypasses the PBX, the console attendants can't listen to your conversations;  
the technicians, unless they physically tap the line. Private lines, therefore, are  
than the typical PBX station line. They also are CO-powered; as a result, they  
able to power outages which might affect the PBX system. Senior executives  
to venture capitalists and others who conduct highly confidential negotiations.  
Line.

**Communications Industry Association** PCIA. The trade  
the new cellular phone providers. PCIA represents a wide range of interests,  
band PCS, paging and narrowband PCS, antenna site owners and man-  
Mobile Radio (SMR), suppliers and manufacturers. See also PCS.

**Communications Networks** PCN. A new type of wireless tele-  
that would use light, inexpensive handheld handsets and communicate via  
terminals. PCN is primarily seen as a city communications system, with far less  
Subscribers would be able to make and perhaps receive calls while they  
ing, as they can do today with cellular radio systems, but at a low price. There's  
I put PCN antennas in communities and issue everyone in the community  
phone that would hub off the PCN antenna. This would save the phone com-  
up each house. In this way, the PCN phone would resemble the common  
wireless phone, but with a larger range. Dr. Sorin Cohn of Northern Telecom calls  
power, wireless, personal communications systems an "enabler of unplanned  
definition. See PCN and Personal Communications Services.

In 1992 MCI broadened the definition of PCN. It proposed a national con-  
national PCNs joined together by a long distance carrier (namely it). In its release,  
PCNs are the next generation of digital wireless communications technolo-  
less power and are less expensive than the current cellular technology and  
of inexpensive pocket telephones with much longer battery life than cellu-  
PCN phones will have many more features than today's cellular or conven-  
and, unlike cellular phones, will be usable in most areas of the world.  
same frequency band in most countries, (1850-1990 MHz) while  
in several different frequency bands in various countries, and thus is  
country to country." See also Personal Communications Services.

**Communications Services** PCS are a broad range of individu-  
communications services that let people or devices to communicate irrespective  
of the services include:

Personal numbers assigned to individuals rather than telephones

- Call completion regardless of location ("find me")
- Calls to the PCS customer can be paid for by the caller, or by the PCS customer
- Call management services giving the called party much greater control over incom-  
ing calls.

PCS can both find and complete a call to a person regardless of location, but give that  
person the choice of accepting or rejecting the call or sending it somewhere else. PCS will  
possibly use a new category of wireless, voice and data communications — using low  
power, lightweight pocket telephones and hand-held computers.

**Personal Computer** PC. A computer for one person's use. That's why it was origi-  
nally called a personal computer — to distinguish it from other computers that existed at  
the time of the PC's invention, or 1981, the date IBM introduced its first PC. Those other  
computers were mainframes and mini-computers. Their main use was to be shared by  
many users. Airline reservations, being an example. Of course, as the PC got more power-  
ful, things got more complex. In 1983, Novell introduced its first local area network soft-  
ware called NetWare. NetWare was originally introduced to allow a handful of personal  
computers to share a single hard disk, which at that stage was costly and scarce. As hard  
disks became more available and cheaper, NetWare evolved to allow sharing of printers  
and file servers. Networking developed in the 1980s and 1990s and gave PCs the shared-  
user power of mainframes and minicomputers. As a result, today some PCs are personal  
computers, used by one person standalone. Some PCs are PCs that sit on a local area net-  
work (LAN). For some reason, people call these PCs workstations. And there are some PCs  
which have become servers — i.e. they "serve" many PCs. They may do faxing. They  
may do voice mail for the company. They may run the company's entire phone system. In  
short, meanings change as technology changes. Not all PCs are personal computers.

**Personal Computer Memory Card International Association** See PCMCIA.

**Personal Computing Systems Architecture** PCSA. A network archi-  
tecture defined and supported by Digital Equipment Corp. for the incorporation of personal  
computers into server-based networks.

**Personal Computer Terminal Adapter** PCTA. A printed circuit card  
that slips into an IBM PC or PC compatible and connects the PC to the ISDN T-interface. The  
PCTA basically turns a normal PC into an ISDN phone and ISDN terminal, ready for voice  
and data communications. According to Northern Telecom, one of the manufacturers of  
such a device, the PCTA does:

- Functional signaling call setup.
- B channel for circuit switched data.
- X.25 packet data services on the B or D channel.
- Simultaneous operation of the B and D channels.
- M5317T digital telephone to PC messaging for integrated voice and data operation.
- NetBIOS interface to applications software, such as Microsoft Networks.

For more, see Northern Telecom's brochure ISDN PC Terminal Adapter NetBIOS  
Interface Description (D307-1).

**Personal Data Interchange** PDI. A format for exchanging information, such  
as electronic business, cards via wired or wireless connections.

**Personal Data Module** A removable module, unique to the ROLM Cypress and  
Cedar, which stores all information entered by the user. Such items as phone numbers, ter-  
minal profiles and log-on sequences are stored in the PDM, which also features battery  
backup to protect the memory in the event of a power failure. The user can take his per-  
sonal data module with him, plug it into another Cypress or Cedar and get all his speed dial  
and other personalized programming on his phone he just moved from.

**Personal Digital Assistant** PDA. A consumer electronics gadget that looks  
like a palmtop computer. Unlike personal computers, PDAs will perform specific tasks-act-  
ing like an electronic diary, carry-along personal database, personal communicator, memo  
taker, calculator, alarm clock. The communications will take place through the phone,  
through a cable attached to your PC or through infrared. See also Windows CE.

**Personal Identification Number** PIN number. 1. An AT&T term meaning  
the last four digits of your AT&T, MCI Bell operating company Credit Card — the card you  
use for making long distance numbers. 2. Some banks and financial institutions issue cred-  
it cards for machine, teller-less banking. These machines, called Automated Teller  
Machines, ask you for a password consisting of several numbers or characters. These are  
not on your credit card. These numbers or characters, called PIN numbers, are designed to  
make sure the right person is using your card. It's not a good idea to use your birthday as  
your PIN number.

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