Exhibit 1407

13th Updated & Expanded Edition

The Official Dictionary of Telecommunications

Computer Telephony The Internet IP Telephony Intranets, LANs & WANs

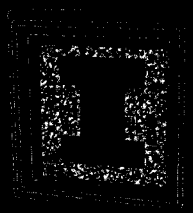
Windows 95, NT, NetWare & Unix Networking

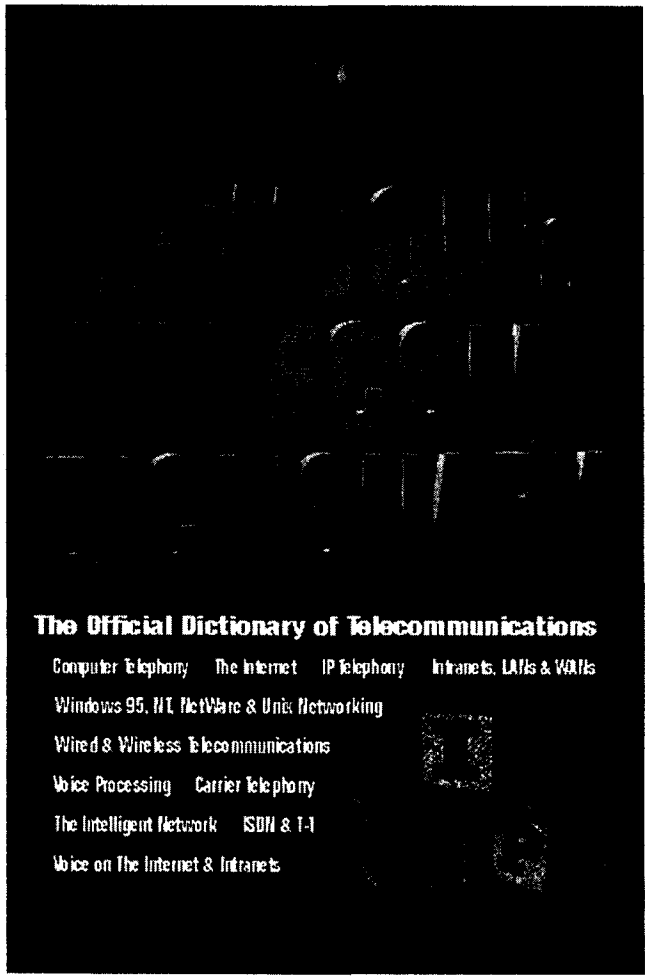
Wired & Wireless Telecommunications

Voice Processing Carrier Telephony

The Intelligent Network ISDN & T-1

Voice on The Internet & Intranets

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offered differing and understandably unprintable definitions.

Context Dependent Soft Keys Many telephones now have an LCD screen. Sometimes such screens have unmarked keys underneath them and/or at their sides. What these keys do depends on the "labels" appearing on the screen. They are called "context dependent" because what those keys do depends on where the call is at that time. The first context dependent soft keys were on the Mitel SuperSet 4 phones. When the handset was resting on the phone, only three of the six context sensitive keys had meaning. One said "Program," one said "Msg" and one said "Redial." When you picked the phone up, three buttons would now be alive. One would say "Page," one would say "Redial" and one would say "Hangup." If the phone rang and you picked it up, one button would now say "transf/conf" (meaning transfer/conference. When another phone was ringing. one button would say "Pickup," letting you push that button and answer someone else's phone. And so on. The neatest implementation of context sensitive keys was probably on the Telenova (now no longer manufactured). At one point when you were in voice mail, this phone's six buttons looked exactly like a cassette recorder — record, play, fast forward, fast reverse, etc. It was brilliant. No one has ever made using voice mail so easy.

Context Sensitive A term from the computer industry which means that "Help" is only a keystroke away. Hit F1 and Help information will flash on the screen. That information will be relevant to what you're doing now, i.e. that help is within the context of what's going on right this moment. See also CONTEXT DEPENDENT SOFT KEYS.

Context Switch The technique with which an Intel 80x86 microprocessor handles multitasking is called a context switch. The CPU performs a context switch when it transfers control from one task to another. In the process, it saves the processor state (including registers) of one task, then loads the values for the task that is taking control. Context switching is the kind of multitasking that is done in standard mode Windows, where the CPU switches from one task to another, rather than allocating time to each task in turn, as in timeslicing.

Contiguous Port Ports occurring in unbroken numeric sequence.

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Contributing Whore A title

Control Cable A multiconductor cable made for operation in control or signal circuits.

Control Channel Within a cellular telephone system, several of the channels are assigned as 'control' channels. Instead of supporting voice communications, these channels allow the base station to broadcast information to the cellular phones in its area. Cellular phones continuously monitor this broadcast information, selecting the base station that provides the best signal.

Control Character A non-printing ASCII character which controls the flow of communications or a device. Control characters are entered from computer terminal keyboards by holding down the Control key (marked CTRL on most keyboards) while the letter is pressed. To ring a bell at remote telex terminal an operator could hold down the CTRL key, and tap the 'G' key, since Control-G is the BELL character. Most computers display Control as the "^" character in front of the designated letter. For example, ^M is the Carriage Return character.

Control Circuit X.21 interface circuit used to send control information from DTE to DCE.

Control Connections A Control VCC links the LEC to the LECS. Control VCCs also link the LEC to the LES and carry LE-ARP traffic and control frames. The control VCCs never carry data frames.

Control Equipment 1. The central "brains" of a telephone system. That part which controls the signaling and switching to the attached telephones. Known as the KSU (or key service unit) in a key system.
2. Equipment used to transmit orders from an alarm center to remote site to enable you to do things by remote control.

Control Field Field in frame containing control information.

Control Flag A cellular phone term. A 6-bit flag transmitted in the forward channel data stream, comprised of a 5-bit busy/idle flag and one bit of the 5-bit decode status flag.

Control Head Roam Lights Indicates that the cellular phone is outside the "home" system.

Control Of Electromagnetic Radiation 1. Measures taken to minimize electromagnetic radiation emanating from a system or component, or to minimize electromagnetic interference. Such measures are taken for purposes of security and/or the reduction of interference, especially on ships and aircraft.
2. A national operational plan to minimize the use of electromagnetic radiation in the United States and its possessions and the Panama Canal Zone in the event of attack of imminent threat thereof, as an aid to the navigation of hostile aircraft, guided missiles, or other devices.

Control Of Flow Language Programming-like constructs (IF, ELSE, WHILE, GOTO, and so on) provided by Transact-SQL so that the user can control the flow of execution of SQL Server queries, stored procedures, and triggers. This definition from Microsoft SQL server.

Control Package Network A Rolm/IBM term for a multinode network used by the processors in one CBX node to communicate with the processors in other nodes. CPN-1 is used with RolmBus 74. CPN-2 is used with Rolmbus 295. Formerly called HUB.

Control Panel The control panel on the Apple Macintosh is for general hardware and software settings. Icons allow a user to customize the system or application, or select a particular service, such as a specific printer, set the sound level, the date and time and choose an Ethernet connection through the network control panel.

Control Plane The ATM protocol includes a Control Plane which addresses all aspects of network signaling and control, through all 4 layers of the model.

Control Point A program that manages an APPN network node and its resources, enabling communications to other control points in the network.

Control Segment A worldwide network of Global Positioning System monitoring and control installations that ensure the accuracy of satellite positions and their clocks.

Control Signal 1. In the public network, control signals are used for auxiliary functions in both customer loop signaling and interoffice trunk signaling. Control signals are used in the customer loop for Coin Collect and Coin Return and Party Identification. Control signals used in interoffice trunk signaling include Start Dial (Wink or Delay Dial) signals, Keypulse (KP) signals or Start Pulse (ST) signals.
2. In modem communications, control signals are modem interface signals used to announce, start, stop or modify a function. Here's a table showing common RS-232-C and ITU-T V.24 control signals

Pin	Control Signal	From	To
4	Request-To-Send (RTS)	DTE	DCE
5	Clear-To-Send (CTS)	DCE	DTE
6	Data Set Ready (DSR)	DCE	DTE
8	Carrier Detect (CD)	DCE	DTE
20	Data Terminal Ready (DTR)	DTE	DCE
22	Ring Indicator (RI)	DCE	DTE

work. It defines how the network — anything from POTS to T-1, from a Northern Telecom to an AT&T PBX — shall interface to Windows Telephony, which in turn talks to the Applications Programming Interface, which talks to the Windows telephony applications software. See WINDOWS TELEPHONY.
2. An organization that provides connections to a part of the Internet. If you want to connect your company's network, or even your personal computer, to the Internet, you have to talk to a "service provider." Also called an ISP, i.e. Internet Service Provider.
3. A service provider is also a company which provides information to people who call up on a phone or on a modem.
4. An SCSA computer telephony definition. An addressable entity providing application and administrative support to the client environment by responding to client requests and maintaining the operational integrity of the server.

Service Provider Messages An SCSA definition. The message information required by, and provided by, the service provider to perform its functions in the environment in which it is installed. Contrast with SCSA Message Protocol Interface. See SERVICE PROVIDER.

Service Provider Network Identifier SPNI. An identifier for the service provider operating a particular CDPD network.

Service Provisioning Tool What the computer industry calls a network manager, the telephone industry calls a service provisioning tool. It is a complex piece of software that allows telephone companies to contact their various switches and sundry computers dispersed over a wide geographic area, to log onto those machines and to upload, download and organize those machines so they are able to make different, new, updated software services for the telephone industry's customers. Telephone companies use various networks to get into their remote switches. Those networks might vary from dial-up to ISDN to packet switched networks to T-1. The better service provisioning tools allow one technician in one place to update and test multiple central offices and computers simultaneously.

Service Quality A call center term. A measure of how well staffing matches workload, expressed often as average delay (in answering a call).

Service Terminal The equipment needed to terminate the channel and connect to the phone apparatus or customer terminal.

Service Traffic Management STM. The SLEE (Service Logic Execution Environment) functionality for detecting overloads associated with a specific service and for sending Automatic Code Gap messages to the appropriate entities. The SN&M (Service Negotiation and Management) OA (Operations Application) also provides STM(Service Traffic Management)-related capabilities.

Services Management System SMS. Administers 800 Data Base Service numbers on a national basis. Customer records for 800 Service are entered into the SCP through this system. See EIGHTHUNDRED SERVICE.

Services On Demand An AT&T term for the immediate provision of almost any network service through universal ports, whenever required by a user; as opposed to provision via an expensive, time consuming, inflexible service order process.

Serving Closet The general term used to refer to either a riser or a satellite closet; Satellite Cabinet; Satellite Closet.

Serving Mobile Data Intermediate System A cellular radio term. The CDPD network entity that operates the Mobile Serving Function. The serving MD-IS communicates with and is the peer endpoint for the MDLP connection to the M-ES.

Serving Office An office of AT&T or its Connecting or Concurring Carriers, from which interstate communications services are furnished.

Serving Wire The term for the phone number that serves the location, referring to the phone number and terminating wire as one unit. Usually applies to a POTS number.

Serving Wire Center The wire center from which service is provided to the customer.

Servo Short for servomechanism. Devices which constantly detect a variable, and adjust a mechanism to respond to changes. A servo might monitor optical signal strength bouncing back from a disc's surface, and adjust the position of the head to compensate.

SERVORD Service Order.

SES 1. Satellite Earth Stations.
2. Severely Errored Seconds. Errored seconds during which the error rate exceeded 10.
3. Source End Station: An ATM termination point, which is the source of ATM messages of a connection, and is used as a reference point for ABR services. See DES.

Sesame Secure European System for Applications in a Multivendor Environment. Developed by the ECMA (European Computer Manufacturers Association), it is intended for very large networks of disparate origin.

Session 1. An active communications connection, measured from beginning to end, between computers or applications over a network. Often used in reference to terminal-to-mainframe connections. Also a data conversation between two devices, say, a dumb terminal and a mainframe. It is possible to have more than one session going between two devices simultaneously.
2. As defined under the Orange Book, a recorded segment of a compact disc which may contain one or more tracks of any type (data or audio). The session is a purely logical concept: when a multisession disc is mounted in a multisession CD-ROM player, what the user will see is one large session encompassing all the data on the disc.

Session Layer The fifth layer — the network processing layer — in the OSI Reference Model, which sets up the conditions whereby individual nodes on the network can communicate or send data to each other. The session layer is responsible for binding and unbinding logical links between users. It manages, maintains and controls the dialogue between the users of the service. The session layer's many functions include network gateway communications.

Session Lead-In The data area at the beginning of a recordable compact disc that is left blank for the disc's table of contents. The session lead-in uses up 6750 blocks of space. See TRACK.

Session Lead-Out The data area at the end of a session which indicates that the end of the data has been reached. When a session is closed, information about its content is written into the disc's Table of Contents, and the lead-out and the pre-gap are written to prepare the disc for a subsequent session. The lead-out and the pre-gap together take up 4650 two-kilobyte blocks (nine megabytes). See TRACK.

Set 1. Set is another name for a telephone.
2. SET. Secure Electronic Transaction. A developing, open specification for handling credit card transactions over any sort of network, with emphasis on the World Wide Web. Rather than providing the merchant with a credit card number, you send the information to them in encoded form. The merchant can't see the encrypted credit card number, but can for-

ward the transaction request to the credit card company c clearinghouse where the information is decrypted and veri fied. Only the financial institution has the key to unlock th encrypted account information. The financial institutio responds to the merchant request with a digital certificat which serves to verify the authenticity of the parties and th overall legitimacy of the transaction. SET ensures that no on else (e.g., hackers) can gain access to your credit card infor mation. It also ensures that an unscrupulous WWW merchan can't take advantage of the credit card number — you don always know with whom you are dealing in Cyberspace.

Set Associative Mapping A caching technique wher each block of main computer memory is assigned to a loca tion in each cache set where the cache is divided into multi ple sets.

Set Copy Set Copy allows the duplication of programming settings from one telephone to another.

Set-Top Box The electronics box which sits on top of you TV, connecting it to your incoming CATV signal and your TV's incoming coaxial cable. Set-tops vary greatly in their complexity with older models merely translating the frequency received off the cable into a frequency suitable for the television receiver while newer models can be addressable with a unique identity much like a telephone. That identity can be addressed from the cable headend. This allows the CATV operator to turn individual channels on and off, such as pay channels.

SETA SouthEastern Telecommunications Association, a user group.

SETI Search for ExtraTerrestrial Intelligence. A federally funded project which uses arrays of radiotelescopes to search the heavens for signs of intelligent life as evidenced by radio transmissions. SETI is based on rationale laid out in a "Nature" article by physicists Philip Morrison and Guiseppe Cocconi and first implemented by Frank Drake, a Cornell astronomer. As radio waves propagate infinitely at the speed of light in the pure vacuum of space, the thinking is that at least traces of intelligent life can be identified, even though they will be of millennia long past since other stars and galaxies are thousands or millions of light years away. Promoted as a far less expensive technique than that of space travel, the project is interesting but in jeopardy as results have been nil over the last 25 years or so.

SF 1. Single Frequency. A method of inband signaling. Single frequency signaling typically uses the presence or absence of a single specified frequency (usually 2,600 Hz). See SIGNALING.
2. SuperFrame: A DS1 framing format in which 24 DS0 timeslots plus a coded framing bit are organized into a frame which is repeated 12 times to form the superframe.

SFBI Shared Frame Buffer Interconnect, a specification that makes it possible for hardware manufactures to produce a single-board video-graphics adapter for the PC.

SFG Switch Fabric Controller.

SFD Start Frame Delimiter. A binary pattern at the end of eight octets of timing information in an Ethernet frame that tells the receiving station that the timing information is over, and all subsequent signal represents an actual frame. The pattern is two 1's after a long string of alternating one, zero, one, zero, etc. The one octet SFD field is 10101011 in binary.

SFG Simulated Facility Group.

SFQL Structured Full-Text Query Language. A proposed standard for full-text databases. The primary focus of the proposed standard is interoperability of CD-ROMs. SFQL is based on the SQL (Structured Query Language) standard for relational databases.

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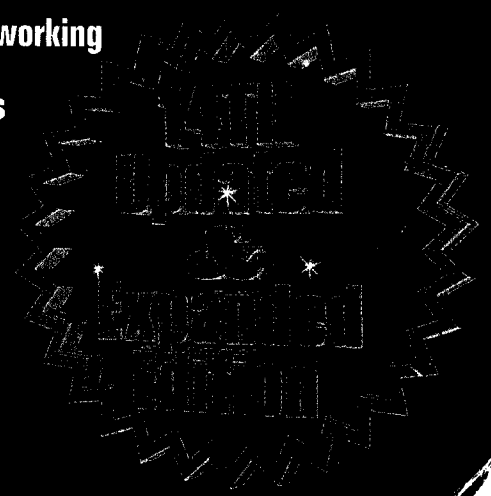

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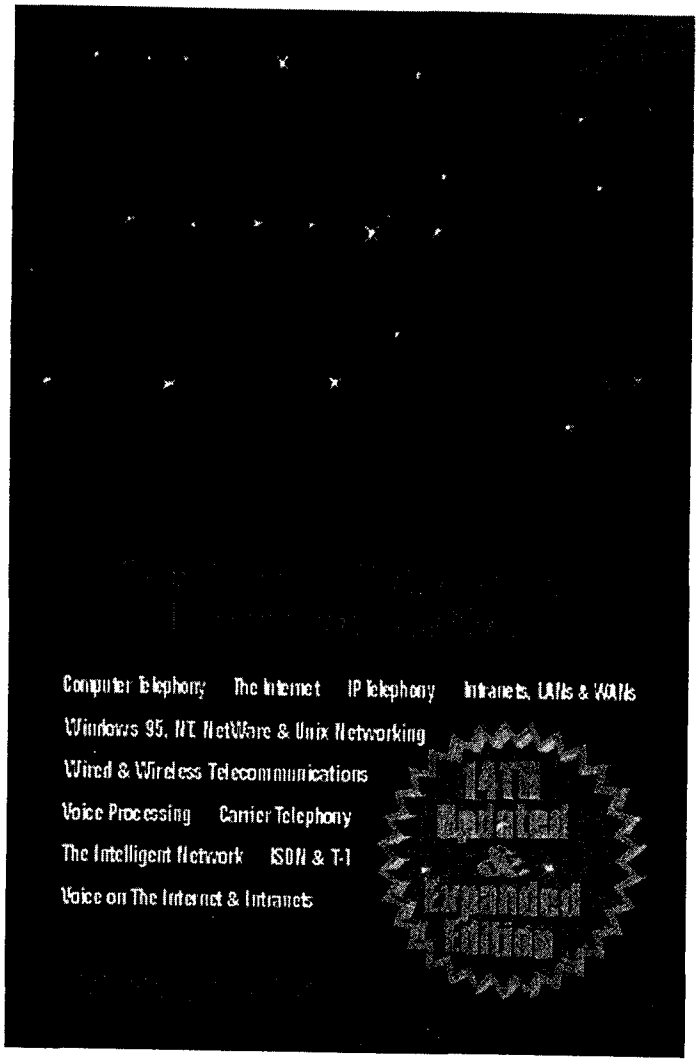
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Ring Indicator (RI)	DCE	DTE

Control Station On a multi-access link, a station that is ... of such functions as selection and polling.

Control Tier An AT&T term for the tier within the Univers... Services network node that provides the transpo... connection control function.

Control Unit An architectural component of a process ... which orchestrates processor activity and handles timi... sure the processor doesn't overlap functions.

Controlled Access When access to a system is limited ... authorized programs, processes or other systems (as in a ne...

Controlled Environment Vault CEV. It is a low main... area, water-tight concrete or fiberglass container typical... in the ground which provides permanent housing fo... switches, remote line concentrators, pair gain an... transmission systems. Because it is buried, it can ofte... located in utility easements or other places where loca... laws may be a problem. This below ground room tha... electronic and/or optical equipment is under con... temperature and humidity conditions.

Controller 1. In the truest sense, a device which control... operation of another piece of equipment. In its more com... data communications sense, a device between a hos... terminals that relays information between them. It admin... their communication. Controllers may be housed in the ... can be stand-alone, or can be located in a file server ... only one controller will be connected to several termi... The most common controller is the IBM Cluste... made for their 370 family of mainframes. In an automat... com, a controller is a device that commands the radio ... transmitter and receiver, and that performs processes, such as ... automatic link establishment, channel scanning and selec... link quality analysis, polling, sounding, message store ... forward, address protection, and anti-spoofing.

... participant in a conference call who sets up the conference ...

Controller Card Also called a hard disk/diskette drive ... controller. It's an add-in card which controls how data is writ... to and retrieved from your PC's various floppy and hard ... drives. Controller cards come in various flavors, including

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Serving Office An office of AT&T or its Connecting or Concurring Carriers, from which interstate communications services are furnished.

Serving Wire The term for the phone number that serves the location, referring to the phone number and terminating wire as one unit. Usually applies to a POTS number.

Serving Wire Center The wire center from which service is provided to the customer.

Servo Short for servomechanism. Devices which constantly detect a variable, and adjust a mechanism to respond to changes. A servo might monitor optical signal strength bouncing back from a disc's surface, and adjust the position of the head to compensate.

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Session Layer The fifth layer — the network processing layer — in the OSI Reference Model, which sets up the conditions whereby individual nodes on the network can communicate or send data to each other. The session layer is responsible for binding and unbinding logical links between users. It manages, maintains and controls the dialogue between the users of the service. The session layer's many functions include network gateway communications.

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Session Lead-Out The data area at the end of a session which indicates that the end of the data has been reached. When a session is closed, information about its content is written into the disc's Table of Contents, and the lead-out and the pre-gap are written to prepare the disc for a subsequent session. The lead-out and the pre-gap together take up 4650 two-kilobyte blocks (nine megabytes). See TRACK.

Set 1. Set is another name for a telephone.

2. SET. Secure Electronic Transaction. A developing, open specification for handling credit card transactions over any sort of network, with emphasis on the World Wide Web. Rather than providing the merchant with a credit card number, you send the information to them in encoded form. The merchant can't see the encrypted credit card number, but can forward the transaction request to the credit card company or clearinghouse where the information is decrypted and verified. Only the financial institution has the key to unlock the encrypted account information. The financial institution responds to the merchant request with a digital certificate which serves to verify the authenticity of the parties and the overall legitimacy of the transaction. SET ensures that no one else (e.g., hackers) can gain access to your credit card information. It also ensures that an unscrupulous WWW merchant can't take advantage of the credit card number — you don't always know with whom you are dealing in Cyberspace.

Set Associative Mapping A caching technique where each block of main computer memory is assigned to a location in each cache set where the cache is divided into multiple sets.

Set Copy Set Copy allows the duplication of programming settings from one telephone to another.

NEWTON'S TELECOM DICTIONARY

The Official Dictionary of Telecommunications & the Internet

• IP Telephony • LANs & Intranets • Call Centers & Computer Telephony • Fiber Optics, SONET and DWDM • Satellites • Voice, Data, Image & Video Networking • Wired and Wireless Telecom • VoIP • T-1, T-3, T-4, E-1, E-3 • ISDN & ADSL • Cable Modems • Cellular, PCS & GSM • Windows 95, 98, NT, NetWare, Apple, Sun & Unix Networking • Ecommerce

by Harry Newton

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content," says Stanley Dolberg, an analyst at Forrester Research Inc. In the computer world, according to William Safire, content means "information on a Web site." Companies that provide content are called content suppliers, or O.S.Ps (on-line service providers). A content provider was once called an information provider. See also Content Supplier.

Content Processing Voice processing is the broad term made up of two narrower terms — call processing and content processing. Call processing consists of physically moving the call around. Think of call processing as switching. Content consists of actually doing something to the call's content, like digitizing it and storing it on a hard disk, or editing it or recognizing it (voice recognition) for some purpose or using it as input into a computer program.

Content Provider 1. In the worlds of Convergence, the Internet and the World Wide Web (WWW), the Content Provider is the company which provides the material (content) rather than the network. See CONTENT SUPPLIER.
2. A fancy name for a writer, also called a language therapist by William Safire in the Sunday New York Times Magazine of January 28, 1996.

Content Supplier Content is a new fancy name for what telecommunications facilities carry. It includes movies, music, games, on-line books, information, etc. Content suppliers are such as movie studios, publishers, and music companies.

Contextual Ecommerce Imagine you receive a email from your friendly CD supplier. In it, he talks about the latest from Madonna. The email mentions the name of the CD. You notice its title is in blue and underlined — like a hot link to a website. You click on it. Instantly, you've bought the CD. You receive it the next day by Fedex. Bingo, we now have contextual ecommerce.

Contention Contention occurs when several devices (phones, PCs, workstations, etc.) are vying for access to a resource and only one of them can get it at one time. Some method is usually established for selecting the winner (first in first out, camp on, etc.) and accommodating the loser(s) (e.g. giving them a busy tone, giving them another shot at the line). When you cannot get an outside line from your extension you have been in contention and lost. See also ETHERNET.

Context Corporation An independent consultancy headed by Ray Horak, Consulting Editor of Newton's Telecom Dictionary. In fact, and according to Horak's mother, wife and children, The Context Corporation is the world's greatest consultancy, headed by the world's greatest, sweetest and most handsome man. Note: Horak's ex-wives (and others) have offered differing and understandably unprintable definitions.

Context Dependent Soft Keys Many telephones now have an LCD screen. Sometimes such screens have unmarked keys underneath them and/or at their side. What these keys do depends on the "labels" appearing on the screen. They are called "context dependent" because what these keys do depends on where the call is at that time. The first context dependent soft keys were on the Mitel SuperSet phones. When the handset was resting on the phone, only three of the six context sensitive keys had meaning. One said "Program," one said "Msg" and one said "Redial." When you picked the phone up, three buttons would now be alive. One would say "Page," one would say "Redial" and one would say "Pickup." If the phone rang and you picked it up, one button would now say "trans/conf" (meaning transfer/conference. When another phone was ringing, one button would say "Pickup," letting you push that button and answer someone else's phone. And so on. The neatest implementation of context sensitive keys was probably on the Telenova (now no longer manufactured). At one point when you were in voice mail, this phone's six buttons looked exactly like a cassette recorder — record, play, fast forward, fast reverse, etc. It was brilliant. No one has ever made using voice mail so easy.

Context Keys Buttons on a phone or device that have a display next to them. The buttons perform different functions depending on the what the screen shows when you press the button. See Context Dependent Soft Keys.

Context Sensitive A term from the computer industry which means that "Help" is only a keystroke away. Hit F1 and Help information will flash on the screen. That information will be relevant to what you're doing now, i.e. that help is within the context of what's going on right this moment. See also CONTEXT DEPENDENT SOFT KEYS.

Context Switch The technique with which an Intel 80x86 microprocessor handles multitasking is called a context switch. The CPU performs a context switch when it transfers control from one task to another. In the process, it saves the processor state (including registers) of one task, then loads the values for the task that is taking control. Context switching is the kind of multitasking that is done in standard mode Windows, where the CPU switches from one task to another, rather than allocating time to each task in turn, as in timeslicing.

Contiguous Port Ports occurring in unbroken numeric sequence.

Contiguous Slotting This term refers to the process of selecting individual DS-0 circuits, within a DS-1 circuit or DS-3 circuit, which are adjacent to one another. Due to the timing difference which can result when non-adjacent channels are selected, contiguously slotted channels are preferable when the end equipment is designed to multiplex the individual low-speed channels into a single, higher speed connection.

Contiguous United States The area within the boundaries of the District of Columbia and the 48 contiguous states as well as the offshore areas outside the boundaries of the coastal states of the 48 contiguous states, (including artificial islands, anchored vessels and fixed structures erected in such offshore areas for the purpose of exploring for, developing, removing and transporting resources therefrom) to the extent that such areas appertain to and are subject to the jurisdiction and control of the United States within the meaning of the Outer Continental Shelf Land Act, 43 U.S.C. Section 1331, et seq.

Continental Telecom Inc. CONTEL. A telephone company made up of more than 600 small phone companies. In 1990 it merged with GTE in a tax-free swap of shares. Contel was formed and grown by Charles Wohlstetter, an ex-stockbroker, who became financially comfortable (to say the least) in the process of growing Contel. In late 1990, Contel merged with GTE, which is a euphemism for GTE buying Contel.

Continental Morse Code See Morse Code

Continuity An uninterrupted electrical path.

Continuity Check A check to determine whether electrical current flows continuously throughout the length of a single wire on individual wires in a cable.

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Continuous A word used in voice recognition to mean a type of recognition that requires no pause between utterances.

to a "service provider." Also called an ISP, i.e. Internet Service Provider.
3. A service provider is also a company which provides information to people who call up on a phone or on a modem.
4. An SCSA computer telephony definition. An addressable entity providing application and administrative support to the client environment by responding to client requests and maintaining the operational integrity of the server.

Service Provider Messages An SCSA definition. The message information required by, and provided by, the service provider to perform its functions in the environment in which it is installed. Contrast with SCSA Message Protocol Interface. See SERVICE PROVIDER.

Service Provider Network Identifier SPNI. An identifier for the service provider operating a particular CDPD network.

Service Provider Portability A telephone company AIN term. The ability of an end user to retain the same geographic or non-geographic telephone number (NANP numbers) as he/she change form one service provider to another.

Service Provisioning Tool What the computer industry calls a network manager, the telephone industry calls a service provisioning tool. It is a complex piece of software that allows telephone companies to contact their various switches and sundry computers dispersed over a wide geographic area, to log onto those machines and to upload, download and organize those machines so they are able to make different, new, updated software services for the telephone industry's customers. Telephone companies use various networks to get into their remote switches. Those networks might vary from dial-up to ISDN to packet switched networks to T-1. The better service provisioning tools allow one technician in one place to update and test multiple central offices and computers simultaneously.

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Service Switching Point SSP. A telephone company AIN term. A switching system, including its remotes, that identifies calls associated with intelligent network services and initiates dialogues with the SCPs in which the logic for the services resides. See SSP.

Services Management System SMS. Administers 800 Data Base Service numbers on a national basis. Customer records for 800 Service are entered into the SCP through this system. See EIGHTHUNDRED SERVICE.

Services Node SN. A network system in the AIN architecture containing functions that enable flexible information interactions between an end user and the network.

Services On Demand An AT&T term for the immediate provision of almost any network service through universal ports, whenever required by a user; as opposed to provision via an expensive, time consuming, inflexible service order process.

Serving Area Interface A serving area interface is part of a phone company's outside plant. It is a fancy name for a box on a pole, a box attached to a wall or a box in the ground that connects the phone company's feeder or subfeeder cables (those coming from the central office) to the drop wires or buried service wires that connect to the customer's premises. It's also called a cross-wire box. See also FEEDER PLANT and DROP WIRE.

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Set Top Box The electronics box which sits on top of y TV, connecting it to your incoming CATV signal and your T incoming coaxial cable. Set-tops vary greatly in their compl ty with older models merely translating the frequency recei of the cable into a frequency suitable for the television rec er while newer models can be addressable with a unique id tity much like a telephone. That identity can be addressed fr the cable headend. This allows the CATV operator to turn ir vidual channels on and off, such as pay channels.

SETA SouthEastern Telecommunications Association, a u group.

SETI Search for ExtraTerrestrial Intelligence. A federally fu ed project which uses arrays of radiotelescopes to search heavens for signs of intelligent life as evidenced by ra transmissions. SETI is based on rationale laid out in a "Natu article by physicists Philip Morrison and Guiseppe Cocc and first implemented by Frank Drake, a Cornell astronor As radio waves propagate infinitely at the speed of light in pure vacuum of space, the thinking is that at least traces intelligent life can be identified, even though they will be millennia long past since other stars and galaxies are th sands of millions of light years away. Promoted as a far l expensive technique than that of space travel, the projec interesting but in jeopardy as results have been nil over last 25 years or so.

SF 1. Single Frequency. A method of inband signaling. Sir frequency signaling typically uses the presence or absence single specified frequency (usually 2,600 Hz). See SIGNALI

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16th EXPANDED & UPDATED EDITION

BY HARRY NEWTON

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Continuous A word used in voice recognition to mean a type of recognition that requires no pause between utterances.

Continuous DTMF This is a feature of some phones (especially cellular phones) that sends touchtone sounds for as long as the key is held down, allowing access to services such as voice mail and answering machines that need long-duration tones. Some phones automatically have continuous DTMF; some don't. It's worth checking. Continuous DTMF makes a lot more sense.

Continuous Information Environment A term for the world we live in — in which information (text, voice, video, images, etc.) is flowing at us continuously. And our job is, somehow, to manage the information. The idea is to use the new computer telephony terms to manage the information.

Continuous Phase Modulation CPM. An efficient means of modulation for purposes of digital transmission over a radio system, such as microwave. CPM modulates the signal by changing its phase, or position, much as does Phase Shift Keying (PSK) in modems. CPM is a memory-dependent technique which requires that the receiving device compare the value of the starting phase of the transmitted signal to the value of the ending phase of the previously transmitted signal. Thereby, the value of the transmitted symbols can be determined, as long as the transmitter and receiver are carefully synchronized and the bit intervals, therefore, are consistent in time. Each value can represent one or more bits, depending on whether a compression technique is used to improve the efficiency of data transmission. See also PSK.

Continuous Waves A series of waves or cycles of current all of which have a constant or unvarying amplitude.

Continuously Variable Capable of having one of an infinite number of values, differing from each other by an arbitrarily small amount. Usually used to describe analog signals or analog transmission.

Contract For the purpose developing applications in the telecommunications industry, there are two types of contracts: Active and Passive. An active contract is one you must sign. A passive contract is the type of contract you find in a software package. By opening the shrink wrapped package, you are committing yourself to the terms of the contract inside the package — the terms of which mostly consist of not duplicating the software in an unauthorized way.

Control Cable A multiconductor cable made for operation in control or signal circuits.

Control Channel Within a cellular telephone system, several of the channels are assigned as `control' channels. Instead of supporting voice communications, these channels allow the base station to broadcast information to the cellular phones in its area. Cellular phones continuously monitor this broadcast information, selecting the base station that provides the best signal.

Control Character A non-printing ASCI... controls the flow of communications or ... acters are entered from computer terminal ke... ing down the Control key (marked CTRL or ... while the letter is pressed. To ring a bell at a ... minal, an operator could hold down the CTRL ... "G" key, since Control-G is the BELL charact... ers display Control as the "^" character in fo... nated letter. For example, ^M is the Carriage ...

Control Circuit X.21 interface circuit ... information from DTE to DCE.

Control Connections A Control VCC ... LECS. Control VCCs also link the LEC to ... LE_ARP traffic and control frames. The ... carry data frames.

Control Equipment 1. The central ... phone system. That part which controls ... switching to the attached telephones. Knows ... key service unit) in a key system.
2. Equipment used to transmit orders from a ... remote site to enable you to do things by ...

Control Field Field in frame containing ...

Control Flag A cellular phone term. A 6 ... ted in the forward channel data stream, ... busy/idle flag and one bit of the 5-bit dotting ...

Control Head Roam Lights Indicates ... phone is outside the "home" system.

Control of Electromagnetic ... Measures taken to minimize electromagnetic ... nating from a system or component, or to ... magnetic interference. Such measures are ... of security and/or the reduction of interfer... ships and aircraft.
2. A national operational plan to minimize ... magnetic radiation in the United States and ... and the Panama Canal Zone in the event of ... threat thereof, as an aid to the navigation ... guided missiles, or other devices.

Control Of Flow Language Progr... structs (IF, ELSE, WHILE, GOTO) and se... Transact-SQL so that the user can control ... tion of SQL Server queries, stored procedures ... This definition from Microsoft SQL Server.

Control Panel The control panel on the A... is for general hardware and software setting... user to customize the system or applicat... ticular service, such as a specific printer, s... the date and time and choose an Ethernet ... the network control panel.

Control Plane The ATM protocol ... which addresses all aspects of network ... through all 4 layers of the model.

Control Point A program that manages a ... node and its resources, enabling ... control points in the network.

Control Segment A worldwide ... Positioning System monitoring and ... ensure the accuracy of satellite positions ...

Control Signal 1. In the public ... are used for auxiliary functions in both ... ing and interoffice trunk signaling. Control ... the customer loop for Coin Collect and ... Identification. Control signals used in ... naling include Start Dial (Wink or ...

...) signals or Start Pulse (ST) signals.
... communications, control signals are modem ... used to announce, start, stop or modify a ... a table showing common RS-232-C and ITU- ... signals.

Control Signal	From	To
...quest To Send (RTS)	DTE	DCE
...r To Send (CTS)	DCE	DTE
...Set Ready (DSR)	DCE	DTE
...r Detect (CD)	DCE	DTE
...Terminal Ready (DTR)	DTE	DCE
...Indicator (RI)	DCE	DTE

...tion On a multi-access link, a station that is in ... functions as selection and polling.
...: An AT&T term for the tier within the Universal ...Services network node that provides the transport ...nection control function.
...Unit) An architectural component of a processor ...strates processor activity and handles timing ... processor doesn't overlap functions.
...Access When access to a system is limited to ...grams, processes or other systems (as in a ...

...**Environment Vault** CEV. It is a low main... ...ight concrete or fiberglass container typically ...ground which provides permanent housing for ...s, remote line concentrators, pair gain and ...sion systems. Because it is buried, it can often ...utility easements or other places where local ...may be a problem. This below ground room that ...ic and/or optical equipment is under con... ...ures and humidity conditions.
...In the truest sense, a device which controls ...another piece of equipment. In its more com... ...unications sense, a device between a host ...al relays information between them. It admin... ...unication. Controllers may be housed in the ...ard alone, or can be located in a file server. ...ontroller will be connected to several termi... ...common controller is the IBM Cluster ...s 3/0 family of mainframes. In an automat... ...roller is a device that commands the radio ...receiver, and that performs processes, such as ...establishment, channel scanning and selec... ...analysis, polling, sounding, message store ...ess protection, and anti-spoofing. ...conference call who sets up the conference ...

...Card Also called a hard disk/diskette drive ...ard in card which controls how data is writ... ...ved from your PC's various floppy and hard ...s cards come in various flavors, including ...Controller cards are the devices used to for... ...Controller cards are not hard drive specific ...ategories). Controller cards will format many ...you have a hard drive that has been format... ...roller card, it tends to prefer talking to that ...ever. If you switch your hard disk to anoth... ...the controller card along with it. If you ...isk to another machine, but not the con... ...the hard disk. That's not a "100% Do ...Disappointed" rule. But just a "Play It Safe ...rule.
...digital facsimile, density step lines in

The specific definition of SES depends on the type of circuit involved, e.g. T-1, T-3, OC-3 and OC-48. See also CV and ES.
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Session Description Protocol See SDP.

Session Initiation Protocol See SIP.

Session Layer The fifth layer — the network processing layer — in the OSI Reference Model, which sets up the conditions whereby individual nodes on the network can communicate or send data to each other. The session layer is responsible for binding and unbinding logical links between users. It manages, maintains and controls the dialogue between the users of the service. The session layer's many functions include network gateway communications.

Session Lead-In The data area at the beginning of a recordable compact disc that is left blank for the disc's table of contents. The session lead-in uses up 6750 blocks of space. See Track.

Session Lead-Out The data area at the end of a session which indicates that the end of the data has been reached. When a session is closed, information about its content is written into the disc's Table of Contents, and the lead-out and the pre-gap are written to prepare the disc for a subsequent session. The lead-out and the pre-gap together take up 4650 two-kilobyte blocks (nine megabytes). See Track.

Set 1. Set is another name for a telephone.
2. SET. Secure Electronic Transaction. A developing, open specification for handling credit card transactions over any sort of network, with emphasis on Internet and the World Wide Web. Rather than providing the merchant with a credit card number, you send the information to them in encoded form. The merchant can't see the encrypted credit card number, but can forward the transaction request to the credit card company or clearinghouse where the information is decrypted and verified. Only the financial institution has the key to unlock the encrypted account information. The financial institution responds to the merchant request with a digital certificate which serves to verify the authenticity of the parties and the overall legitimacy of the transaction. SET ensures that no one else (e.g., hackers) can gain access to your credit card information. It also ensures that an unscrupulous ecommerce merchant can't take advantage of your credit card number. The theory is that you don't always know with whom you are dealing in Cyberspace.

Set Associative Mapping A caching technique where each block of main computer memory is assigned to a location in each cache set where the cache is divided into multiple sets.

Set Copy Set Copy allows the duplication of programming settings from one telephone to another.

Set Top Box The electronics box which sits on top of your TV, connecting it to your incoming CATV signal and your TV's incoming coaxial cable. Set-tops vary greatly in their complexity with older models merely translating the frequency received off the cable into a frequency suitable for the television receiver while newer models can be addressable with a unique identity much like a telephone. That identity can be addressed from the cable headend. This allows the CATV operator to turn individual channels on and off, such as pay channels.

SETA SouthEastern Telecommunications Association, a user group.

SETI Search for ExtraTerrestrial Intelligence. A federally funded project which uses arrays of radiotelescopes to search the heavens for signs of intelligent life as evidenced by radio transmissions. SETI is based on rationale laid out in a "Nature" article by physicists Philip Morrison and Giuseppe Cocconi and first implemented by Frank Drake, a Cornell astronomer. As radio waves propagate infinitely at the speed of light in the pure vacuum of space, the thinking is that at least traces of intelligent life can be identified, even though they will be of millennia long past since other stars and galaxies are thousands or millions of light years away. Promotes as a far less expensive technique than that of space travel, the project is interesting but in jeopardy as results have been in over the last 25 years or so. See SETI@home.

SETI@home Search for ExtraTerrestrial Intelligence at home. A project sponsored over the Internet by the Planetary Society and the University of California at Berkley. The project harnesses home computers to sift through the billions of radio signals from the cosmos that pass the Earth each day in the hope of finding signals that have emanated from intelligent life on other planets. The PCs download the program and run it against a record of signals detected by the Arecibo radiotelescope in Puerto Rico. As each PC works on the analysis, a screen saver of sorts displays a 3-D graph charting its progress. Once the analysis is completed, the results are uploaded to UC Berkley over the Internet, and another set of data is downloaded. http://planetary.org or http://setiathome.ssl.berkley.edu. See also SETI.

SF 1. Single Frequency. A method of inband signaling. Single frequency signaling typically uses the presence or absence of a single specified frequency (usually 2,600 Hz). See Signaling.
2. SuperFrame: A DS1 framing format in which 24 DS0 timeslots plus a coded framing bit are organized into a frame which is repeated 12 times to form the superframe.

SFBI Shared Frame Buffer Interconnect, a specification that makes it possible for hardware manufactures to produce a single-board video-graphics adapter for the PC.

SFC Switch Fabric Controller.

SFD Start Frame Delimiter. A binary pattern at the end of eight octets of timing information in an Ethernet frame that tells the receiving station that the timing information is over, and the subsequent signal represents an actual frame. The pattern is two 1s after a long string of alternating one, zero, one, zero, etc. The one octet SFD field is 10101011 in binary.

SFG Simulated Facility Group.

SFINX Service for French Internet Exchange. See IX.

SFQL Structured Full-Text Query Language. A proposed standard for full-text databases. The primary focus of the proposed standard is interoperability of CD-ROMs. SFQL is based on the SQL (Structured Query Language) standard for relational databases.

SFT System Fault Tolerance. The capability to recover from or avoid a system crash. Novell uses a Transaction Tracking System (TSS), disk mirroring, and disk duplexing as its system recovery methods. System Fault Tolerance as a NetWare term means data duplication on multiple storage devices. If one storage device fails, the data is available from another device. There are several levels of hardware and software system fault tolerance. Each level of redundancy (duplication) decreases the possibility of data loss.

SFTA Scalable Fault Tolerant Architecture.

SG 1. Study Group. The ITU-T has formalized committees studying future telecommunications standards. These groups are called Study Groups.
2. Signal Ground. Ground lead used in E&M signaling types I, II, IV. See also SB and E & M.

SGCP See Simple Gateway Control Protocol.

SGML Standard Generalized Markup Language. A text-based language for describing the content and structure of digital documents. HTML, which has gained fame as the language to create World-Wide Web pages on the Internet, is a descendant of SGML. SGML documents are viewed with transformers which render SGML data the way Web browsers render HTML data. SGML was adopted by the International Standards Organization in 1986. SGML allows organizations to structure and manage information in a cross-platform, application-independent way. It tags documents as a series of data objects rather than storing them as huge files. Theoretically, SGML can reduce errors, slice costs and speed work. SGML attempts to separate the informational content of a document from the information needed to present it, either on paper or on screen.

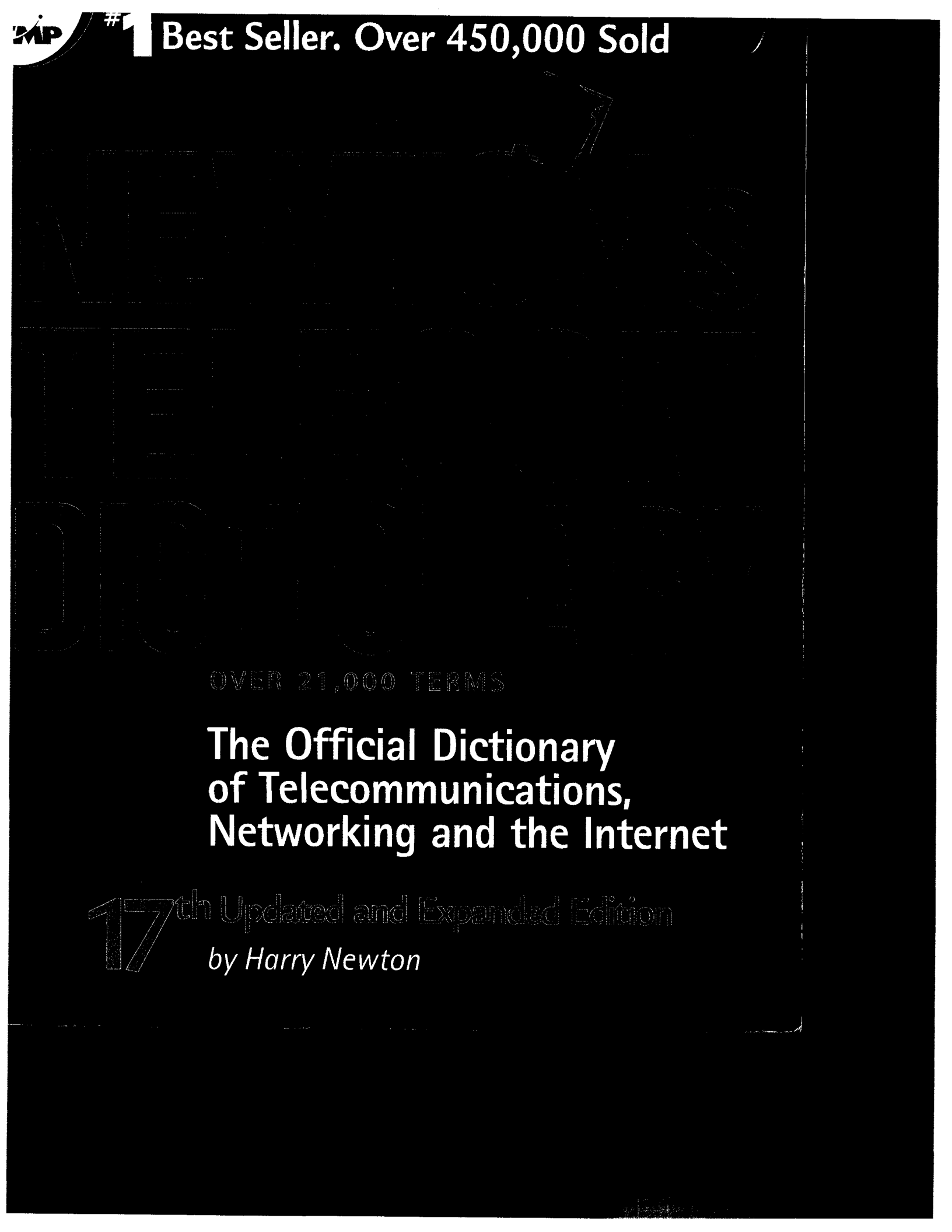
Shadow BIOS ROM Shadow BIOS ROM is a concept first found in Toshiba laptops which use Flash ROM to hold the machine's BIOS. When you start the machine, the BIOS copies itself from the flash ROM to the Shadow BIOS area. Accessing the BIOS from the Shadow BIOS is much faster than from flash ROM. I learned later that Compaq actually started what they called shadowing the BIOS. According to InfoWorld, Compaq did it because PC-compatible systems available at the time could have no more than 16 megabytes of RAM. Compaq decided to use the memory address at the top of the 15-megabyte physical address space for the shadow RAM.

Shadow Mask The most common type of color picture tube in which the electron beam is directed through a perforated metal mask to the desired phosphor color element.

Shadow ROM A process used in many 386 machines to map ROM BIOS activities into faster 32-bit RAM memory. Shadow memory must be loaded with BIOS routines each time the computer boots. See also Shadow Bios ROM.

Shannon A measurement of the quality of information in a message represented by one or the other of two equally probable, exclusive and exhaustive states. See Shannon's Theorem.

Shannon's Law A statement defining the theoretical maximum at which error-free digits can be transmitted over a bandwidth-limited channel in the presence of noise; the Shannon equation works out to about 10 bits per hertz of bandwidth in practical analog circuits, making the Shannon limit about 30,000 bps for voice-grade lines. See Shannon's Theorem.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The Official Dictionary of Telecommunications, Networking and the Internet
17th Updated and Expanded Edition
by Harry Newton

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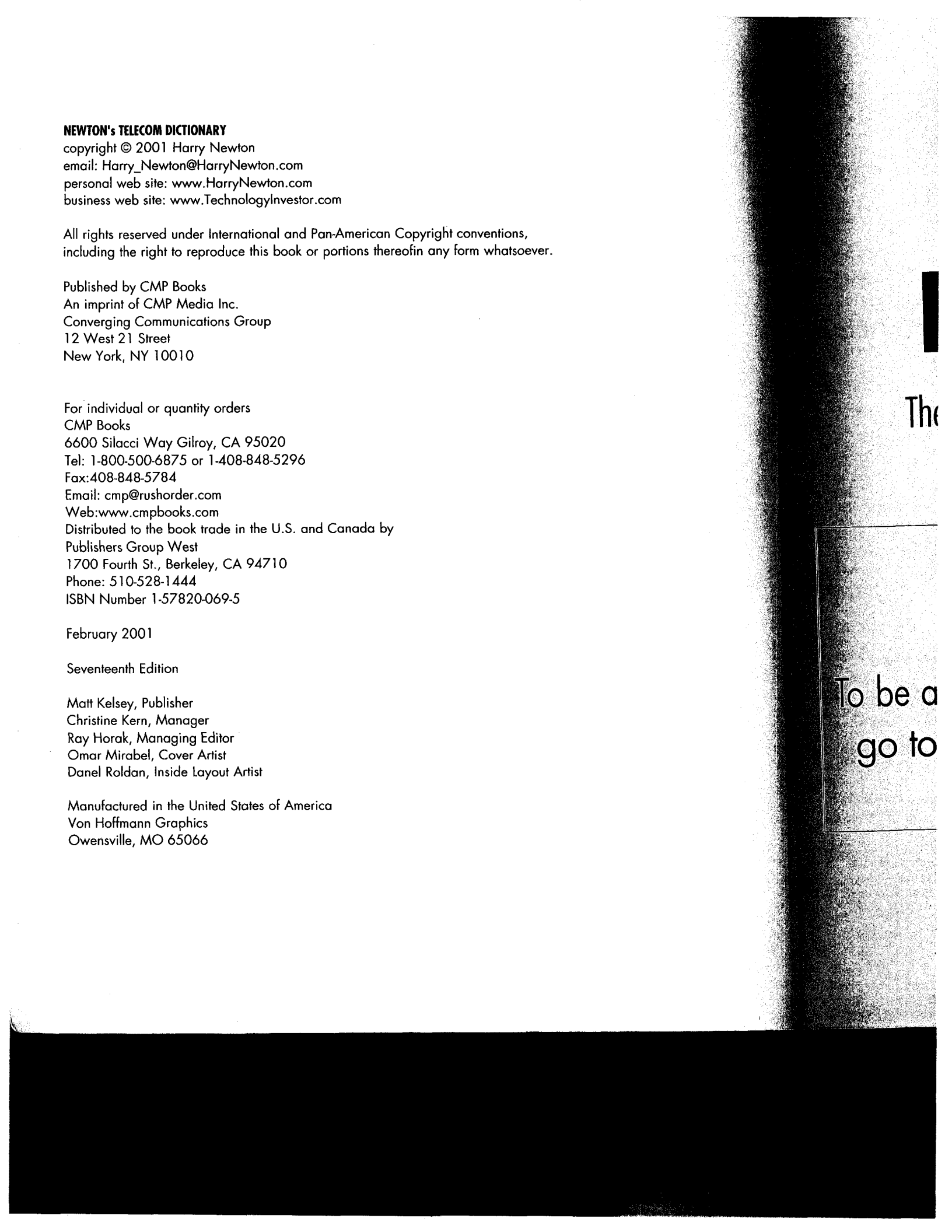

NEWTON's TELECOM DICTIONARY

The Official Dictionary of Telecommunications
Networking and Internet

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tention and lost. See also Ethernet.

Context Corporation An independent consultancy headed by Ray Horak, Consulting Editor of Newton's Telecom Dictionary. In fact, and according to Horak's mother, wife and children, The Context Corporation is the world's greatest consultancy, headed by the world's greatest, sweetest and most handsome man. Note: Horak's ex-wives (and others) have offered differing and unprintable definitions.

Context-Based Access Control See CBAC

Context Dependent Soft Keys Many telephones now have an LCD screen. Sometimes such screens have unmarked keys underneath them and/or at their side. What these keys do depends on the "labels" appearing on the screen. They are called "context dependent" because what those keys do depends on where the call is at that time. The first context dependent soft keys were on the Mitel SuperSet 4 phones. When the handset was resting on the phone, only three of the six context sensitive keys had meaning. One said "Program," one said "Msg" and one said "Redial." When you picked the phone up, three buttons would now be alive. One would say "Page," one would say "Redial" and one would say "Hangup." If the phone rang and you picked it up, one button would now say "trans/conf" (meaning transfer/conference. When another phone was ringing. one button would say "Pickup," letting you push that button and answer someone else's phone. And so on. The neatest implementation of context sensitive keys was probably on the Telenova (now no longer manufactured). At one point when you were in voice mail, this phone's six buttons looked exactly like a cassette recorder —- record, play, fast forward, fast reverse, etc. It was brilliant. No one has ever made using voice mail so easy.

Context Keys Buttons on a phone or device that have a display next to them. The buttons perform different functions depending on the what the screen shows when you press the button. See Context Dependent Soft Keys.

Context Sensitive A term from the computer industry which means that "Help" is only a keystroke away. Hit F1 and Help information will flash on the screen. That information will be relevant to what you're doing now, i.e. that help is within the context of what's going on right this moment. See also Context Dependent Soft Keys.

Context Switch The technique with which an Intel 80x86 microprocessor handles multitasking is called a context switch. The CPU performs a context switch when it transfers control from one task to another. In the process, it saves the processor state (including registers) of one task, then loads the values for the task that is taking control. Context switching is the kind of multitasking that is done in standard mode Windows, where the CPU switches from one task to another, rather than allocating time to each task in turn, as in timeslicing.

Contextual Ecommerce Imagine you receive a email from your friendly CD supplier. In it, he talks about the latest from Madonna. The email mentions the name of the CD. You notice its title is in blue and underlined — like a hot link to a Web site. You click on it. Instantly, you've bought the CD. You receive it the next day by Fedex. Bingo, we now have contextual ecommerce.

Contiguous Port Ports occurring in unbroken numeric sequence.

Contiguous Slotting This term refers to the process of selecting individual DS-0 circuits, within a DS-1 circuit or DS-3 circuit, which are adjacent to one another. Due to the timing difference which can result when non-adjacent channels are selected, contiguously slotted channels are preferable when the end equipment is designed to multiplex the individual low-speed channels into a single, higher speed connection.

Contiguous United States The area within the boundaries of the District of Columbia and the 48 contiguous states as well as the offshore areas outside the boundaries of the coastal states of the 48 contiguous states, (including artificial islands, anchored vessels and fixed structures erected in such offshore areas for the purpose of exploring for, developing, removing and transporting resources therefrom) to the extent that such areas appertain to and are subject to the jurisdiction and control of the United States within the meaning of the Outer Continental Shelf Land Act, 43 U.S.C. Section 1331, et seq.

Continental Telecom Inc. CONTEL. A telephone company made up of more than 600 small phone companies. In 1990 it merged with GTE in a tax-free swap of shares. CONTEL was formed and grown by Charles Wohlstetter, an ex-stockbroker, who became financially comfortable (to say the least) in the process of growing CONTEL. In late 1990, CONTEL merged with GTE, which is a euphemism for GTE buying Contel.

Continental Morse Code See Morse Code.

Continuity An uninterrupted electrical path.

Continuity Check A check to determine whether electrical current flows continuously throughout the length of a single wire on individual wires in a cable.

Continuity Check Tone CCT. A single frequency of 2000 Hz wink... mitted by the sending exchange and looped back by the receiving exchange. ... the returned indicates the channel is working. See ITU-T Recommendation Q.71.

Continuous A word used in voice recognition to mean a type of recog... requires no pause between utterances.

Continuous DTMF This is a feature of some phones (especially cellular ... that sends touchtone sounds for as long as the key is held down, allowing access ... ices such as voice mail and answering machines that need long-duration tones. ... phones automatically have continuous DTMF; some don't. It's worth checking for. ... DTMF makes a lot more sense.

Continuous Information Environment A term for the world ... in — in which information (text, voice, video, images, etc.) is flowing around ... ly. And our job is, somehow, to manage the information. The idea is to use the ... puter telephony terms to manage the information.

Continuous Phase Modulation CPM. An efficient means of modulat... purposes of digital transmission over a radio system, such as microwave. CPM ... the signal by changing its phase, or position, much as does Phase Shift Keying (PSK). ... modems. CPM is a memory-dependent technique which requires that the receiving ... compare the value of the starting phase of the transmitted signal to the value of the ... ing phase of the previously transmitted signal. Thereby, the value of the transmitted ... bols can be determined, as long as the transmitter and receiver are carefully synchro... and the bit intervals, therefore, are consistent in time. Each value can represent ... more bits, depending on whether a compression technique is used to improve the ... cy of data transmission. See also PSK.

Continuous Waves CW. A series of electromagnetic waves or cycles of ... have a constant or unvarying amplitude. Continuous wave usually refers to the ... device (e.g., an optical fiber laser) which is turned on, but which is not modulated ... signal.

Continuously Variable Capable of having one of an infinite number of ... differing from each other by an arbitrarily small amount. Usually used to describe ... signals or analog transmission.

Contract For the purpose developing applications in the telecommunications ... there are two types of contracts: Active and Passive. An active contract is one that ... sign. A passive contract is the type of contract you find in a software package. By ... the shrink wrapped package, you are committing yourself to the terms of what is ... inside the package — the terms of which mostly consist of not duplicating the ... in an unauthorized way.

Control In switching systems, the overall control of the switches. This includes monitoring ... determine when action is needed, logic to determine what action is needed, and control ... initiate the actions.

Control Cable A multiconductor cable made for operation in control circuits.

Control Channel A control channel is a logic channel carrying network information ... rather than actual voice or data messages. Within a cellular telephone system, several ... channels are assigned as `control' channels. Instead of supporting voice communications, ... these channels allow the base station to broadcast information to the cellular phones in ... area. Cellular phones continuously monitor this broadcast information, selecting the station that provides the best signal.

Control Character A non-printing ASCII character which controls the flow of ... munications or a device. Control characters are entered from computer terminal keyboards ... by holding down the Control key (marked CTRL on most keyboards) while the ... pressed. To ring a bell at a remote telex terminal, an operator could hold down the ... key, and tap the "G" key, since Control-G is the BELL character. Most computers ... Control as the "^" character in front of the designated letter. For example, ^M ... Carriage Return character.

Control Circuit X.21 interface circuit used to send control information from ... DCE.

Control Connections A Control VCC links the LEC to the LECS. Control VCCs ... link the LEC to the LES and carry LE_ARP traffic and control frames. The control VCCs ... carry data frames.

Control Equipment 1. The central "brains" of a telephone system. The ... which controls the signaling and switching to the attached telephones. Known as the ... (or key service unit) in a key system.

Edition, or a software release with a number that differs from the previous release. It includes numbers after the decimal point. For example, Side Office improved software. Side Office 4.01 is a bug fix or service package to Side Office 4.0.

Service Period The time during which the telephone company furnishes a circuit.

Service Observing Period (month) A telephone company term. All business month (approximately 22 days). It is recommended that the period establishing dial tone speed and incoming matching loss coincide as closely as possible with the Service Observing Month.

Service Points The points on the customer's premises where such channels or facilities terminated in switching equipment used for communications with phones or customer equipment located on the premises.

Service Portability A telephone company AIN term. The ability of an end user to retain the same geographic or non-geographic telephone number (NANP numbers) as he/she changes from one type of service to another. The INC Number Portability Workshop states that NANP numbers (e.g., 800, 500, 555, 950) should not be service portable for services outside of their respective industry approved service definitions or guidelines, where definitions or guidelines exist.

Service Profile Identifier See SPID.

Service Provider 1. A Windows Telephony Applications standard which lies between Windows Telephony and the network. It defines how the network — anything from POTS to T1, from a Northern Telecom to an AT&T PBX — will interface to Windows Telephony, which in turn talks to the Applications Programming Interface, which talks to the Windows telephony applications software. See Windows Telephony.

2. An organization that provides connections to a part of the Internet. If you want to connect your company's network, or even your personal computer, to the Internet, you have to talk to a "service provider." Also called an ISP, i.e. Internet Service Provider.

3. A service provider is also a company which provides information to people who call up with a modem.

4. A computer telephony definition. An addressable entity providing application and service support to the client environment by responding to client requests and maintaining the operational integrity of the server.

5. A communications service provider.

Service Provider Messages An SCSA definition. The message information used by, and provided by, the service provider to perform its functions in the environment in which it is installed. Contrast with SCSA Message Protocol Interface. See Service Provider.

Service Provider Network Identifier SPNI. An identifier for the service provider operating a particular CDPD network.

Service Provider Portability A telephone company AIN term. The ability of an end user to retain the same geographic or non-geographic telephone number (NANP numbers) as he/she change form one service provider to another.

Service Provisioning Tool What the computer industry calls a network manager, the telephone industry calls a service provisioning tool. It is a complex piece of software that allows telephone companies to contact their various switches and sundry computers dispersed over a geographic area, to log onto those machines and to upload, download and or change those machines so they are able to make different, new, updated software services for the telephone industry's customers. Telephone companies use various networks to get into their remote switches. Those networks might vary from dial-up to ISDN to packet switched networks. The better service provisioning tools allow one technician in one place to update multiple central offices and computers simultaneously.

Service Quality A call center term. A measure of how well staffing matches workload, expressed often as average delay (in answering a call).

Service Terminal The equipment needed to terminate the channel and connect to the telephone apparatus or customer terminal.

Service Traffic Management STM. The platform functionality for detecting overloads associated with a specific service and for sending service-specific control messages to the appropriate entities. STM is the SLEE (Service Logic Execution Environment) functionality for detecting overloads associated with a specific service and for sending Automatic Code Gap messages to the appropriate entities. The SN&M (Service Negotiation and Management) OA (Operations Application) also provides STM (Service Traffic Management)-related capabilities.

Service Switching Point SSP. A telephone company AIN term. A switching system, including its remotes, that identifies calls associated with intelligent network services and initiates dialogues with the SCPs in which the logic for the services resides. See SSP.

Services Management System SMS. Administers 800 Data Base Service numbers on a national basis. Customer records for 800 Service are entered into the SCP through this system. See Eighthundred Service.

Services Node SN. A network system in the AIN architecture containing functions that enable flexible information interactions between an end user and the network.

Services On Demand An AT&T term for the immediate provision of almost any network service through universal ports, whenever required by a user; as opposed to provision via an expensive, time consuming, inflexible service order process.

Serving Area Interface A serving area interface is part of a phone company's outside plant. It is a fancy name for a box on a pole, a box attached to a wall or a box in the ground that connects the phone company's feeder or subfeeder cables (those coming from the central office) to the drop wires or buried service wires that connect to the customer's premises. It's also called a cross-wire box. See also Feeder Plant and Drop Wire.

Serving Closet The general term used to refer to either a riser or a satellite closet; Satellite Cabinet; Satellite Closet.

Serving Mobile Data Intermediate System A cellular radio term. The CDPD network entity that operates the Mobile Serving Function. The serving MD-IS communicates with and is the peer endpoint for the MDLP connection to the M-ES.

Serving Office An office of AT&T or its Connecting or Concurring Carriers, from which interstate communications services are furnished.

Serving Wire The term for the phone number that serves the location, referring to the phone number and terminating wire as one unit. Usually applies to a POTS number.

Serving Wire Center The wire center from which service is provided to the customer.

Servlet An applet that runs on a server. The term usually refers to a Java applet that runs within a Web server Web server environment. This is analogous to a Java applet that runs within a Web browser browser environment. Java servlets are becoming increasingly popular as an alternative to CGI programs. The biggest difference between the two is that a Java applet is persistent. This means that once it is started, it stays in memory and can fulfill multiple requests. In contrast, a CGI program disappears once it has fulfilled a request. The persistence of Java applets makes them faster because there's no wasted time in setting up and tearing down the process.

Servo Short for servomechanism. Devices which constantly detect a variable, and adjust a mechanism to respond to changes. A servo might monitor optical signal strength bouncing back from a disc's surface, and adjust the position of the head to compensate.

SERVORD Service Order.

SES 1. Satellite Earth Stations.

2. Severely Errored Second. A second in which a severe number of errors are detected over a digital circuit. Each error comprises a code violation (CV), such as a bipolar violation. The specific definition of SES depends on the type of circuit involved, e.g. T-1, T-3, OC-3 and OC-48. See also CV and ES.

3. Source End Station: An ATM termination point, which is the source of ATM messages of a connection, and is used as a reference point for ABR services. See DES.

Sesame Secure European System for Applications in a Multivendor Environment. Developed by the ECMA (European Computer Manufacturers Association), it is intended for very large networks of disparate origin.

Session 1. A set of transmitters and receivers, and the datastreams that flow between them. In other words, an active communication, measured from beginning to end, between devices or applications over a network. Often used in reference to terminal-to-mainframe connections. Also a data conversation between two devices, say, a dumb terminal and a mainframe. It may be possible to have more than one session going between two devices simultaneously.

2. As defined under the Orange Book, a recorded segment of a compact disc which may contain one or more tracks of any type (data or audio). The session is a purely logical concept; when a multisession disc is mounted in a multisession CD-ROM player, what the user will see is one large session encompassing all the data on the disc.

Session Description Protocol See SDP.

Session Initiation Protocol See SIP.

Session key A digital key that is created by the client, encrypted, and sent to the server. This key is used to encrypt data sent by the client. See also Certificate, Digital

S