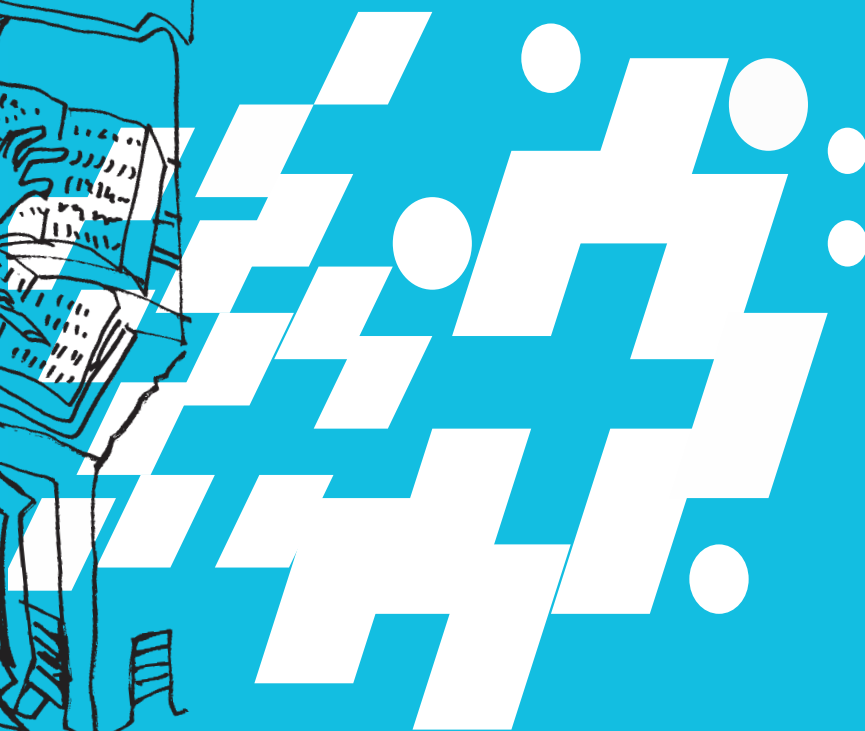


# A Glossary of Telecommunications Terms

Federal Communications Commission



Prepared by the  
Public Service Division • Office of Public Affairs

1998

# Preface



This 1998 edition of the glossary of telecommunications terms was prepared by the Public Service Division of the Office of Public Affairs of the Federal Communications Commission. This glossary contains many words and phrases used to describe telecommunications terms which commonly appear in Commission documents and other publications or articles on telecommunication technology. If you need further information please contact the Public Service Division at (202) 418-0200 or by writing to: Federal Communications Commission, Public Service Division, Stop Code 1160A1, 1919M Street NW, Washington, D.C.

This publication can also be found on the FCC World Wide Web at <http://www.fcc.gov/Consumers/glossary.html>



**Access Charge**

A fee charged subscribers or other telephone companies by a local exchange carrier -- for the use of its local exchange network facilities.

**Active Satellite**

A functioning satellite that receives and transmits or retransmits radio-communication signals to or from a base station.

**Advanced Television (ATV)**

New television technology that provides better audio and video quality than the current standard television broadcast system. High Definition TV (HDTV) is a form of ATV.

**Affiliate**

A broadcast station that airs a network's programs and commercials, but is not owned by that network.

**Agenda Item**

At the FCC, a term that refers to the document which is to be voted on by the Commission at an agenda meeting. The final document is released to the public the same day or as soon as possible.

**Aggregator**

Any person or business who, in the normal course of business, provides a public telephone for the use of patrons through an Operator Service Provider(OSP).

**Analog**

Analog is "shorthand" for the word analogous, which means similar to. The signal being sent — voice or video — is sent as a stream of changing radio waves and is similar to what is received. This produces a nearly square video picture with generally a 480 line resolution picture.

**Amateur Radio Operator ("HAM")**

A noncommercial, private radio operator. There are six classes of amateur radio licenses that can be earned after passing FCC-administered examinations.

**American Standard Code for Information Interexchange (ASCII)**

ASCII is a uniform code used in computer and data communications systems. ASCII code letters, numbers, punctuation and actual control systems in digital codes of "0s" and "1s." For example, the capital "C" is 100011 and a "3" is 0110011.

## 4 A Glossary of Telecommunications Terms

A-C

### **Amplitude Modulation (AM)**

A type of transmission used in either the standard radio broadcast band at 535-1705 kilohertz, shortwave broadcasting, and in some private radio services such as citizens band (CB) and aviation.

### **Auxiliary Service Station**

A type of station used by television and radio stations to facilitate the broadcast of programming to the general public.

### **Audio Text**

The term used to describe a system that provides automated interactive telephone information, such as stock prices, sports scores and personals

### **Bandwidth**

A range of frequencies in the broadcast spectrum that is occupied by a signal. (For example, a television channel may have a bandwidth of 6 MHz.) The “necessary bandwidth” is the amount of spectrum required to transmit the signal without distortion or loss of information. Commission rules require suppression of the signal outside the band to prevent interference.

### **Base Station**

A land station in the land mobile service. For example, in cellular and personal com-

munications uses, each cell has its own base station; each base station is interconnected with other base stations and with the public switched network.

### **Basic Trading Area (BTA)**

Geographic boundaries that segment the country for licensing purposes. BTAs are based on Rand McNally’s Commercial Atlas & Marketing Guide. BTA boundaries follow county lines and include the county or counties whose residents make the bulk of their shopping goods purchases in the area. The FCC has used BTAs to license a number of services including broadband and narrowband Personal Communication Services.

### **Baud**

A measure of the speed at which data is transmitted, computed in number of elements changed per second. The “Baud Rate” is the speed in which a computers can transfer data through a modem using communications software.

### **Baudot**

A seven bit code, only five of which are information bits. Baudot is used by some text telephones to communicate with each other.

**Bidding Credit**

A spectrum auction term. It is a credit given to eligible FCC auction applicants which allows them to receive a discount on their winning bids in an auction.

**Bird**

A colloquial expression used to refer to a communications satellite.

**Binary Information Unit or Binary Digit (BIT)**

The smallest unit of digital information. A single digit number in “base-2”, either a 0 or a 10. Bandwidth is usually measured in bits-per-second (bps).

**Blackout**

A term used to describe the non-broadcast of a live event (i.e. sports, cultural) usually imposed by the sponsor(s) of the event.

**Booster**

A television or FM broadcast station, operating at relatively low power that receives a distant input signal, amplifies it, and re-transmits it on the same channel.

**Broadband**

Broadband is a descriptive term for evolving digital technologies offering consum-

ers a single switched facility offering integrated access to voice, high-speed data services, video-demand services, and interactive information delivery services. Broadband also is used to define an analog transmission technique for data or video that provides multiple channels. A cable TV system, for example, employs analog broadband transmission. (See Bandwidth)

**Broadcast**

To transmit a signal over the spectrum to be received by two or more receiving devices.

**Browser**

A software program used to query, search and view information on computer sites connected to the Internet.

**Byte**

A set of “bits” that represent a single character. Usually there are eight bits in a Byte.

**Cable Converter Box**

Equipment often provided by a cable company in a subscriber’s home that allows access or controls interference to cable services.

A-C

**Cable Signal Leakage**

Excessive levels of radio frequency (RF) energy that leak from cable television systems. Leak can cause interference to communications users, including safety service users such as aviation, police and fire departments. FCC rules specify the maximum RF leakage, and require that cable television systems be operated within certain guidelines.

**Cable Television Transmission**

The transmission, usually for a fee, of television signals, including signals that originate at over-the-air television stations, to consumers on a wired network.

**Cable Television Relay Service (CARS)**

The relaying of television, FM radio, cablecasting and other signals on a microwave frequency band to a terminal for distribution over CATV or over cable line.

**Cellular Mobile Radio Telephone System**

Also called “Cellular.” A high capacity land mobile telephone system wherein channels assigned to the system are divided among several geographical “cells” covering a defined service area. A cellular system is capable of re-using the same channels in different cells within the service

area. The use of many small cells in an area, with low transmitter powers, permits the intensive re-use of channels, thereby increasing system capacity.

**Churn**

The term used to describe turnover rate of subscribers to a service or product.

**Circuit**

A two-way communications path.

**Circulation (FCC term)**

An FCC term, circulation is the procedure whereby items are routed to Commissioners for notation voting without a need for discussion at an open or closed agenda meeting. Voting is done electronically from each Commissioner’s office.

**Clear Channel**

A clear channel protects stations designated as Class A stations from objectionable interference within their primary and secondary service areas. The secondary service areas of the stations may extend outward for a distance of up to 750 miles at night. To provide this wide area service, Class A stations operate within a power range of 10 to 50 kilowatts.

**Closed Captioning**

A service for persons with hearing disabilities that translates television program dialog into written words on the television screen. Closed captioning is not visible without the use of a specially installed decoder.

**Closed-circuit Television (CCTV)**

A system in which a signal is transmitted from a point of origin to only those receivers who have previously arranged access to it. Examples of its use are: lectures by professors in educational institutions, theater television, sports, and video conferencing.

**Coaxial Cable (COAX)**

A type of cable commonly used in cable television systems which is composed of two concentric conductors: an inner wire, and an outer braided sleeve.

**Common Carrier**

The term used to describe a telephone company. It is a telecommunications company that is available for hire on a non-discriminatory basis to provide communication transmission services, such as telephone and telegraph, to the public.

**Communications Assistant (CA)**

A person who translates conversation from text to voice and from voice to text between two end users of Telecommunications Relay Service (TRS). This service allows a person with hearing or speech disabilities to communicate with anyone else via telephone at no additional costs. CA supersedes the term “TDD operator.”

**Communications Satellite**

A satellite that is used to relay telecommunications information.

**Communications Satellite Corporation (COMSAT)**

A corporation, chartered by Congress, as an exclusive provider of international telecommunications satellite channels to the United States. COMSAT also represents the United States in INTELSAT. (See INTELSAT)

**Community Antenna Television (CATV)**

A service through which subscribers pay to have local television stations and additional programs brought into their homes from the antenna via a coaxial cable.

**Compact Disc (CD)**

A five-inch disc on which a digital audio signal is inscribed so that it can be read



## 8 A Glossary of Telecommunications Terms

A-C

optically by a laser beam device in a computer or CD player.

### **Competitive Access Providers**

Common carriers who provide local service and compete against local telephone companies' access services that connect customers to long distance companies. These carriers often use fiber optic networks.

### **Competitive Bidding**

Another term for an auction.  
(See Spectrum Auction)

### **Convergence**

In this context, convergence means that providers of communication systems can deliver products and services that compete with the products and services now delivered by other networks. One example would be a cable company providing local phone service or a local phone company providing video services.

### **Crosstalk**

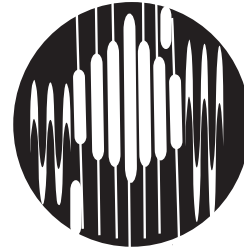
Occurs when a receiver on one communications channel inadvertently receives information being sent by a neighboring communications channel, either radio or wireline.

### **Customer Premises Equipment (CPE)**

Telephone terminal devices, such as handsets and private branch exchanges (PBXs), located on the customer's premises.

### **Cyberspace**

A term introduced by science fiction author William Gibson in 1984. "Cyberspace" is where human interaction occurs over computer networks, through E-mail, games or simulations.



# D F



**Dedicated Line**

A communications circuit or channel provided for the exclusive use of a particular subscriber. Dedicated lines are used for computers when large amounts of data need to be moved between points.

**Descrambler**

An electronic circuit that restores an intentionally scrambled video signal to its original standard form.

**Dial-It Service**

A telecommunications service that permits simultaneous calling by a large number of callers to a single telephone number. There is usually a fee for calls to 900 numbers or 976 numbers .

**Digital/Digitized**

Any type of information that can be output, transmitted and interpreted as individual bits of binary information (the use of the numbers 0 and 1), using electrical or electromagnetic signals that can be modulated to convey their specific content. A TV picture will be more like a rectangle and have up to 1,080 lines of resolution, producing a crisper picture.

**Digital Audio Broadcasting (DAB)**

Radio broadcasting using digital modulation and digital source coding techniques.

**Direct Broadcast Satellite (DBS)/DISH**

A high-powered satellite that transmits or retransmits signals which are intended for direct reception by the public. The signal is transmitted to a small earth station or dish (usually the size of an 18-inch pizza pan) mounted on homes or other buildings.

**Distant Signal**

A television channel from another market imported and carried locally by a cable television system.

**Distributor**

A person/company that distributes signals from a satellite carrier and provides that transmission either directly to individual subscribers for private home viewing or to other program distribution companies for transmission.

**Docket Number (FCC term)**

A number assigned to a proceeding opened by the issuance of either a Notice of Proposed Rule Making or a Notice of Inquiry,

or if an adjudicatory or tariff proceeding, has been instituted. Since January 1, 1978, the docket numbers indicate the year they were initiated and the Bureau which initiated the docket (e.g., MM 89-494 and CC 87-313).

### **Downlink**

The part of a satellite system that includes the satellite itself, the receiving earth station and the signal transmitted from the satellite to earth stations.

### **Download (Receive)**

To receive data from another computer into your computer. It is also called “receive.” The opposite is called “Upload.”

### **Earth Station**

Equipment on earth that can transmit or receive satellite communications. In general usage, this term refers to receive-only stations.



### **Electronic Bidding**

A process by which bidders in an auction use computers to place their bids. (See Spectrum Auction)

**D-F**

### **Electronic Book**

Computer program (often called an electronic book) that uses text, graphics, animation and audio to guide the user through an instruction or teaching process, an electronic “help-desk.”

### **Electronic Bulletin Board**

A system located on a computer network which allows users to post or receive information; it facilitates file sharing.

### **Electronic Funds Transfer (EFT)**

An electronic system that transfers money and records financial transactions, replacing the use of paper.

### **Electronic Mail (E-Mail)**

E-Mail allows the user to send a message via a computer instantly to one or many persons around the world. E-mail users typically have a “mailbox” on a network or a videotext system where other users can send messages to be retrieved by the recipient.

D-F

**Emission**

In this context, radiation produced by a radio transmitting station.

**Enhanced Service Providers**

A for-profit business that offers to transmit voice and data messages and simultaneously add value to the message it transmits. Examples include telephone answering services, alarm/security companies and transaction processing companies. An enhanced service provider offers voice as well as data services.

**En Banc**

An en banc meeting is a hearing held by the Commissioners to hear various presentations on specific topics by diverse parties. The Commissioners or other officials question the presenters and their comments and presentations can be used by the Commission when it considers rules.

**Equal Opportunity**

**(“Equal Time”) Rule**

If a political candidate obtains time on a broadcast station, other candidates for the same office (or their appointed representatives) may obtain an “equal opportunity” on that station. An equal opportunity usually includes equal time, but the term means more than equal time. For example, it

means the right to obtain time in a period likely to attract approximately the same size audience as the period in which the opposing candidate appeared. News shows are exempt.

**Ex Parte Presentation**

Any communication addressing the merits or outcome of a particular proceeding made to decision-making personnel (or in some proceedings, from the decision-making personnel), which, (1) if written, is not served on the parties to the proceeding, or (2) if oral, is made without opportunity for the parties to the proceeding to be present.

**Facsimile (Fax)**

The electronic transmission of printed material by electronic means over a telephone system. An image is scanned at a transmitting point and reconstructed at a receiving station, where a printed copy can be produced.

**FCC Number**

Sequential number assigned by the Secretary’s Office (Agenda Branch) to all documents approved by the Commission. This number is assigned after the item has been adopted by the Commission. Example: FCC 96-123. The first two digits reflect the year.

**FCC Record**

A bi-weekly comprehensive compilation of decisions, reports, public notices and other documents released by the Commission. The FCC Record replaced the FCC Reports in October 1986. The Record is available for a fee. The ordering address: Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954; by phone: (202) 512-8200.

**Fiber Optics**

A method for the transmission of information (sound, video, data) in which light is modulated and transmitted over high-purity, hair-thin filaments of glass. The bandwidth capacity of fiber optic cable is much greater than that of copper wire.

**Fixed Service**

Radio-communications service between specified fixed points.

**Flat Rate**

A method of pricing in which a fixed rate is charged for a given service, regardless of usage. The fixed monthly charge which a residential subscriber in a local exchange pays to be allowed to make an unlimited number of local calls is an example of a flat rate.

**FM Cable Service**

The offering of FM radio signals over a cable system for a fee. A cable is connected to the subscriber's FM stereo receiver for service.

**Footprint**

The area in which a specific transmission can be received. Some footprints cover as much as one-third of the earth, such as satellite or cell systems.

**Franchise Authority**

The franchise authority is the local body, usually a local government entity, that enters into a contractual agreement with a cable company. A franchise agreement defines the rights and responsibilities of each in the construction and operation of a cable system within a specified geographical area.

**Freeware**

Software, which is free to users, and is available from many locations on the Internet.

**Frequency**

A measurement of the number of electromagnetic waves that pass a given point in a given time period. It is equal to the speed of light divided by wavelengths, and is expressed in Hertz (cycles per second).

**D-F** **Frequency Modulation (FM)**

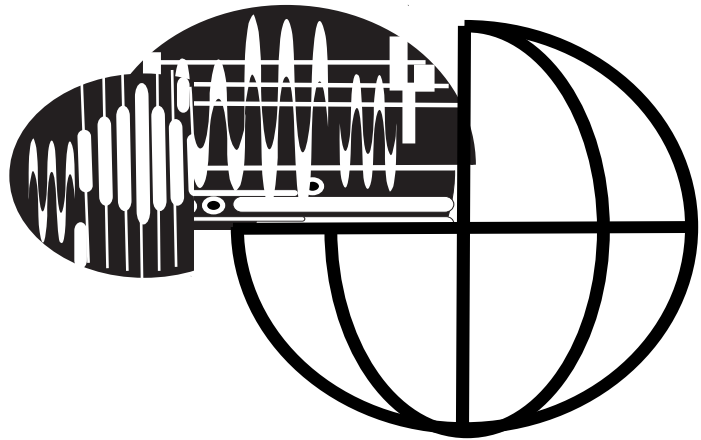
Radio transmission covering 88-108 megahertz on the broadcast band. FM is less susceptible to interference than AM broadcasting, and is also used in other frequency bands for two-way communications in land mobile and marine services.

**Frequently Asked Questions (FAQs)**

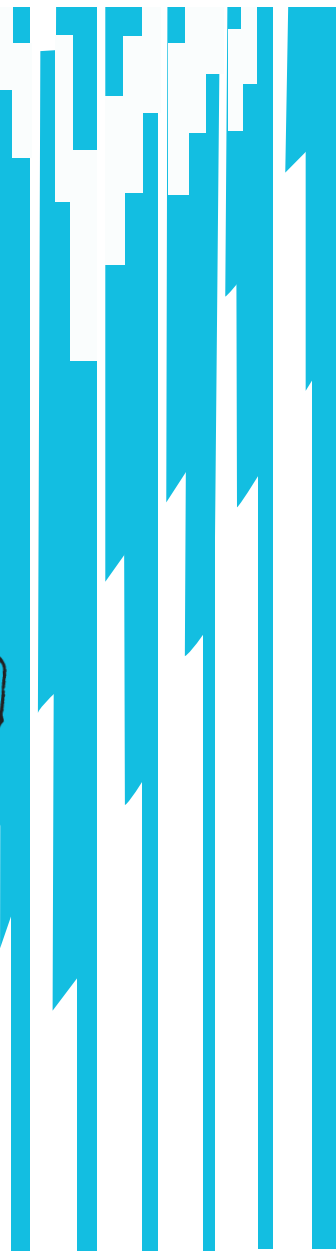
FAQs on Internet sites answer the most often asked questions.

**Further Notice of Proposed Rule Making (FNPRM)**

A Commission term, a Further Notice of Proposed Rule Making is issued by the Commission to further clarify and seek more information and public comment on the Commission's proposed changes. (See Notice of Proposed Rulemaking)



# GL





**Gateway**

Gateways provide a single source through which users can locate and gain access to a wide variety of computer services. Gateways typically offer a directory of services available through them, and provide billing for these services.

**Geostationary Orbit**

The revolutionary path traveled by a satellite in which the satellite travels in sync with the Earth's motion, so that it appears stationary in the sky. A stationary antenna located on Earth can remain pointed at the satellite at all times.

**Geostationary Satellite**

A satellite whose circular and direct orbit lies in the plane of the Earth's equator and which remains fixed relative to the earth.

**Gigahertz (GHz)**

A unit of frequency equal to one billion hertz (one billion cycles per second).

**Gopher**

A tool used on the Internet which permits users to locate and retrieve information quickly throughout the Internet.

**Hearing Designation Order (HDO)**

A Commission term, a Hearing Designation Order institutes a comparative or other adjudicatory hearing proceeding, usually before an Administrative Law Judge.

**Headend**

The electronic control center of a cable system. This is the site of the receiving antenna and the signal processing equipment essential to proper functioning of a cable system.

**Hearing Carry Over (HCO)**

A form of TRS where a person with a speech disability is able to listen to the other end user and, in reply, a Communications Assistant speaks the text as typed by the person with the speech disability.

**Hertz (Hz)**

A unit of frequency equal to one cycle per second (cps). One kilohertz equals 1000 cps; one megahertz equals 1 million cps; one gigahertz equals 1 billion cps.

**High Definition Television (HDTV)**

An improved television system which provides approximately twice the vertical and

horizontal resolution of the existing television standards. It also provides video quality approaching that of 35 mm film, and audio quality equal to that of compact discs. (See Advanced Television)

### **Home Satellite Dish (HSD)**

A home receiver that permits the consumer to receive existing satellite transmissions.

### **Horizontal Concentration**

The share of consumers subscribing to a commonly owned system.

### **Host**

Your Internet access provider's computer. You may use one of its hard-wired terminals, if you are at an institution with a main-frame computer connected directly to the Internet, or you may dial up via modem to connect with the Internet access provider's host computer.

### **Hyper-text**

Text that links to other documents that can be retrieved from one document.

### **Hyper-Text Mark-Up Language (HTML)**

Hyper-Text Mark-up Language is the programming language used to design and

present computer sites on the Internet in a graphical user interface fashion. HTML is the language used by programmers to design a Home Page for computers on the Internet as part of the World Wide Web project.

### **Hyper-Text Transport Protocol (HTTP)**

The method for moving "hypertext" files across the Internet. Requires an HTTP program at one end and a server at the other.

### **Information Superhighway**

A term describing a network of integrated telecommunications systems connecting people around the world to information, businesses, governments and each other. (See National Information Infrastructure)

### **Input Selector Switch (A/B Switches)**

A switch used by cable customers to alternate between cable and over-the-air television reception through a cable box.

### **Inside Telephone Wiring**

Telephone wiring: For a residence, the wiring usually starts where the line enters the house. It's called the demarcation line. For businesses, the location of the demarcation point varies.

G-L

**Instructional Television Fixed Service (ITFS)**

A service provided by one or more fixed microwave stations operated by an educational organization and used mainly to transmit instructional, cultural and other educational information to fixed receiving stations.

**Integrated Services Digital Network (ISDN)**

Switched network providing end-to-end digital connection for simultaneous transmission of voice and/or data over multiple multiplexed communication channels and employing transmission that conforms to internationally-defined standards. ISDN is considered to be the basis for a “universal network” that can support almost any type of communications device or service.

**Interactive Video Data Service (IVDS)**

A communication system, operating over a short distance, that allows nearly instantaneous two-way responses by using a hand-held device at a fixed location. Viewer participation in game shows, distance learning and E-mail on computer networks are examples.

**International Telecommunications Satellite Organization (INTELSAT)**

Formed under a multilateral agreement, it is the organization which owns, maintains, and operates the global satellite system used by over 100 participating countries around the world. COMSAT is the U.S. representative to and participant in INTELSAT.

**Interconnection**

The connection of one telecommunication carrier’s network to another or the connection of a piece of telephone equipment to the nation-wide telephone network.

**Interface**

The point at which two systems or pieces of equipment are connected.

**Interference**

Unwanted electrical signals or noise causing degradation of reception on a communications circuit.

**International Record Carrier (IRC)**

A common carrier engaged in providing overseas telecommunications service. Services furnished traditionally include telex, private line service and alternate voice data service.

**International Shortwave Broadcast Station**

A station that sends programs overseas either for direct reception by listeners abroad or for intermediate reception by overseas relay stations that rebroadcast the programs on shortwave or medium wave stations to nearby audiences.

**Internet**

A computer network stretching across the world that links the user to businesses, government agencies, universities, and individuals. The Internet provides computers with the ability to connect with other computers for communicating, disseminating and collecting information.

**Intersatellite Link**

A message transmission circuit between two communication satellites, as opposed to a circuit between a single satellite and the earth.

**Land Mobile Service**

A public or private radio service providing two-way communication, paging and radio signaling on land.

**Lifeline /Link-Up Services**

Programs that help qualify low-income households afford local telephone service. Lifeline assists with monthly telephone

bills and Link-Up assists with connection and installation charges.

**Local Access and Transport Area (LATA)**

A contiguous local exchange area which includes every point served by a local phone company within an existing community of interest. It also serves as the dividing line for the allocation of assets and liabilities between AT&T and the Bell Operating Companies. LATAS were established by the Department of Justice as a result of the AT&T divestiture.

**Local Multipoint Distribution Services (LMDS)**

This is a point/multipoint service with two-way capability to transmit voice, data, and other video information. LMDS can offer innovative consumer services such as two-way interactive video, advanced teleconferencing, telemedicine, telecommuting, and high-speed data services.

**Lottery (random selection)**

In this context, an alternative method to auctions and comparative hearings for allocating spectrum space to competing applicants in various services. In a lottery, the winning applicant is chosen at random.

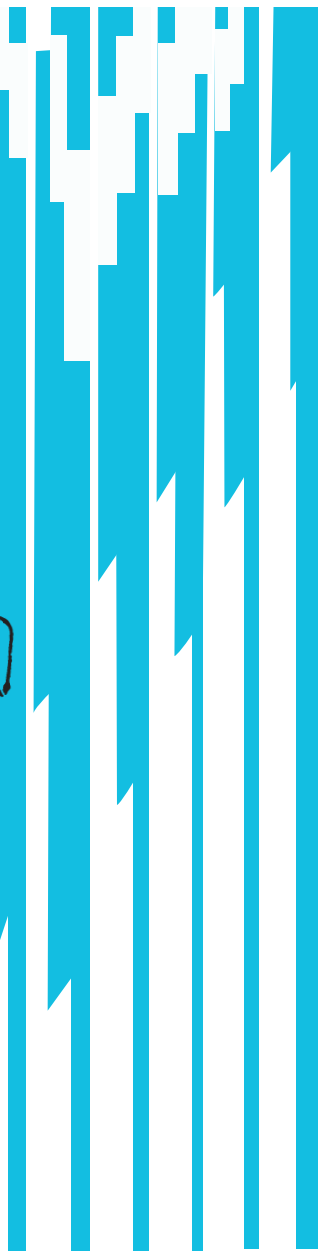
G-L

**Low Power Television Service (LPTV)**

A broadcast service that permits program origination, subscription service, or both via low powered television translators. Low Power Television service includes the existing translator service and operates on a secondary basis to regular television stations. Transmitter output is limited to 1000 watts for a UHF station, 10 watts for a normal VHF station, and 100 watts when VHF operation is on an allocated channel.



# M O Q



**Major Trading Area (MTA)**

Boundaries that segment the country for telecommunication licensing purposes. MTAs are based on Rand McNally's Commercial Atlas & Marketing Guide. Each MTA is named after one or more cities which are Major Trading Centers. MTAs are larger than BTAs. The FCC has used MTAs to license a number of services, including broadband and narrowband PCS.

**Master Antenna Television System (MATV)**

An antenna system that serves a concentration of TV sets such as in an apartment building or hotel. MATV utilizes one central antenna to pick up broadcast signals.

**Meeting**

At the FCC, the term "meeting" is applicable for the "Sunshine Act" (see Sunshine Act). The deliberations of at least the number of individual agency members (see Member) required to take action on behalf of the agency (a majority at the FCC) where such deliberations determine or result in the joint conduct or disposition of official agency business. A closed meeting is one at which public attendance is restricted.

**Member**

At the FCC, the term "member" refers to a Commissioner.

**Microwave Band**

Those frequencies from about 1 gigahertz upward that use microwave frequencies for point-to-point and point-to-multipoint communications, including common carriers, cable TV operators, broadcasters, and private operational fixed users.

**Modem**

An abbreviated term for "modulator-demodulator." A modem converts digital signals into analog signals (and vice versa), enabling computers to send and receive data over the telephone networks.

**Multi-User Dimension (MUD)**

This term refers to users who connect to each other via a host computer.

**Multichannel Multipoint Distribution Service (MMDS)**

A service which uses omnidirectional microwave signals to deliver video programs to subscribers.

**Multimedia**

The combination of various forms of media (texts, graphics, animation, audio, etc.) to communicate information. The term also refers to information products that include text, audio, and visual content.

**Multiple Address Systems (MAS)**

A microwave point-to-multipoint communications system, either one-way or two-way, serving a minimum of four remote stations. The private radio MAS channels are not suitable for providing a communications service to a larger sector of the general public, such as channels the Commission has allocated for cellular, paging, or specialized mobile radio service (SMR).

**Multiple System Operator (MSO)**

A company that operates more than one cable TV system.

**Multipoint Distribution Service (MDS)**

Also known as “wireless cable,” this is a one-way, domestic public radio service broadcast on microwave frequencies from a fixed station that transmits (usually in an omnidirectional pattern) to multiple receiving facilities located at fixed points determined by the subscriber’s location.

**Must Carry (retransmission)**

A term from the 1992 Cable Act, it refers to a cable system’s mandatory signal carriage of both commercial and noncommercial television broadcast stations that are “local” to the area served by the cable system.

**Narrowband**

A term applied to telecommunications facilities capable of carrying only voice, facsimile images, slow-scan video images and data transmissions at “kilobit” speeds. The term is commonly applied to voice-grade analog facilities and to digital facilities operating at low speeds (less than 1.544 Nbps).

**Narrowcasting**

The delivery of cable programming to a small community or audience where that programming addresses the audience’s specific needs or desires. It is the opposite of broadcasting.

**National Information Infrastructure (NII)**

The NII refers to a nationwide network of integrated telecommunications that connects people, businesses, schools, institutions and governments with one another. (See Information Superhighway)



M-Q

**National Television Standards Committee (NTSC)**

A television industry group that develops standards for television broadcasting and receiving equipment in the United States.

**Nationwide/Statewide Cost Averaging**

A method of averaging costs to establish uniform prices for telephone service so that subscribers using more costly-to-serve, lightly-trafficked routes — such as those between small communities — receive the same service for the same price as subscribers on lower-cost, highly-trafficked metropolitan routes.

**Netiquette**

Network + etiquette= netiquette. Customs and socially accepted behavior for using the Internet networks.

**Network/Networking**

A group of computers connected in any way that allows data to be sent among these computers.

**Non-Duplication Rules**

Restrictions placed on cable television systems which prohibit them from importing distant programming that is simultaneously available locally.

**Notice of Inquiry (NOI)**

A Commission term, a *Notice of Inquiry* (NOI) is adopted by the Commissioners primarily for fact gathering, a way to seek comments from the public or industry on a specific issue. The NOI also states where and when comments may be submitted, where and when you can review comments others have made, and how to respond to those comments. After reviewing comments, the FCC may issue a *Notice of Proposed Rulemaking* or it may release a *Report & Order* (R&O) explaining what action -- or non-action --is taken.

**Notice of Proposed Rulemaking (NPRM)**

A *Notice of Proposed Rulemaking* (NPRM) is adopted by the Commissioners to detail proposed changes to FCC rules and to seek public comment on these proposals. The NPRM also states where and when comments may be submitted, where and when comments can be reviewed, and where and when comments others have made can be reviewed and responded to. After reviewing the comments to the NPRM, the FCC may issue a “Further NPRM” to provide an opportunity for the public to comment further on a related proposal. The next step is a *Report & Order*.

**Number Portability**

Number portability is the term used to describe capability of individuals, businesses, and organizations to retain their existing telephone number(s) -- and the same quality of service -- when switching to a new local service provider.

**Open Outcry Auction**

An auction in which bidders openly shout out their bids.

**Operator Service Provider (OSP)**

A common carrier that provides services from public phones, including payphones and hotel/motel phones.

**Open Video Systems (OVS)**

An Open Video System is similar to a cable system. In an OVS, the system operator must lease channel capacity to unaffiliated programmers at just, reasonable, and non-discriminatory rates.

**Paging System**

One-way mobile radio service where a user carries a small, lightweight miniature radio receiver capable of responding to coded signals.

**Pay-Per-View**

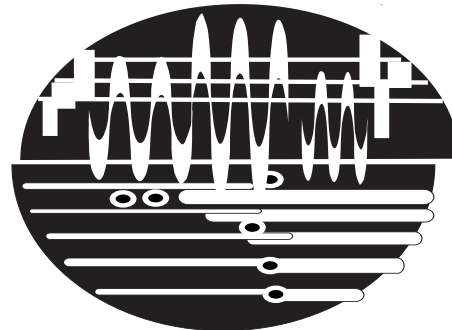
Programming (usually movies or special events) that a cable subscriber specially requests to receive for a single fee added to the monthly cable bill.

**PC**

Personal computer.

**Personal Communications Services (PCS)**

A term coined by the FCC, it describes a two-way, voice and digital, wireless telecommunications system. PCS encompasses cordless phones, cellular mobile phone, paging systems, personal communications networks, wireless office phone systems and any other wireless telecommunications systems that allow people to place and receive voice/data calls while away from home and office.



M-Q

M-Q

**Petition For Reconsideration**

A Petition for Reconsideration is a written request submitted to the FCC for review of an action it has previously taken. Applicants have 30 days after a *Report and Order* is published in the *Federal Register* to file comments with the FCC. The agency will consider public comments, replies, and industry concerns before finalizing its initial decision. As a result of the review process, the FCC will either issue a *Memo-randum Opinion and Order* amending its initial decision, or deny the Petition for Reconsideration.

**Pixel**

The smallest area of a television picture capable of being sampled, transmitted through a system and displayed on a monitor.

**Pole Attachment**

A communications relay or receiving device attached to a pole, duct or conduit owned or controlled by a utility company.

**Premium Channels**

Channels not included in a cable provider's regular service tiers. There are additional monthly fees charged for receiving premium channels.

**Presubscription**

This term is used to describe the selection of a particular long distance carrier to handle all calls for "1+dialing" zones. (See Primary Interexchange Carrier)

**Primary Interexchange Carrier (PIC)**

The PIC is the main long distance carrier used for "1+dialing" through which all interstate long distance toll calls are made. (See Presubscription)

**Private Home Viewing**

The viewing of television in a private home with reception by satellite equipment that is operated by an individual in that household and which serves only that household. It is a secondary transmission (via satellite) of a primary transmission of a television station licensed by the FCC.

**Private Line Service**

Dedicated telecommunications channels provided between two points or switched among multiple points. Privately leased for high-volume voice, data, audio or video transmissions.

**Private Radio Service**

Radio communications authorized for local governments and private enterprises.

Amateur and citizen band radio are private radio services as are several other services in the categories of: Aviation, Marine, Public Safety, Industrial, Land Transportation and Microwave.

**Program Log**

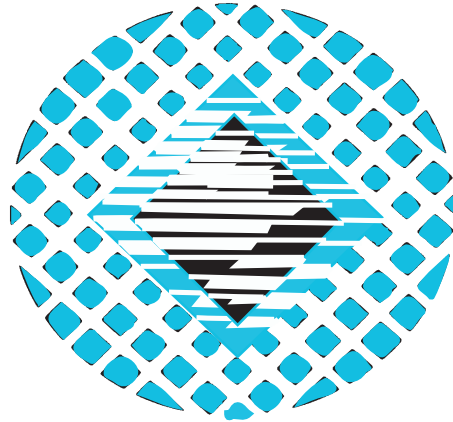
Records once kept by a broadcasting station in a public file which provided a record of programs broadcast, program type and program length. The logs also included commercial and public service spots. Broadcasters are no longer required to maintain program logs.

**Public Notice (PN)**

A Public Notice is issued by the Commission to notify the public of an action taken or an upcoming event.

**Quorum**

At the FCC, the minimum number of Commissioners required to be present at a meeting or to participate in voting by circulation before the Commission can validly proceed to transact business. A quorum consists of a majority of the Commissioners.



# Rs



**Radar**

A radio determination system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.

**Radiation**

The outward flow of energy from any source in the form of radio waves.

**Radio Common Carrier**

Part of the domestic land mobile radio service. Signals are received and transmitted from mobile transmitters.

**Radio Determination**

The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters by means of the propagation properties of radio waves.

**Radiotelegraphy**

The use of a radio (instead of wire) to communicate a messages over a distance.

**Radiotelephony**

The use of radio to communicate sounds (e.g., speech).

**Reach**

“Reach” refers to the availability of a service in the community. It is the number of homes to which the service is available regardless of whether or not residents choose to subscribe.

**Real Time**

Usually used to describe situations when two or more people are interacting via their keyboards on the computer in real time, versus delayed back-and-forth communication, such as with e-mail.

**Regional Bell Operating Company (RBOC)**

Any one of the seven local telephone companies created in 1984 as part of the break-up of AT&T. The RBOCs are Ameritech, Bell Atlantic, Bell South, NYNEX, Pacific Telesis Group, Southwestern Bell, and U. S. West.

**Regulatory Fee**

A fee charged users of certain FCC services, such as license applicants and holders, to help support such services. Regulatory fees go to the U.S. Treasury.

R-S

**Report & Order(R&O)**

A Commission term. After considering comments and reply comments to Notices of Inquiries or Notices of Proposed Rulemakings, the FCC may issue a *Report & Order* amending the rules or deciding not to do so. Summaries of R&Os are published in the Federal Register. Issuance of an R&O triggers a 30-day period for Petitions for Reconsideration.

**Resale Carrier or Reseller**

A carrier that does not own transmission facilities, but obtains communications services from another carrier for resale to the public for a profit.

**Resolution**

The amount of detail that can be seen in a broadcast image. The resolution of a TV screen is defined by the number of horizontal lines of picture elements that the screen displays and the number of pixels per line.



**Rulemaking Number**

A number assigned to a proceeding after the appropriate Bureau/Office has reviewed and accepted a Petition for Rulemaking, but before the Commission has taken action on the petition. The rulemaking number should appear on all appropriate documents, even those which carry a docket number.

**Rural Cellular Radio Service Area**

A market area not based on Metropolitan Statistical Areas which under existing rules applicants may propose to provide with cellular service, as long as the proposed area does not exceed 2,000 square miles.

**Satellite**

A radio relay station that orbits the earth. A complete satellite communications system also includes earth stations which communicate with each other via the satellite. The satellite receives a signal transmitted by an originating earth station and retransmits that signal to the destination earth station(s). Satellites are used to transmit telephone, television, and data signals originated by common carriers, broadcasters, and distributors of CATV program material.

**Satellite Carrier**

An entity that owns or leases the facilities of a satellite or satellite service to establish and operate a channel of communications for point-to-multipoint distribution of television station signals.

**Satellite Dish**

A kind of antenna used to pick up transmissions broadcast from a satellite.

**Satellite Master Antenna Television (SMATV)**

A satellite dish system used to deliver signals to multiple dwelling units (e.g. apartment buildings and trailer parks).

**Scrambler**

A device that electronically alters a program signal so that it can be seen only by persons, typically paid subscribers, with appropriate decoding devices.

**Shortwave Station**

A broadcast station that transmits on frequencies of 6-25 megahertz. These waves are shorter than those sent out by AM stations but longer than those of the Very-High frequency FM radio and television stations.

**Simultaneous Multiple Round Auction**

An auction in which many licenses are put up for auction at the same time. Bidders have the opportunity to top the high bids from the previous round. The auction ends when no bidders are willing to top the bidders from the previous rounds on any of the licenses.

**Slamming**

The term used to describe what occurs when a customer's long distance service is switched from one long distance company to another company without the customer's permission. Such unauthorized switching violates FCC rules.

**Special Emergency Radio Services (SERS)**

A Private Land Mobile Radio Service employed by persons or organizations engaged in emergency medical and rescue service, health care, or similar activity.

**Specialized Common Carrier (SCC)**

A company (other than the telephone company) that provides point-to-point communications service on a common carrier basis. For example, point-to-point services are used to connect points on the telephone network that normally cannot be connected using standard wire line or fiber optic because of terrain.



R-S

**Specialized Mobile Radio Services (SMR)**

A private, two-way radio system providing land mobile communications service to eligible persons on a commercial basis. Typical SMR customers using dispatch communications include construction companies with several trucks at different jobs or on the road, with a dispatch operation in a central office.

**Spectrum**

The range of electromagnetic radio frequencies used in the transmission of sound, data, and television.

**Spectrum Auction**

A public sale of spectrum space in which the price is increased by bids until the highest bidder becomes the purchaser. The U.S. Treasury receives all profits from the FCC spectrum auctionS. (See spectrum)

**Spectrum Allocation/Management**

The assignment of available spectrum space; the coordination of spectrum used to maximize efficiency and to prevent interference.

**Spurious Emission**

Any emission or part of it which appears outside of the authorized bandwidth (See Part 2 of the Code of Federal Regulations).

**Subcarrier**

An inaudible portion of the broadcast signal that is added to the program signal of FM or TV sound and can be used for either broadcast or non-broadcast purposes. Uses include stereo sound, augmented audio for the blind, bilingual programming and paging.

**Subscriber Line Charge (SLC)**

A monthly fee paid by telephone subscribers that is used to compensate the local telephone company for part of the cost of installation and maintenance of the telephone wire, poles, and other facilities that link your home to the telephone network. These wires, poles, and other facilities are referred to as the “local loop.” The SLC is one component of access charges.

**Subscription Television (STV)**

A special service providing additional programs in encoded form to television viewers who pay a monthly rate. Devices that attach to the subscriber’s set are able to decipher transmitted signals that have been scrambled.

**Sunshine Notice/Period**

A Public Notice is released seven calendar days before an Open or Closed Commis-

sion Meeting, announcing the day and time of the meeting, and listing each item to be considered. The Sunshine Notice is printed in the Federal Register after it is released to the public. The Sunshine Period runs from the time a public notice placing an item on the Sunshine Agenda is released until the text of the decision is issued or a public notice is released stating that the matter has been deleted from the Sunshine Agenda or returned for further consideration. Presentations to decision-making personnel and discussions of the item are generally prohibited during the Period.

### **Superstation**

A television broadcast station, other than a network station, licensed by the FCC that is secondarily transmitted by a satellite carrier.

### **Surfing**

A slang term used to describe switching a television from channel to channel in a continuous order with a remote control. Also used to describe the process of scanning entries on the Internet.

### **Syndicated Exclusivity (SYNDEX) Rule**

**R-S**

This rule requires cable systems carrying distant signals to black out syndicated programming (usually on superstations) for which a local broadcaster owns exclusive rights. (See “Black Out”)





**Tariff**

A statement by a communications company that sets forth the services offered by that company, and the rates, terms and conditions for the use of those services.

**Time Division Multiple Access/TDMA  
Code Division Multiple Access /CDMA**

These terms are used to describe multiple access systems. For example, **CDMA** is a method of spreading spectrum transmission for digital wireless personal communications networks that allows a large number of users simultaneously to access a single radio frequency band without interference. **TDMA** is a method of digital transmission for wireless telecommunications systems that allows a large number of users simultaneously to access a single radio frequency band without interference.

**Telecommunications**

Any transmission, emission or reception of signs, signals, writing, images, sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

**Teleconferencing**

The use of audio, video, or computer equipment brought together through a commu-

nications system to permit geographically separated individuals to participate in a meeting or discussion.

**Telephony**

The word used to describe the science of transmitting voice over a telecommunications network.

**Teletext**

Textual and graphic information broadcast in the vertical blanking interval between conventional video frames in television signals. It requires a special adapter.

**Teletypewriter Exchange Service (TWX)**

A dial-up worldwide telegraph service (similar to telex, but operating at different transmission speeds, and with a different code) used in the United States and Canada. It enables subscribers to send each other printed messages.

**Television Receive Only Earth Station (TVRO)**

Earth station equipment that receives video signals from satellite or MDS-type transmissions. Such stations have only receiving capability and need not be licensed by the FCC unless the owner wants protec-

T-Z

tion from interference. Authority for reception and use of material transmitted must be given by the sender.

**Telex Service**

A public switched service in which teletypewriter stations are provided with lines to a central office for access to other stations.

**Text Telephone (TT)**

A machine that employs graphic communication in the transmission of coded signals through a wire or radio communication system. TT supersedes the term “TDD” or “telecommunications device for the deaf.”

**Tier**

Levels of cable television service providing selected channels.

**Translator**

A television or FM broadcast station, operating at relatively low power, that receives a corresponding television or FM signal on one channel, amplifies it, and retransmits it on another channel.

**Transponder**

The device in a communications satellite that receives signals from the earth, translates and amplifies them on another frequency, and retransmits them.

**Twisted Pair**

This is the term used to describe the traditional copper cable that is used for short distance communications.

**Two-way Cable TV Capability**

Interactive services offered by cable systems, for example, home shopping, banking and polling services.

**Ultra High Frequency (UHF)**

The part of the radio spectrum from 300 to 3000 megahertz which includes TV channels 14-83, as well as many land mobile and satellite services.

**Unbundling**

Unbundling is the term used to describe the access provided by local exchange carriers so that other service providers may buy or lease portions of its network elements, such as interconnection loops to serve subscribers.

**Uniformed Resource Locator (URL)**

The standard way to give the address of any resource that is on the Internet and is part of the World Wide Web. For example, the FCC's URL is *http://www.fcc.gov*

**Universal Service**

This term describes the financial support mechanisms that constitute a universal fund which helps compensate telephone companies or other communication entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, and high cost areas, and to public institutions.

**Uplink**

The signal that carries information from an earth station source up to a satellite.

**Upload**

To send a text file or software program via telecommunications to another computer (See Download).

**Usenet Groups**

Usenet groups are also known as newsgroups, or discussion groups. Users exchange information generally provided in a "chat room."

**User Name**

A short name (with no spaces allowed) unique to you on your Internet access provider's system. Sometimes these are assigned and sometimes you can select your own. The user name, or ID, followed by your site address, becomes your e-mail address. For example, if Ben Franklin had an account at world.std.com and he chose a user name of bfranklin, his e-mail address would be bfranklin@world.std.com.

**Value Added Network (VAN)**

A national (or international) enhanced network that is designed expressly to carry data communications. VANs provide special services to their customers, such as access to databases.

**Vertical Blanking Interval (VBI)**

The period of time between television pictures, which is visible as a black bar when the picture rolls. The VBI contains signals that allow receivers to keep the picture stable and has additional signal capacity that can be used to carry closed captioning information, test, cue and control signals, and other data services.

T-Z

**Vertical Integration**

The involvement of cable systems in other links of the video distribution chain, such as program production and supply.

**Very High Frequency (VHF)**

The part of the radio spectrum from 30 to 300 megahertz which includes TV channels 2-13, the FM broadcast band, and some marine, aviation and land mobile services.

**VHF Drop-Ins**

Full power VHF TV stations that may be squeezed into locations that do not comply with the FCC's spacing requirements.

**Videodisc**

A phonograph record-type disc that displays recorded video information when played on an attachment to a television set.

**Videotext**

An interactive service connecting a TV set and text or video recorder to a central computer by phone lines or cable TV. The computer provides textual information on demand and transactional services.

**Virtual Reality**

A computer simulation usually experienced through headgear, goggles and sensory

gloves that allows the user to experience being present in a computer generated environment, and to interact with the images being displayed there.

**Voice Carry Over (VCO)**

A reduced form of TRS where the person with the hearing disability speaks directly to the other end user. The Communications Assistant then types the response back to the person with the hearing disability. The Communications Assistant does not voice the conversation.

**Wide Area Network (WAN)**

**Local Area Network (LAN)**

The term **WAN** is used to describe a data network used to interconnect a companies' remote sites, or widely-dispersed computer equipment. The term **LAN** is used to describe a local data network, one that is used to interconnect the computer equipment of a commercial user.

**Wavelength**

The length of one complete wave of an alternating or vibrating phenomenon, generally measured from crest to crest or from trough to trough of successive waves.

### **Wide Area Telecommunications/ Telephone Service (WATS)**

Discount long-distance service offered to high-volume customers on a subscription basis.

### **Wireless Cable/Multipoint Distribution Service**

Multipoint Distribution Service (MDS) is defined as a medium of mass communications. It may be licensed as a common carrier where non-affiliated programmers, usually pursuant to a tariff on file with FCC, lease time from the MDS licensee to “air” its programming. Alternatively, a licensee may choose to operate as a non-common carrier and program its own facility of lease transmission time to an affiliated programmer without the requirement of filing a tariff. Unlike conventional broadcast stations whose transmissions are received universally, MDS programming is designed to reach only those who have opted to subscribe to the service.

### **Wireless Communication**

Any broadcast or transmission which can be received through microwave or radio frequencies without the use of a cable connection for reception.

### **World Wide Web (WWW)**

Created in Switzerland, WWW is client/server software. It uses the HTTP (Hypertext Transfer Protocol) to exchange documents and images. The FCC is on the “web,” along with most government agencies, the White House, and the Library of Congress. To reach the FCC’s world wide web page, and to access its material, here’s the address: **<http://www.fcc.gov>**





