

ELIGIBLE SERVICES LIST (ESL) GLOSSARY

The following Glossary contains a list of common terms that relate to the eligibility of products and services that applicants may request in the E-rate program. This Glossary should NOT be used by applicants to determine the eligibility of a service or product or to determine the E-rate category of service for a particular service or product. Instead, applicants must refer to the Eligible Services List (ESL) for a particular funding year to determine eligibility for services and products for E-rate support for that funding year. Products and services that are not listed in the ESL are presumed to be ineligible.

800 SERVICE 800 Service provides toll calling that is paid by the called party rather than the calling party. The name comes from the original Area Code used for all toll-free numbers. Current and future “800 Service” area codes use the convention 8NN, when N is a specific digit, for example 888, 877, and 866.

ANTENNAS An antenna is a device for transmitting and/or receiving radio frequency signals.

ASYNCHRONOUS TRANSFER MODE (ATM) ATM is a high-speed Digital Transmission Service that can provide bandwidth of 622 Megabits per second or higher.

BROADBAND OVER POWER LINES (BPL) Broadband over Power Lines (BPL) is a carrier current system installed and operated on an electric utility service as an unintentional radiator that sends radio frequency energy on frequencies between 1.705 MHz and 80 MHz over medium voltage lines or low voltage lines to provide broadband communications. It is also located on the supply side of the utility service’s points of interconnection with customer premises.

CABLE MODEM A cable modem is a modem designed for use on a TV coaxial cable circuit and provides a high-speed data path. It can provide high-speed access to the Internet over a coaxial cable circuit.

CABLING Cabling refers to the wires or groups of wires capable of carrying voice, video, or data transmissions. Cabling provides electrical (or, in the case of fiber optics, lightwave) connectivity between points.

CACHING SERVICES/EQUIPMENT A method that stores recently accessed information locally so that the information is accessible more quickly than if transmitted across a network from a distance.

CELLULAR SERVICE Cellular Service uses radio transmissions to provide a wireless telephone service.

CENTREX Centrex is a business telephone service that consists of a wide variety of features, such as, call forwarding and call transfer, provided by central office software.

CONNECTORS Connectors are devices that connect wires or fibers.

DIGITAL SUBSCRIBER LINE (DSL) Digital Subscriber Line (DSL) is a technology that provides high-speed connections over telephone lines. Different types of DSL service are available, using descriptions such as ADSL, HDSL, and SDSL. The DSL family of technologies sometimes goes by the general name xDSL.

DS-1 DS-1 is a type of Data Transmission Service, and stands for “Digital Signal, level 1.” It operates at a bandwidth of 1.544 megabits per second. Other DS levels—DS-2, DS-3, and DS-4—operate at higher bandwidths.

ETHERNET Ethernet is a type of Data Transmission Service. Traditionally, Ethernet operates at a bandwidth commonly known as 10Base-T which is equivalent to 10 megabits per second (Mbps). 100Base-T at 100 Mbp and Gigabit (1,000Mbps) are also available.

FIBER OPTICS OR FIBER SERVICE Fiber Optics is a technology that uses light to transport information over thin strands of glass (called fiber optic cable) and can provide a Data Transmission Service.

FIREWALL OR FIREWALL SERVICE A firewall is a hardware and software combination that sits at the boundary between an organization’s network and the outside world, and protects the network against unauthorized access or intrusions.

FRAME RELAY Frame relay is a type of Data Transmission Service. Frame relay networks in the United States support data transfer rates at T-1 (1.544 Mbps) and T-3 (45 Mbps) speeds.

INTEGRATED SERVICES DIGITAL NETWORK (ISDN) ISDN is a type of Data Transmission Service that uses traditional phone lines to transmit digital voice and data over telephone lines. There are two types of service. Basic Rate Interface (BRI) provides a total bandwidth of 144 kilobits per second. Primary Rate Interface (PRI) provides a total bandwidth of 1.544 megabits per second.

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INTERCONNECTED VOICE OVER INTERNET PROTOCOL (VOIP)

Interconnected VoIP is defined as a service that (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet protocol-compatible customer premises equipment (CPE); and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.

INTERNET ACCESS The definition of Internet access comes from section 54.5 of the FCC's rules which states that Internet access includes the following elements: 1) The transmission of information as common carriage; (2) The transmission of information as part of a gateway to an information service, when that transmission does not involve the generation or alteration of the content of information, but may include data transmission, address translation, protocol conversion, billing management, introductory information content, and navigational systems that enable users to access information services, and that do not affect the presentation of such information to users; and (3) Electronic mail services (e-mail).

LEASED DARK FIBER Dark fiber refers to fiber optic cable for which the service provider has not provided modulating electronics, and that is not being used to transmit data. Leased dark fiber is a type of fiber service in which the applicant leases a portion of a provider-owned and maintained fiber network, and separately pays to have that fiber

lit in order to transmit information over that fiber. For the purposes of the E-rate program, the term "leased dark fiber" includes infeasible rights of use.

LEASED LIT FIBER Lit fiber refers to fiber optic cable for which the service provider provides modulating electronics to light the fiber. Leased lit fiber is a fiber-based broadband service where the service provider owns and manages the network, and the E-rate applicant pays a recurring fee to have data transported over the network.

LOCAL AREA NETWORK (LAN)

A LAN is a short distance data communications network used to link together computers and peripheral devices under some form of standard control. The LAN is most often connected by cabling or wireless links within the same building.

LOCAL PHONE SERVICE

Local phone service is a service provided by a local exchange carrier (LEC). Phone lines from homes and businesses terminate at a central office of a LEC, which in turn connects to other local exchanges and to carriers for long distance service.

LONG DISTANCE TELEPHONE SERVICE

Long distance telephone service is provided by interexchange carriers and provides telephone service outside of a local calling area.

MANAGED INTERNAL BROADBAND SERVICES (MIBS)

MIBS are services provided by a third party for the operation, management, and

monitoring of eligible broadband internal connections components.

MICROWAVE Microwave is a wireless technology used for point-to-point communications systems.

OC-1 OC-1 stands for "optical carrier 1," which is a Data Transmission Service that operates at 51.84 Megabits per second. Multiples of this bandwidth are also available, such as, OC-3 and OC-12.

POTS POTS stands for "Plain Old Telephone Service" and provides local telephone dial-tone service.

RACKS A rack is a metal supporting framework for mounting cables, equipment, and/or wires.

RADIO LOOP Radio Loop is provided by a local exchange telecommunications carrier and is also called Basic Exchange Telecommunications Radio Service (BETRS). BETRS is used by local telephone companies to provide dial tone to subscribers in certain circumstances, such as when it is either not technically possible or not cost-effective to provide the service by conventional means.

ROUTER Routers are switching devices that can act as an interface between two networks and connect different segments, such as departments or floors in a building. Functionally, routers select the routing path for traffic.

SATELLITE SERVICE Satellite service provides communication between points on Earth by using an orbiting satellite as a communications relay point.

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SELF PROVISIONED NETWORK

Complete applicant ownership of a high-speed broadband network. The applicant hires a vendor to construct the network or a portion of the network, and thereafter owns and maintains that network or portion.

SHARED TELEPHONE SERVICE

Shared telephone service involves the sharing of a single service between two or more entities. As an example, a telephone line may be shared between a parochial school and the church administrative offices.

SHIPPING CHARGES

Shipping Charges are the charges associated with the delivery of products from their point of origin to the customer premises.

SWITCH A switch is a mechanical or electronic device that completes or breaks an electrical path or that selects the paths for communication. More specifically, network switches provide capability similar to a network hub but provide a dedicated bandwidth at each network port, rather than shared bandwidth among all ports.

SWITCHED MULTIMEGABIT DATA SERVICE (SMDS)

Switched Multimegabit Data Service (SMDS) is a type of Data Transmission Service offered by telephone companies that operates at speeds of from 1.544 Megabits per second to 45 Megabits per second or even more.

T-1 T-1, which stands for Trunk Level 1, is a Data Transmission Service that operates at 1.544 Megabits per second. Greater speeds are available from other Trunk

Levels, such as T-2 (6.312 Mbps) or T-3 (44.736 Mbps). Slower speeds are known as Fractional T-1.

UNINTERRUPTIBLE POWER SUPPLY (UPS) / BATTERY

BACKUP UPS, also called a battery backup, is a device that provides backup electric energy to a piece of equipment in the event of a power failure.

WIDE AREA NETWORKS (WANS)

A WAN is a voice, data, and/or video network that provides connections from within an eligible school or library to other locations beyond the school or library.

WIRELESS ACCESS POINT

A Wireless Access Point is used to distribute a wireless signal to allow devices to connect to a network and/or access the Internet within a wireless LAN.

WIRELESS CONTROLLER

SYSTEM A Wireless Controller System is used in conjunction with access points to create a wireless local area network.

WIRELESS LOCAL AREA

NETWORK (LAN) A Wireless Local Area Network provides the functionality of a local area network using wireless components rather than cabling.