# Schools and Libraries Universal Service Support Mechanism

# **Eligible Services List**

CC Docket No. 02-6; GN Docket No. 09-51

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The Federal Communications Commission's rules provide that all services that are eligible for to receive discounts under the Schools and Libraries Universal Service Support Mechanism (otherwise known as the E-rate program or "E-rate") are listed in this Eligible Services List (ESL). The E-rate program is administered by the Universal Service Administrative Company (USAC).

# Background:

The E-rate program provides eligible schools and libraries discounts for eligible services and products. Consistent with prior years, in each category the ESL first lists the services and products that are eligible for funding, and then lists the services and products that are not eligible for funding. Under the E-rate program, E-rate funds are allocated according to rules of priority, with first priority given to requests for telecommunications services, telecommunications, and Internet access services; these services are listed in the "Priority One" section of the ESL. The remaining available funds are allocated to requests for support for internal connections and basic maintenance of internal connections; these services are listed in the "Priority Two" section of this ESL. There is also a Miscellaneous section, and at the end of this ESL, a Special Eligibility Conditions section and a Glossary, providing additional information and definitions for many of the terms used herein.

Note on FCC Form 471. For Block 5 of the FCC Form 471, for Priority One services, applicants must indicate the services they select as a Priority One Telecommunications Service or Priority One Internet Access. The applicant may select one or the other category depending on the provider of the service (i.e., if the service is one that could be requested as a telecommunications service or Internet access, but the applicant checks "Telecommunications Services" on Block 5, the service needs to be provided by a "telecommunications carrier" (see "Special Regulatory Requirements" in the Special Eligibility Conditions section below)). After an applicant has complied with E-rate competitive bidding requirements and selected its vendors, it may consult with each vendor about which service category in Block 5 of the FCC Form 471 the applicant should use in describing the service the vendor will be providing. See also "Administrative Convenience" below for additional information regarding combined service offerings.

Administrative Convenience. Some service offerings provide a combination of both Internet access and telecommunications services, which are both Priority One services. For example, a service provider may offer local phone service, long distance service, and Internet access for one price. For administrative convenience, such a combined offering, if provided by a telecommunications carrier, may be requested in the telecommunications services category of service on the FCC Form 471. Alternatively, funding may be requested as two separate requests, with the price of the offering appropriately allocated between the telecommunications services and Internet access categories.

<u>CIPA Reminder.</u> The funding of Internet access in the telecommunications services category *does not* relieve applicants of complying with the requirements of the Children's Internet Protection Act (CIPA) if the service request includes Internet access.

Additional information about eligibility requirements is available at USAC's website at <a href="http://www.usac.org/sl/">http://www.usac.org/sl/</a>, the reference area of the USAC website at <a href="http://www.usac.org/sl/tools/reference-area.aspx">http://www.usac.org/sl/tools/reference-area.aspx</a>, and in Schools and Libraries News-briefs available at <a href="http://www.usac.org/sl/tools/news-briefs/Default.aspx">http://www.usac.org/sl/tools/news-briefs/Default.aspx</a>. These documents are not incorporated by reference into the Eligible Services List.

| This List, dated <b>September 27</b> , <b>2012</b> may represent a change from prior funding years and applies to funding requests for Funding Year 2013. |  |  |
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# **Priority One**

This section lists the Priority One telecommunications services, telecommunications, and Internet access services for which E-rate applicants may seek discounts.

Support is also available for maintenance and technical support appropriate to maintain reliable operation when provided as a component of these services. Please see the <u>Miscellaneous</u> section of this document for additional entries applicable to these services, such as charges for installation and configuration.

| Function                            | Description   |  |
|-------------------------------------|---|--|
| Digital<br>Transmission<br>Services | Digital transmission services provide transmission from an eligible school or library facility to other locations beyond the school or library. Such services generally refer to data links that connect multiple points using any available technology. An eligible digital transmission service may be used to connect an eligible location to the Internet or <a href="Internet2">Internet2</a> . Digital transmission services used to link local networks are commonly called "wide area networks" (WANs). |  |
|                                     | Eligible digital transmission technologies include, but are not limited to:  • Asynchronous Transfer Mode (ATM) • Broadband over Power Lines (BPL) • Digital Subscriber Line (DSL) • DS-1, DS-3 • Ethernet • Fiber • Frame Relay • Integrated Services Digital Network (ISDN, BRI, PRI) • OC-1, OC-3, OC-12, OC-n • Satellite service • Switched Multimegabit Data Service (SMDS) • T-1, T-3, Fractional T-1 • Wireless   |  |
|                                     | Components required as an integral part of a digital transmission service are eligible for discount, such as:  • costs of a permanent virtual circuit (PVC) • costs of trunk lines • reasonable installation costs  -The telecommunications component of: • a distance learning capability • video, or • interactive television, is eligible for discount. In addition, the telecommunications component of voice or video  |  |

|   | conferencing services that provide a means for multiple users to participate in group discussions may be eligible if the services are limited only to eligible educational or library purposes.   |  |
|---|---|--|
| E-mail Service                              | E-mail service is eligible. E-mail service may be included in the cost of Internet access (listed above) or may be provided at a separate cost, either as a fixed charge and/or on a per-user or other basis.   |  |
|   | Some e-mail services may include substantial ineligible features, such as collaboration tools, and services to ineligible users. Funding is limited strictly to the eligible portion of an electronic mail service ( <i>i.e.</i> , the part of the service that provides for the transmission of text messages and other information). <a href="E-mail archiving"><u>E-mail archiving</u></a> is not eligible for discount.   |  |
| Fiber or Dark<br>Fiber                      | Lit or dark fiber, provided by any entity, including a non-telecommunications carrier, is eligible. Dark fiber is eligible as long as applicants light the fiber immediately.  Certain maintenance and installation costs are also eligible, including charges for installation of dark fiber within the property line. For leased lit fiber, all special construction charges are eligible. When lit fiber is leased as telecommunications, the modulating electronics included as part of that service is eligible as telecommunications.  Applicants should apply for the fiber service as Internet access, if they select a non-telecommunications carrier to provide the fiber. Funding requests for fiber must be submitted in the Internet Access category of service if the service will not be provided by a telecommunications carrier. |  |
| Interconnected Voice Over Internet Protocol | Costs to subscribe to interconnected Voice Over Internet Protocol (VoIP) are generally eligible for E-rate discounts.   |  |
| Internet Access                             | Support in this funding category is generally only available for basic conduit access to the Internet but is not available for content, equipment purchased by applicants, and services beyond basic conduit access to the Internet. Basic conduit access to the Internet may be used for access to Internet-based distance learning and video conferencing services. Basic conduit Access technologies include but are not limited to:  • Broadband over Power Lines (BPL)-enabled Internet access service  • Cable Modem • Digital Subscriber Line (DSL) • Fiber/Dark Fiber • Satellite service • Telephone dial-up • T-1 lines • Wireless (For more details see the entry for "Wireless Internet access")  |  |

Eligible Internet access may include features typically provided for when provided as a standard component of a vendor's Internet access service. Such features may include: Domain Name Service, Dynamic Host Configuration, and basic firewall protection against unauthorized use and access. Firewall protection may not be provided by a vendor other than the Internet access provider and may not be priced out separately. A Wide Area Network can be eligible for funding as a part of Internet access if the service is limited to basic conduit access to the Internet. Paging services are eligible when integral, immediate, and Paging proximate to the education of students. Telephone Costs to subscribe to a telephone service are generally eligible for Service discount, including the costs for the following telephone services: 800 service, e.g., a toll-free telephone number for students to contact school regarding questions about homework Centrex Local phone service Long distance telephone service POTS ("Plain Old Telephone Service") Radio loop Satellite Wireless telephone services, e.g., cellular service and Personal Communications Services (PCS) See the Internet Access category for the eligibility of Wireless Internet access/e-mail plans for portable electronics Shared telephone service (only that portion of the shared service relating to the eligible use and location may receive discounts) Various payment options may be used with these eligible services, and phone bills may include billing terms, such as, flat rate, local measured service, and message rate service. Phone calling cards may also be eligible, if they are used for an educational purpose. Service to an eligible location for educational or library purposes can provide voice communication, fax connections, modem connections, 911 or an alarm. Telephone Telephone features indicated in this section are eligible for discount if they are a component part of a telephone service. Service Components Generally, this requirement means that these charges will appear on the same bill as the telephone service itself. 900\976 Call blocking Text messaging Custom calling services Direct Inward Dialing (DID) Directory assistance charges

An inside wire maintenance plan is eligible as a component part of

|                             | a telephone service only if charges are minimal.   |  |
|-----------------------------|--|--|
| Voice Mail<br>Service       | A voice mail service is eligible.  |  |
|                             | Voice mail equipment may be requested in the Internal Connections category of service, but funding is not available for end user products, such as answering machines.   |  |
| Web Hosting                 | A web hosting service that provides a means for a school or library to maintain a website on the Internet is eligible. This will include storage, access, and website administration tools for the creation and maintenance of the website. In addition, web hosting may include password-protected pages, interactive communication features such as blogging and webmail, and other features that facilitate real-time interactive communication, such as instant messaging and chat.  Note: Domain name registration is also eligible if it is necessary for the creation of a school or library website. |  |
| Wireless<br>Internet Access | A wireless Internet access service is eligible under the same provisions as wired access to the Internet.  |  |
|                             | A <u>wireless Internet access service</u> designed for portable electronic devices is eligible if used for educational purposes. Off-campus use must be removed by cost allocation. Applications (including GPS) for wireless devices are not eligible for discount. Service/Data charges dedicated solely to the provision of these applications are not eligible and require cost allocation.  |  |
|                             | Mobile hotspot service designed for portable electronics is eligible if used for educational purposes. Off-campus use must be removed by cost-allocation. Hardware costs of the mobile hotspot embedded in or connected to the end-user device are not eligible.   |  |

NOT Eligible for Erate Funding as a Priority One service The following charges are **NOT ELIGIBLE** for E-rate support:

- *End User Equipment.* Support is not available for end-user equipment.
- <u>Ineligible Fiber Costs.</u> Special construction charges to build out dark fiber connections from an applicant's facilities to an off-premises fiber network are NOT eligible. Special construction charges include design and engineering costs, project management costs, digging trenches and laying fiber.
- -Modulating Equipment. The purchase and ownership of modulating electronics associated with lighting dark fiber is NOT eligible as Priority One telecommunications but if it is on premises, it may be eligible under the priority two internal connections category if it meets the definition of internal connections. Modulating electronics on applicant-leased dark fiber that is leaving the school premises is NOT eligible.
- -<u>Dark Fiber Warehousing.</u> Applicants are also not permitted to use E-rate discounts to acquire unneeded capacity or warehouse dark fiber for future use.
- -The <u>non-telecommunications components</u> of a distance learning service, video service, or interactive television service, such as a scheduling service or services for creation, maintenance, and storage of content are not eligible.
- -Services that provide voice, video, or data connectivity exclusively within school or library grounds are not eligible for Priority One funding but may be eligible as <a href="Internal Connections">Internal Connections</a>
- Services to ineligible locations are not eligible.
- Applications (including GPS) for wireless devices are not eligible for discount. Charges for services used solely for the provision of these applications are not eligible.
- -Ineligible charges related to telephone service.
  - End-user equipment
  - 900\976 service
  - Broadcast "Blast" Messaging
  - <u>Direct Broadcast</u> and other services that provide broadcast content or cable television
  - <u>Directory advertising</u>
  - Extra costs for directory listings
  - Payphone
  - Reverse directory assistance
  - Charges for creation, configuration, or maintenance of content
  - Services that are not related to voice services, such as monitoring services for 911, or an <u>alarm telephone line</u>Telephone services that connect to a residential facility or home, except as allowed by the Commission in FCC 10-175 for the residential areas of residential schools that serve unique populations
- -Ineligible charges related to Internet access.

- Internet access that provides features or content that go beyond basic conduit access to the Internet including specialized services such as Virtual Private Network services
- Charges for creation, configuration, or maintenance of content
- <u>Internet</u> content or charges for the creation or display of information. Applicants may accept an Internet Access service with minimal content included if the content meets the limitations for Ancillary Use. (See <u>Special Eligibility</u> <u>Conditions</u> below for further information on Ancillary Use.)
- Online backup solutions
- Costs attributable to the creation or modification of information, or design such as a <u>web site creation fee</u> or content maintenance fees.
- Charges to access Internet content or limited-access information
- Charges for distance learning or video conferencing utilities, such as web meetings or online collaboration solutions, even if provided via the Internet
- Software, services, or systems used to create or edit Internet content
- Internet2 membership fees or dues
- Training regarding the use of the Internet
- Costs for training provided via the Internet
- Electronic library/on-line public access and associated software

Separate pricing for the following components when not included in the standard configuration of an Internet access service are also **NOT ELIGIBLE**:

- Caching
- Content <u>filtering</u>
- Web Casting

# - Ineligible charges related to web hosting

- Costs attributable to the creation or modification of information, or design such as a <u>web site creation fee</u> or content maintenance fees.
- Content supplied as part of a web hosting service created by third-party vendors or the web hosting service provider itself and any features or software involving data input or retrieval other than the provision of applicant-created content for an educational purpose (e.g. teacher web pages or blogs).
- The parts of a web hosting service including, but not limited to, any portion of tools, capabilities or integration

with other systems such as: Student Information Systems (SIS); databases; student attendance or grades or grade management; course scheduling; tests or testing systems; on-line/interactive education systems; and learning/education management systems. (An eligible web hosting service will also not include support for the applications necessary to run online classes or collaborative meetings).

# **Priority Two: Internal Connections**

# **Eligibility Requirements for All Internal Connections:**

Internal Connections are components located at the applicant site that are necessary to transport information to classrooms, publicly accessible rooms of a library, and to eligible administrative areas or buildings. Internal Connections include connections within, between or among instructional buildings that comprise a school campus or library branch, but do not include services that extend beyond the school campus or library branch.

Components at the applicant site are eligible only if they are an essential element in the transmission of information within the school or library. The components must be necessary to transport information to the individual classrooms or public areas of a library.

Internal Connections do not include services that extend across a public rightof-way beyond the school or library facility.

Funding for Internal Connections is subject to the provisions of the "<u>Two-in-</u>Five Rule."

| Function                     | Description  |  |
|------------------------------|--|--|
| Cabling/<br>Connectors       | <u>Cabling</u> , <u>connectors</u> , and related components used for eligible voice, video, and data transmission within an eligible location are eligible for discount. Eligible components include:  |  |
|                              | <ul> <li>Cable (e.g., copper, fiber, coax, twisted pair)</li> <li>Connectors</li> <li>Jacks, panels, <u>faceplates</u> and <u>wire managers</u></li> <li>Conduit and raceway</li> <li>Other cabling components necessary to transport</li> </ul> |  |
|                              | information to the individual classrooms or public areas of a library.   |  |
|                              | Consumable components are eligible only when included as part of the original installation of eligible components.   |  |
|                              | Eligibility limitations If cabling or cabling components are used for both eligible and ineligible purposes, the cost of the ineligible portion must be cost allocated.  |  |
| Circuit Cards/<br>Components | Circuit cards and related components, such as memory modules/Random Access Memory (RAM), are eligible if they are necessary for adequate performance of an eligible component, for example, an eligible PBX, router, or server.                  |  |
|                              | Network interface cards that are separately priced or used in eligible equipment are eligible.   |  |

Processors and a processor terminator card are eligible if used in an eligible component. Phone modems may be eligible if used with an eligible server or other eligible device for providing remote dial-in network access, if the remote access is limited to connections from eligible locations. Data Components used to transport information from telecommunication or Internet access facilities to the Distribution individual classrooms or public areas of a library are eligible. Such components may include: Access Points used in a LAN environment Multiplexers used as part of a LAN Network Switches are eligible for discount when used for an eligible purpose Routers are eligible for a discount when used for an eligible purpose Wireless LAN Controllers Voice/Video over IP components are eligible as Internal Connections. Components such as those indicated above are typically configured into a <u>local area network</u> or <u>wireless</u> area network. Some products may have modules or features that are not eligible, (e.g., content filtering, network management, and caching). If these ineligible components are available separately, or the applicant specifically seeks the ineligible functions, their cost must be subtracted from the amount eligible for discount. Data Protection Data protection components are used to ensure the continued operation of eligible equipment by protecting equipment and computer files from environmental or security hazards. The following components are eligible if used to provide basic and reasonable measures for data protection: Firewall **Proxy Server** Tape Backup when used as part of an eligible server Virtual Private Network Tape backup cartridge units are eligible when used as part of an eligible server. A cartridge included with a tape backup may be provided as an integral component of the backup unit, if the cartridge is part of the standard product configuration and provided at

no additional cost.

An <u>Uninterruptible Power Supply (UPS)/Battery Backup</u> that protects eligible equipment is eligible as a data protection component, but no funding will be provided for UPS systems that can provide continued backup power for substantial periods in excess of that necessary for basic power protection.

The following components used for the reliable operation of a UPS are eligible:

- UPS Interface Expander
- Relay I/O Module

### Interfaces, Gateways, Antennas

Interfaces, gateways, and antennas represent miscellaneous components that are eligible when used for an eligible purpose to transport information from telecommunications or Internet access facilities to the individual classrooms or public areas of a library.

The following components are generally eligible:

- Bridge
- <u>Cable Modem</u> (but not for receipt of cable TV service; may also be leased as part of Internet access service)
- <u>Channel Service Unit/Data Service Unit (CSU</u> (may also be leased as part of Priority One service)
- Copper-to-Fiber
- FRAD
- Gateway
- Interface/Edge Device
- Network Interface Device
- Media Converter
- Terminal Adapter
- <u>Transceiver</u>
- Voice/Fax network module

### Eligibility limitations for antennas

Antennas and related components, such as <u>satellite</u> dishes used for eligible purposes, are eligible for discount if they are priced separately on a contract or are sold separately. Antennas embedded in ineligible equipment such as computer workstations are not eligible.

While an antenna <u>mast</u> that supports eligible Internal Connections is eligible, large antenna towers are not eligible as Internal Connections.

#### Servers

Computers used as <u>servers</u> or similar centralized functions are eligible if the use is necessary to transport information to the individual classrooms or public areas of a library.

A server may be eligible depending on how it is used. An

eligible server must serve as a conduit for information rather than as a source for content. Servers typically provide multiple functions. If servers are used for both eligible and ineligible purposes, the cost of the ineligible portion must be removed by cost allocation. The following servers are eligible:

- <u>Dynamic Host Configuration Protocol (DHCP)</u>
- Domain Name Service (DNS)
- E-mail
- Firewall, or Proxy Server

The following servers are eligible only in certain cases:

Remote Access Components— Eligible if steps are taken to ensure that remote access is limited to connections from eligible locations. Remote access cannot be provided to homes or other non-school or non-library sites, other than eligible school-based residences and dorms.

<u>Terminal Server</u>— Eligible to the extent that the use meets the other eligible server types indicated in this section, but not eligible as a source for ineligible software applications or other ineligible uses.

<u>Web Server</u>— Eligible if used to display content to users of the Internet, but not eligible as a source for software applications, database functions, or storage of end-user files.

One <u>monitor</u> per eligible server or other eligible component requiring a visual display is eligible for discount. However, special-purpose devices, such as large screen monitors, are not eligible.

A <u>KVM switch</u> ("keyboard-video-mouse" switch) is eligible if cost-effective in comparison to the individual components necessary.

#### Software

Specific types of computer software are eligible for discount.

Operating system software, such as network operating system software required to obtain operation of an eligible component, is eligible, including functionality provided with the core operating system at no cost. Additional software products available separately that provide optional operational features are not eligible for discount.

<u>E-mail</u> software that is a server-based, shared product is eligible. If such a software product provides substantial additional functionality that is not eligible, such as <u>archiving</u>, database, workflow, or groupware features, only the e-mail portion of the product is eligible and the cost of the ineligible portion must be <u>cost allocated</u>.

E-mail software or other eligible components that include content filtering as an integral component part are eligible, but a separately priced content filtering module or product is not eligible. Software for a server-based, shared voice mail system is eligible. Software for server based, VoIP user licenses are eligible. Client Access Licenses for eligible software products are eligible Virtualization software that is a server based, shared product is eligible if used for an eligible server function. If such a software product is used for or provides substantial functionality that is ineligible, such as archiving, applications, network management, a cost allocation to remove the ineligible functionalities is required. Storage Devices Storage devices provide electronic data storage on magnetic or other media. Devices include hard disk drives, CD ROM drives, DVD drives, and floppy disk drives. Storage products may be used to store the operating system of an eligible product, such as a network server used for an eligible purpose. (See the entry for Servers for further information.) In addition, storage products may be used for eligible e-mail files but not for e-mail archiving. An eligible server or other eligible component that provides a storage product, such as a DVD drive, as an integral component part, at no additional cost, is eligible. Telephone Centralized components that are an essential element in the Components transport of telephone services within a school or library are eligible. This includes: Private Branch Exchange (PBX) Key System (KSU) Voice Mail Wireless VoIP Telephony Equipment In addition, the following features are also eligible: Automatic Route Selection (ARS) E911 Reader Board Voice Compression Module Voice Interface Card One switchboard/attendant console necessary for operation of

|                                     | each eligible PBX or eligible Centrex telephone service is eligible.  An intercom system that is an integral component of a PBX or   |
|-------------------------------------|--|
|                                     | other eligible product that is included in the cost of the eligible component is eligible  |
| Video<br>Components                 | Centralized <u>video</u> necessary to transport information to the individual classrooms or public areas of a library are eligible. This includes:   |
|                                     | <ul> <li>CODEC</li> <li>Master Control Unit</li> <li>Multipoint Control Unit</li> <li>PVBX</li> <li>Video Amplifier</li> <li>Video Channel Modulator</li> <li>Enhanced Multimedia Interface</li> </ul>   |
|                                     | Equipment that is used to control the programming, distribution, and selection of video content may be eligible, if used in the transport of information to individual classrooms or public areas of a library. However, such components are not eligible if used in end-user equipment and/or are operated directly by end-users. |
| Other Eligible Internal Connections | Documentation in hard copy or electronic form is eligible for discount if it is basic and is provided as part of the purchase of eligible components.  |
| Components                          | Racks are eligible only to the extent that the components they contain are eligible. A surge protector provided as an integral component of a rack or cabinet, without a separately identifiable cost can be included in the cost of the rack or cabinet, but a separately priced surge protector is not eligible.                 |
|                                     | System improvements and upgrades to eligible components are eligible for discount. Memory upgrades, for example, to eligible servers are eligible, but memory upgrades would not be eligible in end-user workstations.   |
|                                     | Please see the <u>Miscellaneous</u> section of this document for additional entries applicable to Internal Connections, such as charges for installation and configuration.  |

NOT Eligible for E-rate Funding as Internal Connections Components Products and services are only eligible as Internal Connections if they are an essential element in the transmission of information within the school or library.

The following components are **NOT ELIGIBLE**:

- Asbestos removal
- Broadcast
- Electrical system upgrades
- Multimedia content, such as encyclopedias on CD ROM, video information, etc., and also <u>multimedia kits</u>
- Intercom and public address (PA) system
- Spare parts
- External <u>speakers</u> (except when provided at no cost as an integral part of an eligible component)
- <u>Test Equipment</u>
- Consumable Kits which contain installation tools
- Wiring and components providing electrical service or for radio or television broadcast or cable services
- <u>Network interface cards</u> that are embedded in ineligible equipment (such as end-user equipment) or included in the pricing for ineligible equipment
- <u>Phone modems</u> that are provided in or with end-user equipment, or used to provide dial-in access from ineligible locations such as homes or other non-school or non-library sites
- Lightning Arrestor
- Surge Protector
- Power Distribution Units
- Power Strips
- Disaster Recovery
- Environmental Monitoring
- Components that are installed in standby mode, redundant, not active and online, or otherwise not an essential element in the transmission of information within the school or library

#### Ineligible Servers:

- Storage of application software, databases accessed by end users, or end-user files other than e-mail files
- End-user <u>personal computers/workstations</u>, even if the device also provides server functionality
- <u>Caching</u> server and print server. (However, caching and print server features provided by the core network operating system may be utilized if the principal function of the server is for other purposes that are eligible).
- <u>Laptop</u> (presumed to not be eligible because a laptop is typically used as an end user workstation).

## Ineligible Software:

- All end-user software such as curriculum and productivity software
- <u>Softphones</u> for VoIP
- Application Software other than server-based, shared e-mail
- Software used to develop new applications
- Network management software
- Operating system software for end-user computers
- Security software/Utility software, such as anti-virus and anti-spam software
- Client Access Licenses for ineligible software products

#### Ineligible Storage:

- Devices used to supplement storage requirements of personal computers on a network. For example, storage devices are not eligible if used to store the following information: end-user files other than eligible e-mail files; application software; other ineligible software; archival information including archived e-mail files; caching information
- Storage devices in end-user components, such as enduser computer workstations
- Consumable <u>storage</u>, such as floppy disks, recordable CD ROM media, and <u>cartridge magnetic tape</u>
- Video Content Storage

#### Ineligible Data Protection Components:

- Intrusion Detection/Intrusion Prevention
- Online Backup Solutions
- Tape backup cartridge units when part of a PC or workstation
- Cost of purchasing additional or separate tapes

## <u>Ineligible Interfaces, Gateways, Antennas:</u>

Antennas and other components used for the receipt of overthe-air radio and television broadcast signals or for radio signals from cable television operators.

# <u>Ineligible Telephone Components</u>:

- Automatic Call Distribution System (ACD)
- Call Accounting System
- <u>Call Sequencer</u>
- Homework Hotline
- Station Message Detail Recording (SMDR)
- An intercom or public address system

#### <u>Ineligible End-user Equipment</u>:

- <u>Computer workstations</u> including personal computers and laptops
- End-user telephone sets
- Fax machine
- Cameras
- Microphones
- Videotape recorders
- Personal digital assistants, smartphones, and tablets
- CD/DVD player
- Pager
- Printer
- Two-way radio
- End-user <u>telephones</u> and end-user <u>voice mail</u> such as answering machines are not eligible. In addition, telephone components not essential for the transport of telephone services within the school or library are not eligible (unless included as an integral component of a standard product offering for an eligible product, at no additional cost).
- Interactive White Boards

## **Ineligible Video Components:**

- End-user video equipment and equipment for the creation of video content is not eligible for discount. Examples include video monitors, televisions, video cameras, and video recorders and playback devices.
- <u>Broadcast and cable television equipment</u> used for the display or distribution of broadcast and cable television signals

See the <u>Miscellaneous</u> section of this document for additional entries applicable to Internal Connections. For example, finance charges and termination charges are not eligible.

# **Priority Two: Basic Maintenance of Internal Connections**

Basic maintenance of internal connections (BMIC) ensures the necessary and continued operation of eligible internal connection components at eligible locations.

Funding will be provided for the eligible portion of a technical support contract that includes services that exceed BMIC, if the ineligible portion of the contract can be cost allocated. Technical support contracts that cannot be cost allocated to remove costs that are beyond BMIC, are ineligible in their entirety.

All requests in this category are for services to be delivered within the July 1 to June 30 Funding Year.

Although Internal Connections is subject to the provisions of the "<u>Two-in-Five Rule</u>," this rule does not apply to Basic Maintenance of Internal Connections ("BMIC").

# Maintenance and Technical Support of Internal Connections

Necessary basic maintenance services are defined as follows: "but for the maintenance at issue, the connection would not function and serve its intended purpose with the degree of reliability ordinarily provided in the marketplace to entities receiving such services without E-rate discounts." 47 C.F.R. § 54.506(b). The following basic maintenance services are eligible:

- Repair and upkeep of eligible hardware
- Wire and cable maintenance
- Basic technical support
- Configuration changes

Basic maintenance is eligible for discount only if it is a component of a maintenance agreement or contract for eligible components. The agreement or contract must specifically identify the eligible components covered, including product name, model number, and location. Reimbursements for BMIC will be paid for the actual work performed under the agreement or contract.

# NOT Eligible for E-rate Funding as Basic Maintenance of Internal Connections

The following products and services are **NOT ELIGIBLE**:

- <u>Unbundled Warranties</u>, including prepaid retainers for service that may not actually need to be performed.
- On-site technical support (*i.e.*, contractor duty station at the applicant site) when off-site technical support can provide basic maintenance on an as-needed basis, unless applicants present sufficient evidence demonstrating that on-site technical support is more cost-effective than utilizing off-site support.
- Services such as network management and 24-hour network monitoring.
- · Help desks that provide a comprehensive level of

support beyond basic maintenance of only eligible components.

In addition, software <u>Client Access Licenses</u> are not eligible as Basic Maintenance. However, Client Access Licenses for eligible software products may be eligible in the Internal Connections funding category.

Eligible basic maintenance does not include services to maintain ineligible equipment, to enhance the utility of equipment beyond the transport of information, or to provide diagnostic services in excess of those necessary to maintain the equipment's ability to transport information.

#### Miscellaneous

Additional miscellaneous services associated with Priority One and Priority Two services are eligible for funding. When requesting these services on the FCC Form 471, applicants should list these miscellaneous services in the same category as the product or service being installed or obtained—Telecommunications Services, Internet Access, Internal Connections, or Basic Maintenance of Internal Connections. The miscellaneous services and products in this section related to Telecommunications should be requested in the Telecommunications Services or Internet Access category, depending upon the nature of the service provider.

| Product Type<br>(Function)           | Description  |  |
|--------------------------------------|--|--|
| Installation and<br>Configuration    | Installation, activation, and initial configuration of eligible components are eligible if they are part of a contract or bid for those eligible components. Such eligible services may include basic design and engineering costs and basic project management costs, if these services are provided as an integral component of the installation of the relevant services. |  |
|                                      | In addition, on-site training is eligible as a part of installation services but only if it is basic instruction on the use of eligible equipment, directly associated with equipment installation, and a part of the contract or agreement for the equipment. Training must occur coincidently or within a reasonable time after installation.                              |  |
| Miscellaneous<br>Fees and<br>Charges | Fees and charges that are a necessary component of an eligible product or service are generally eligible, including:  • Change fees • Freight assurance fees   |  |
|                                      | Shipping charges   |  |
|                                      | The following fees and charges are eligible only if a contract with a vendor for eligible product or services specifically provides for these costs:   |  |
|                                      | <ul> <li>Per diem</li> <li>Travel time</li> </ul>  |  |
|                                      | A manufacturer's multi-year warranty for a period up to three years and provided as an integral part of an eligible component, without a separately identifiable cost, can be included in the cost of the component.   |  |
|                                      | Lease fees to rent or lease eligible components are eligible.  |  |

Taxes, surcharges, and other similar, reasonable charges incurred in obtaining an eligible product or service are eligible. This includes customer charges for universal service fees, but does not include additional charges for universal service administration.

A reasonable <u>contingency fee</u> is eligible only if it is a regular business practice of the service provider. This fee will be reimbursed only if the work is performed.

# Other Miscellaneous Components that are NOT Eligible

In addition to items indicated in other sections of this Eligible Services List, the following items are **NOT ELIGIBLE** for discount:

- Interest or finance charges
- Late payment fees
- Performance bond
- Termination charges

Any product or service that is <u>duplicative</u> of a service for which funding has already been requested. Services that provide necessary bandwidth requirements, such as multiple T-1 lines, when appropriate for the population served and the services to be received, are not duplicative.

<u>Failover</u> products or services are not eligible. Any stand alone products or services that are only utilized when the primary fails are not eligible.

Broadcast television, cable television, Instructional Television Fixed Service (ITFS), and satellite television are not eligible for discount.

Creation of software programs or functions, such as through computer programming is not eligible.

### <u>Ineligible Installation and Configuration:</u>

Consulting services not directly tied to and coincident with basic installation and configuration of eligible services are not eligible. Services and components that are **NOT ELIGIBLE** include, but are not limited to the following:

- Initial planning to determine the technology and/or components to be deployed.
- Network architecture design.
- Development of technology plans.
- Application assistance, program advice, and other activities not tied directly to actual installation and initial configuration of components.
- Labor costs for school and library personnel.
- Costs for contractor personnel to operate components.

| • | Costs for | network | management | software, | services, |
|---|-----------|---------|------------|-----------|-----------|
|   | and equip | ment.   | _          |           |           |

- Test equipment and tools.
  End-user training, such as training of teachers and staff in the use of covered services in their programs of instruction or for professional development.
- Construction costs, other than incidental charges to restore a facility to pre-installation conditions.

# **Special Eligibility Conditions**

The following section lists additional requirements relating to eligible services and products. The Universal Service Administrative Company also maintains documents providing more details regarding the administration of the E-rate program on the Schools and Libraries Division website, available at <a href="http://www.usac.org/sl/">http://www.usac.org/sl/</a>. These documents are not included by reference in this Eligible Services List.

| Ancillary Use                    | If a product or service includes ineligible functionality, then, in general, the proportionate cost of this functionality must be removed from funding requests through a cost allocation process. However, in certain limited cases, if any ineligible functionality is not significant and strictly ancillary to the principle uses of the product or service, the full product or service may be eligible for discounts.   |
|----------------------------------|---|
|                                  | The following conditions are considered when evaluating whether ineligible functionality is ancillary: (1) a price for the ineligible component cannot be determined separately and independently from the price of the eligible components, and (2) the specific package remains the most cost-effective means of receiving the eligible services, without regard to the value of the ineligible functionality. In addition, the applicant may not be specifically seeking one or more of the ineligible components.                             |
|                                  | Funding requests that include only a single price for components that contain both eligible and ineligible functionality, and fail to meet the requirements for Ancillary Use, are fully ineligible. Therefore, applicants are encouraged to utilize a cost allocation process to remove ineligible functionality whenever feasible. For further information, see <a href="Cost Allocation Guidelines for Products">Cost Allocation Guidelines for Products</a> and Services.   |
| Cost Allocation                  | If a product or service contains both eligible and ineligible features, an applicant may use cost allocation so that partial funding can be provided. Any cost allocation must be based on tangible information that provides a reasonable and appropriate delineation between the eligible and ineligible components. When no cost allocation is provided for funding requests that require cost allocation, USAC will contact the applicant to request such cost allocation. See the web document "Cost Allocation" for additional information. |
| Cost Allocation for File Servers | File servers and other components can be used simultaneously for multiple purposes, some of which are   |

eligible and some not eligible. Cost allocation is required to remove any ineligible functionality from funding requests. However, the exact usage of a file server or other product with multiple uses may be difficult to determine before the product is installed and utilized. A simplified method of cost allocation is available to accommodate this situation. It is based on a simple averaging process of the different functions of the product and is described more fully in the web document "Cost Allocation." Eligible Users and **Educational purposes**. E-rate support may be provided Locations only for eligible products or services that will be used primarily for educational purposes. Activities that are integral, immediate, and proximate to the education of students or the provision of library services to patrons, qualify as "educational purposes." The presumption is that activities on school or library property meet this standard. Residential schools that serve students with special circumstances – schools on Tribal lands; schools designated to serve students with medical needs; schools designed to serve students with physical, cognitive or behavioral disabilities; and schools where 35 percent or more of their students are eligible for the National School Lunch Program (NSLP) – are eligible for support. Some services outside of a school or library location may also be eligible for discount in certain cases, such as use by teachers or other school staff while accompanying students on a field trip or sporting event. The term "school or library property" includes a district office or similar facility, but does not include businesses or organizations separate from a school or library organization. For example, the facilities of a business that has contracted with a school to provide bus service do not constitute a location eligible for E-rate support. Employees of a school or library with a normal duty station at an eligible location are eligible users. Employees of a non-school or non-library activity, even if located on school or library property, such as a state government office with responsibilities other than education or library services (e.g., a division of motor vehicles), are not eligible users. Special Regulatory Telecommunications Services: If the applicant seeks a Requirements telecommunications service, support will be available only if the telecommunications service is provided by a telecommunications carrier, that is, a company that offers telecommunications services on a common carriage basis.

A telecommunications service is "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public...." All telecommunications carriers must be common carriers and are required by the Commission to file FCC Form 499A (Telecommunications Reporting Worksheet). Supported telecommunications services provided by telecommunications carriers include all commercially available telecommunications services. <u>Telecommunications</u>: Supported telecommunications can be provided in whole or in part via lit or dark fiber by any entity, including non-telecommunications carriers. Telecommunications is defined as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." **Internet access.** If the applicant seeks Internet access, support will generally be available only for basic conduit access to the Internet. "Internet access" is defined in section 54.5 of the Commission's rules. Some Internet Access services may include features that are not themselves eligible, such as specialized content, caching services, and/or filtering services. In general, funding requests that provide only a single price for a product or service that contains both eligible and ineligible functionality are fully ineligible. However, cost allocation may be used to provide separate pricing for the eligible and ineligible components. The <u>"Two-in-Five Rule"</u> allows each eligible entity to obtain Two-in-Five Rule support for Internal Connections funding requests every two out of five years. This limitation applies only to Internal Connections and not to requests appropriately categorized as Telecommunications Services, Internet Access, or Basic Maintenance of Internal Connections. Wide Area WAN Restriction. WANs cannot be built or Networks purchased using E-rate support but WAN facilities may be leased. Lease of Wide Area Network Infrastructure. Facilities that provide a Wide Area Network may be leased by applicants as a Priority One service. Limitations apply to the reimbursements that are available for initial implementation costs (leased equipment and its installation) of service provider infrastructure. The Wide Area Network Fact Sheet has further details about

exclusive access limitations, amortization requirements, and other eligibility conditions for lease of Wide Area Network functionality.

• WAN Versus LAN Components (On-Premise Priority One Equipment). For data and other networks, the distinction between Wide Area Network (WAN) functionality and Local Area Network (LAN) functionality is important. FCC rules establish a rebuttable presumption that a connection does not constitute an Internal Connection if it crosses a public right of way. In order to determine what may be properly funded as Internal Connections, a demarcation point between a Wide Area Network service and the Local Area Network components must be established. This approach is described more fully in the web document On-premise Priority 1 Equipment located in the SLD Reference Area of the USAC web site.

# Glossary

| 800 Service<br>( <u>Telephone Service</u> )                                | 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.  |
|--|--|
| 900/976 Call Blocking<br>( <u>Telephone Service</u><br><u>Components</u> ) | Call Blocking is a monthly or recurring telephone company charge for the blocking of calls, such as to 900 or 976 numbers. The blocking prevents callers from completing calls to 900 or 976 numbers.  |
| 900/976 Charges (NOT Eligible for Funding as Telecommunications Services)  | "900" is an area code used to reach a wide range of information providers. Examples of the information that may be provided via a 900 number are adult content programming, weather reports, lottery results, or caller voting for various topics such as television polls. 900 service calls are charged to the party originating the call. Charges for accessing 900 calls are often included in the toll charges on the local telephone bill. 976 service provides a local, pay-per-call telephone service. |
| 911/E911 Trunks/Lines<br>( <u>Telephone Service</u> )                      | 911 and E911 trunks or lines are dedicated telecommunications links specifically or exclusively used for connection between a school/library and a Public Safety Answering Point (PSAP).   |
| Access Point (Data Distribution)   | An Access Point is a base station in a wireless LAN. Access points are typically stand-alone devices that may plug into an Ethernet hub or server or may provide a repeater function for wireless networks.  |
| Alarm Telephone Line<br>(Telephone Service)                                | An alarm telephone line is a telecommunications line specifically dedicated to a school or library burglar or fire alarm system. It may be the equivalent of a POTS line or a dedicated line between the school or library and the alarm company.  |
| Antennas<br>( <u>Interfaces</u> )  | An antenna is a device for transmitting and/or receiving radio frequency signals.  |
| Application Software<br>(Not Eligible for E-rate                           | Application software applies to software accessed directly by end users, such as word  |

| <u>Funding as Internal</u><br><u>Connections Components</u> )   | processors, spreadsheets, utility, anti-virus, and graphics programs.  |
|---|--|
| Asbestos Removal (Not Eligible for E-rate Funding as Internal Connections Components)                       | Some older buildings were constructed using products that contain asbestos, which has been determined to be harmful to health. Renovations and installations in such buildings require special treatment, such as, asbestos removal.   |
| Asynchronous Transfer Mode (ATM) ( <u>Digital Transmission</u> <u>Services</u> )                            | ATM is a high-speed Digital Transmission<br>Service that can provide bandwidth of 622<br>Megabits per second or higher.  |
| Automatic Call Distribution<br>System (ACD)<br>( <u>Telephone</u> —Ineligible)                              | An Automatic Call Distribution (ACD) system, typically used with a PBX, provides a means of automatically distributing calls evenly on a next available agent basis, so that productivity is maintained and inbound calls are handled efficiently. The system also allows the monitoring of operation on a real-time basis. Additionally, some systems compile historic reports that may enable better utilization of resources for handling incoming calls. |
| Automatic Route Selection (ARS) (Telephone Components)  | Automatic Route Selection (ARS) is a PBX and Centrex service that allows for automatic selection of the most efficient and costeffective route. It may also be referred to as "least cost routing". By using the ARS feature, outgoing phone calls from PBX and Centrex stations are routed to the most cost-efficient service or facilities.  |
| Bridge<br>( <u>Interfaces</u> )   | A bridge is a data communications device that connects two or more network segments, often translating information from one type of network protocol to another.   |
| Broadband over Power Lines (BPL) ( <u>Digital Transmission</u> <u>Services</u> ) ( <u>Internet Access</u> ) | 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.                           |
| Broadcast and Cable Television Equipment (Video Components— Ineligible)                                     | Broadcast/cable equipment applies to equipment used in the transmission or receipt of broadcast TV, broadcast radio, broadcast satellite, or cable television service.   |

| Broadcast "Blast" Messaging (NOT Eligible for Funding as Telecommunications Services)      | Broadcast "Blast" Messaging is a service that allows for a message to be created and delivered to a user defined group typically via voice or text message.  |
|--|--|
| Cable Modem ( <u>Internet Access</u> ) ( <u>Interfaces</u> )                               | 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 cable television line.  |
| Cabling<br>(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<br>( <u>Servers</u> —Ineligible)<br>( <u>Storage Devices</u> —Ineligible)          | Caching is a method that stores recently accessed information. Caching components, such as, caching servers, store information locally so that the information is accessible more quickly than if it must be transmitted across a network from a distant server.                                       |
| Caching Service (Not Eligible for E-rate Funding as Internet Access Services)              | A caching service is a special high-speed storage mechanism at the border of a network and the Internet that holds frequently accessed Internet information, thereby reducing retrieval times for information often requested from the Internet.   |
| Call Accounting System (Not Eligible for E-rate Funding as Internal Connection Components) | A Call Accounting System records information about telephone calls. It can provide comprehensive information about call costs by associating call records with users, phone extensions, or profiles.   |
|  | Such systems may include Station Message Detail Recording (SMDR) or Call Detail Recording (CDR), which are software/hardware PBX components that provide the capability to generate reports on call details such as call duration, PBX station number, time and date, dialed number, and cost of call. |
| Call Sequencer (Not Eligible for E-rate Funding as Internal Connections Components)        | An Automatic Call Sequencer is a component used with a PBX or Key system. The call sequencer distributes incoming telephone calls among a select number of stations or telephones. Some call sequencers are designed to generate statistical reports on number of calls and how calls were handled.    |
| Cartridge Magnetic Tape<br>(Not Eligible for E-rate  | Cartridge magnetic tape is used in tape backup devices, and provides replaceable and archive   |

| Funding as Internal<br>Connections Components)                                      | storage capacity.   |
|---|---|
| CD/ DVD Player (Not Eligible for E-rate Funding as Internal Connections Components) | A Compact Disc or Digital Video Disc (CD/DVD) Player is a device that plays or reproduces the music, voice, and/or video from a CD or Digital Video Disc.   |
| Cellular Service<br>(Telephone Service)   | Cellular Service uses radio transmissions to provide a wireless telephone service.  |
| Centrex<br>( <u>Telephone Service</u> )   | 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.   |
| Change Fees<br>( <u>Miscellaneous Fees and</u><br><u>Charges</u> )                  | Change fees are charges imposed for the modification of an existing service.  |
| Channel Service Unit /Data<br>Service Unit (CSU/DSU)<br>(Interfaces)                | A CSU/DSU is a device that terminates a digital channel at a customer's premises. A CSU/DSU often serves as a demarcation between a local network and wide area network facilities.                                     |
| Circuit Cards<br>( <u>Circuit Cards</u> )   | Circuit cards provide microprocessors, transistors, and other components on a circuit board. Circuit cards often are designed to fit into a slot of a larger component, such as a telephone PBX, router, or computer.   |
| Client Access Licenses (Software)   | A Client Access License is a software licensing approach used by some vendors that provides authorization to access a software product.   |
| CODEC / Video Encoder<br>( <u>Video Components</u> )                                | A CODEC (coder/decoder), also known as a video encoder, is a device comprising an encoder and decoder in the same equipment. The CODEC produces a coded output and compresses and decompresses audio and video signals. |
| Conduit and Raceway<br>( <u>Cabling</u> )   | Conduit and raceway are metal or plastic pipe or channels used to protect cable.  |
| Conferencing Services (Other Eligible Telecommunications)                           | Conferencing Services provide a means for multiple users to participate in group discussions via telephone circuits or video facilities.  |
| Connectors<br>( <u>Cabling</u> )  | Connectors are devices that connect wires or fibers.  |
| Consumable Components (Cabling)   | Consumables consist of miscellaneous components that are depleted with use, such as tape, splicing materials, labels, and wire wrap.  |

| Consumable Kits (Not Eligible for E-rate Funding as Internal Connections Components) | Consumable Kits include installation tools and consist of miscellaneous components that are depleted with use, such as tape, splicing materials, labels, and wire wrap.   |
|--|---|
| Contingency Fee (Miscellaneous Fees and Charges)                                     | A contingency fee is a specific dollar allowance for possible unforeseeable elements that may occur within the scope of a project.  |
| Copper-to-fiber (TX-to-FX) Converter (Interfaces)                                    | A Copper-to-fiber converter, also known as a TX-to-FX converter, is a device that converts a copper connection to a fiber optic connection.   |
| Couplers<br>( <u>Cabling</u> )   | Couplers are passive devices that accept one input broadband signal and replicate it onto another or multiple outputs.  |
| Custom Calling Services (Telephone Service Components)                               | Custom calling services extend the features available with telephone service. Features available include (but are not necessarily limited to) call waiting, 3-way calling, speed calling, distinctive ring, and call forwarding.  |
| Dark Fiber Service<br>( <u>Dark Fiber</u> )  | Dark fiber refers to fiber optic cable for which the service provider has not provided modulating electronics.  |
| Digital Subscriber Line (DSL) (Telecommunications/Internet Access)                   | 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.         |
| Direct Broadcast Satellite (DBS) (Ineligible Telecommunications)                     | Direct Broadcast Satellite (DBS) is a technology that uses satellite to transmit TV programs to subscribers. The transmitted signals are received using individual rooftop antennas. Program reception of the subscriber is limited to those channels broadcast by a specific provider. |
| Direct Inward Dialing (DID) (Telephone Service Components)                           | Direct Inward Dialing (DID) service allows outside calls to be directed to a Private Branch Exchange station line without the use of an operator.   |
| Directory Advertising (NOT Eligible for Funding as Telecommunications Services)      | Directory Advertising is advertising in a telephone directory yellow pages, Internet, or elsewhere. This may be provided by the telephone company or another entity.  |
| Directory Assistance Charges (Telephone Service)                                     | Directory Assistance Charges are those charges assessed for calls made to 411 or other Directory Assistance numbers such as (201)   |

|  | 555-1212 for information. Typically charges are assessed on a per call basis.  |
|--|--|
| Directory Listings (NOT Eligible for Funding as Telecommunications Services)           | A telephone company directory contains an alphabetical listing, by name, of all telephone subscribers (except those requesting unlisted or non-published service). Typically, the initial directory listing is provided free of charge to the subscriber, but extra-cost services are available, such as additional listings, unlisted or non-published numbers, and bolded entries. |
| Disaster Recovery (Not Eligible for E-rate Funding as Internal Connections Components) | Disaster recovery describes a means of restoring service to a computer network that has suffered a disaster. Such costs may include the rental of a site that houses links and equipment that is modeled after the damaged network.  |
| Distance Learning ( <u>Digital Transmission</u> <u>Services</u> )                      | Distance Learning utilizes video and audio technologies to allow students who are remotely located from other students or the lecturer to participate interactively with the class.  |
| Documentation (Other Eligible Internal Connections Components)                         | Documentation includes support material provided in the form of paper or electronic media. It may include diagrams, blueprints, equipment specifications, or instruction manuals for services and products.  |
| Domain Name Registration<br>(Internet - Related Services)                              | A Domain Name indicates an address of location on the Internet. For the e-mail address portion of a symbolic abc@xyz.org, the domain name is xyz.org. Domain Name Registration is the registering of the name and the charge associated with the registration process.   |
| Domain Name Service (DNS)<br>( <u>Internet Access</u> ) ( <u>Servers</u> )             | Domain names, such as <a href="www.fcc.gov">www.fcc.gov</a> , are alphabetic, so they are easier to remember than the IP addresses on which the Internet is based. A Domain Name Service translates the alphabetical names input by users into the IP addresses used by Internet devices.  |
| DS-1<br>( <u>Digital Transmission</u><br><u>Services</u> )                             | DS-1 is a type of Digital 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.  |
| Duplicative Services (Other Miscellaneous Ineligible Components)                       | Duplicative services are those that deliver the same functionality, to the same population, in the same location, during the same period of  |

|  | time.   |
|--|---|
| Dynamic Host Configuration<br>Protocol (DHCP)<br>( <u>Internet Access</u> )<br>( <u>Servers</u> )        | Standard networks need each computer to have a unique address for communication to occur. Dynamic Host Configuration Protocol (DHCP) is a system that provides this unique address from a central computer so that each individual computer does not need to be separately configured.  |
| E911 Reader Board<br>( <u>Telephone</u> )  | The E911 Reader Board is adjunct hardware for a PBX and is used to access E911 Emergency service.   |
| Electrical System Upgrades (Not Eligible for E-rate Funding as Internal Connections Components)          | Electrical system upgrades refer to products and services that provide, upgrade, or enhance the provision of electrical power.  |
| E-mail<br>( <u>Software</u> )<br>( <u>Servers</u> )  | E-mail stands for "electronic mail." E-mail or electronic mail, is a system for sending text messages and other information across a network.   |
| E-mail Archiving ( <u>E-mail</u> ) ( <u>Servers</u> ) ( <u>Storage Devices</u> )                         | E-mail archiving is a form of electronic recordkeeping that often includes compressing e-mail files to make greater inbox space available.  |
| E-mail Service<br>( <u>E-mail</u> )  | An e-mail service provides for the transmission of text messages and other embedded data such as file attachments. It also enables the transmission of messages over a local network or the Internet.   |
| Enhanced Multimedia Interface (EMMI) (Video Components)  | The EMMI is an interface that gives PC and workstation users on ATM networks the ability to send and receive full-motion, high quality video, CD quality stereo and high speed data. Signals are transformed into ATM cells and transported optically, using the Synchronous Optical Network (SONET) standard.  |
| Environmental Monitoring Components (Not Eligible for E-rate Funding as Internal Connections Components) | Environmental monitoring components provide information about heat, humidity, or other factors in order to provide a warning system for conditions that may affect the correct operation of equipment. For example, an environmental monitoring card is sometimes available as an optional feature of an uninterruptible power supply and is used to monitor the environmental conditions of a rack, computer room, or data center. |

| Ethernet<br>( <u>Digital Transmission</u><br><u>Services</u> )                   | Ethernet is a type of Digital Transmission<br>Service. Traditionally, Ethernet operates at a<br>bandwidth commonly known as 10Base-T<br>which is equivalent to 10 megabits per second<br>(Mb/s). 100Base-T at 100 Mb/s and Gigabit<br>(1,000Mb/s) are also available.  |
|--|--|
| Faceplates<br>(Cabling)  | Faceplates are covers that fit over a jack, outlet, or dial.   |
| Failover (Other Miscellaneous Ineligible Components)                             | Failover is generally a component or service which is activated if the primary component or service loses its capability to function.  |
| Fax Machine (Not Eligible for E-rate Funding as Internal Connections Components) | A facsimile, or fax, machine is a device in which the image of a document is electronically transferred over the telephone network and printed out elsewhere.  |
| Fiber Optics or Fiber ( <u>Digital Transmission</u> <u>Services</u> )            | Fiber Optics is a technology that uses light to transport information and can provide a Digital Transmission Service.  |
| Filtering Service (Not Eligible for E-rate Funding as Internet Access Services)  | A filtering service protects users from dangerous or inappropriate content most often by selectively blocking certain words or certain Internet sites.   |
| Firewall (Internet Access) (Data Protection) (Servers)                           | 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.   |
| Flat Rate<br>( <u>Telephone Service</u> )  | Local telephone companies use several methods to bill customers for local phone service, such as Flat Rate, Message Rate, and Local Measured Service. Flat Rate is a billing method for telephone service that, for a set price per month, provides a user an unlimited number of local calls.                 |
| FRAD<br>(Interfaces)   | A Frame Relay Assembler/Disassembler (FRAD) is a communications device that breaks a data stream into frames for transmission over a Frame Relay network and recreates a data stream from incoming frames. A Frame Relay router serves the same purpose but provides more intelligence in avoiding congestion. |
| Frame Relay ( <u>Digital Transmission</u> <u>Services</u> )                      | Frame relay is a type of Digital Transmission<br>Service. Frame relay networks in the United<br>States support data transfer rates at T-1<br>(1.544 Mbps) and T-3 (45 Mbps) speeds.  |

| Freight Assurances<br>( <u>Miscellaneous Fees and</u><br><u>Charges</u> )                      | Freight assurance fees are fees assessed to the purchaser for the guarantee of safe delivery to their premises of goods, <i>i.e.</i> , they provide shipping insurance.   |
|--|---|
| Gateway<br>( <u>Interfaces</u> )   | A gateway is a network device that acts as an entrance to another network and often is used to connect two otherwise incompatible networks.   |
| Hard Disk Drives<br>( <u>Storage Devices</u> )   | Hard disk drives are storage devices that consist of magnetic platters that spin like a record player and magnetic pickup devices, called heads, that are like the needle of a record player. The magnetic platters and heads are sealed in a vacuum in order to maintain tight tolerances and enhance service life.  |
| Homework Hotline Equipment (Ineligible for E-rate Funding for Internal Connections Components) | Homework Hotline equipment includes an automated response or call routing system that provides information to callers about school assignments.   |
| Homework Hotline Service (Other Eligible Telecommunications)                                   | A Homework Hotline Service is typically provided as a toll-free telephone number for students to contact the school regarding questions on homework.  |
| Hub<br>( <u>Data Distribution</u> )  | Hubs are central connection points for some types of local area networks with interconnecting cabling from many individual devices, such as computer workstations, printers, servers, and other hubs.   |
| Inside Wire Maintenance Plan<br>( <u>Telephone Service</u> )                                   | An Inside Wire Maintenance Plan is a monthly recurring charge that provides for the repair, replacement, and maintenance of customer owned inside-premise wire. Cost of the service is sometimes included in regular monthly bills for local and long distance telephone services.  |
| Integrated Services Digital Network ( <u>Digital Transmission</u> <u>Services</u> )            | Integrated Services Digital Network (ISDN) is a type of Digital 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. |
| Interactive Television (Digital Transmission Services)   | Interactive TV (ITV) provides a means for a viewer to interact with the television set in ways other than controlling the channels,   |

|   | volume, and/or handling videotapes. In an educational setting, such as in a school, ITV provides a means for teachers and students who are remotely located in different places to conduct a class and to interact with each other. ITV also requires a special "set-top box" to be added to the existing television set.   |
|---|---|
| Interactive White Board (Not Eligible for E-rate Funding as Internal Connections Components)                        | An Interactive White Board is a device that allows for end-users to display information with a vast array of interactive features such as online annotation, the ability to control a personal computer, and distance learning.   |
| Intercom (Not Eligible for E-rate Funding as Internal Connections Components)                                       | An intercom is an internal communication system, originally consisting of multiple speaker/microphone devices connected into an amplifier system. Currently, most intercoms are a part of telephone systems, although separate intercom systems continue to be used in many schools.  |
| Interconnected Voice over Internet Protocol (Interconnected VoIP) (Telephone Service) (Internet - Related Services) | 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.  |
| Interface/Edge Device<br>( <u>Interfaces</u> )  | An Interface or Edge Device is a physical device that can pass packets between some types of networks and an <u>Asynchronous Transfer Mode</u> (ATM) network. The device may be a router or Ethernet-to-ATM switch that directly connects to an ATM network.  |
| Internet Access<br>(Internet Access)  | Internet access provides a connection to the Internet, which is the publicly available worldwide system of interconnected computer networks that uses agreed-upon technical standards based on the Internet Protocol (IP). Internet access provides a connection to a vast quantity of information and services, such as electronic mail and the documents and features of the World Wide Web. Service Providers for Internet access need not be telecommunications carriers. |
| Internet Content<br>(Not Eligible for E-rate  | Internet Content refers to all forms of information that are available on the Internet,   |

| Funding as Internet Access<br>Services)   | such as text, pictures, sound recordings, animation, and video clips.   |
|---|---|
| Internet2 (Not Eligible for E-rate Funding as Internet Access Services)               | Internet2 is a consortium of universities, industry, and government members that develop and deploy advanced network applications and technologies.   |
| Intrusion Detection/Intrusion Prevention (Ineligible Internal Connections Components) | Intrusion Detection/Intrusion Prevention functions in addition to firewalls to monitor, detect, and deter threats to a network from external and internal attacks.  |
| Key System (KSU)<br>( <u>Telephone Components</u> )                                   | A Key System, also known as Com Key System or a KSU, is a type of phone system that permits more than one telephone line, PBX extension, private line, or intercom line to appear on a single telephone.  |
| KVM Switch<br>( <u>Servers</u> )  | A keyboard-video-mouse (KVM) switch is a switchbox that is used to control two or more computers from a single keyboard, monitor, and computer mouse.   |
| Laptop / Notebook Computer (Servers—Ineligible)                                       | A laptop or notebook computer is a lightweight, portable computer designed for mobility.  |
| Lightning Arrestor<br>( <u>Data Protection</u> —Ineligible)                           | A lightning arrestor is a device that protects equipment from lightning strikes and static.   |
| Lit Fiber<br>( <u>Telecommunications</u> )  | Lit fiber refers to fiber optic cable for which the service provider provides modulating electronics to light the fiber.  |
| Local Area Network<br>( <u>Data Distribution</u> )                                    | A Local Area Network (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. A LAN consists of several components, including cabling, servers, computer workstations, network interface cards, printers, and data distribution equipment, such as network switches, hubs, and routers. |
| Local Measured Service<br>(Telephone Service)   | Local telephone companies use several methods to bill customers for local phone service, such as Flat Rate, Message Rate, and Local Measured Service. Local Measured Service typically allows an unlimited number of incoming calls. Outgoing calls beyond a certain threshold result in extra charges.   |

| Local Phone Service<br>(Telephone 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 (Telephone Service)                        | Long distance telephone service is provided by interexchange carriers and provides telephone service outside of a local calling area.  |
| Mast<br>(Interfaces)   | A mast is a pole or structure on which an antenna is placed.   |
| Master Control Unit<br>(Video Components)                                  | A Master Control Unit (MCU) is a device that controls the main operating functions of a video system.  |
| Media Converter<br>(Interfaces)  | A media converter is a module that converts one type of media to another type of media for network compatibility. The actual media can vary, such as fiber, coax, or twisted pair.   |
| Memory Modules / Random<br>Access Memory (RAM)<br>( <u>Circuit Cards</u> ) | A memory module is the electronic holding place for instructions and data that a computer's microprocessor can reach quickly. The module usually holds multiple Random Access Memory (RAM) chips. Common types are SIMM, DIMM, RDRAM, and SDRAM.   |
| Message Rate Service<br>(Telephone Service)                                | Local telephone companies use several methods to bill customers for local wireline service, such as Flat Rate, Message Rate, and Local Measured Service. Message Rate Service provides a certain number of "call units." Various call lengths and distances can use a different number of call units. Calls in excess of the message rate allocation result in additional charges. |
| Mobile Hotspot Service (Internet Access)                                   | Mobile hotspot service allows certain mobile devices to share their high speed mobile broadband with other users wirelessly.   |
| Monitor<br>( <u>Servers</u> )  | A monitor is the video display unit (television screen) that is used to display information from a computer.   |
| Multimedia Kits (Ineligible Internal Connections Components)               | Multimedia kits provide a package of hardware and software that adds multimedia capabilities to a computer. A multimedia kit may include a CD ROM or DVD player, a sound card, speakers, and a bundle of CD ROMs.  |
| Multiplexer<br>( <u>Data Distribution</u> )                                | A multiplexer is electronic equipment that allows two or more signals to pass over one   |

|  | communications circuit. The circuit may be a telephone line, dedicated line, or radio signal. It provides an economic approach for transporting, for example, up to 24 voice-grade lines on a single circuit.  |
|--|--|
| Multipoint Control Unit<br>( <u>Video Components</u> )   | A Multipoint Control Unit (MCU) is a bridging or switching device used for multipoint videoconferencing.   |
| Network Interface Cards<br>(NICs)<br>( <u>Circuit Cards</u> )  | Network interface cards (NICs) are electronic devices that connect workstations, servers, or other devices to a network. NICs work with the network software and computer operating system to transmit and receive messages on the network.  |
| Network Interface Device (Interfaces)  | A Network Interface Device (NID) is a component installed between a telephone network and the inside wire of a customer premises. The NID is usually provided by the telephone company and is the transition, or demarcation point, between the company's network and the customer's inside wiring.  |
| Network Management<br>( <u>Software</u> —Ineligible)   | Network Management is a system of equipment or software used in monitoring, controlling, and managing a communications network.  |
| Network Switch<br>( <u>Data Distribution</u> )   | 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 <a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/</a> dedicated bandwidth at each network port, rather than shared bandwidth among all ports. |
| OC-1<br>( <u>Digital Transmission</u><br><u>Services</u> )   | OC-1 stands for "optical carrier 1," which is a Digital Transmission Service that operates at 51.84 Megabits per second. Multiples of this bandwidth are also available, such as, OC-3 and OC-12.  |
| Online Backup Solution (Not Eligible for E-rate Funding as Internet Access Services) (Ineligible Internal Connection Components) | An Online Backup Solution provides off-site data storage generally accessible from any Internet connection.  |
| Operating System Software (Software)   | Operating System software enables the basic operations of a computer system or other electronic device. For example, it can configure the communication paths between memory and storage, and provides basic   |

|   | functions for other software to operate   |
|---|---|
| Pager (Ineligible Internal Connections Components)  | A Pager (also known as a Beeper) is the receiving end of a paging service and is a small device worn on the belt or carried in a handbag. Pagers may provide text or voice messages, or both.   |
| Paging Services<br>( <u>Paging</u> )  | Paging is a service designed to deliver a message to a person whose exact location is unknown. The service employs radio signals that activate a paging receiver carried by the intended recipient to deliver a text, numeric, or voice message.  |
| Payphone Telephone Service (NOT Eligible for Funding as Telecommunications Services)                                | Payphone (or coin) telephone service is provided in a public or semi-public place and requires the use of coins, credit card, pre-paid card, or other means of payment at the time of placing the call.   |
| Per Diem<br>( <u>Miscellaneous Fees and</u><br><u>Charges</u> )   | Per diem is a dollar amount designated to a vendor for daily expenses, such as, lodging and food. It may or may not include travel time.  |
| Performance Bond (Other Miscellaneous Ineligible Components)  | A Performance Bond, also known as a Bid Bond, is a legal obligation, generally obtained by the vendor or contractor from a third party, that guarantees the terms of the contract or agreement will be met. In the event of default or failure to meet the terms, the bond would be used to complete the contracted work.                       |
| Permanent Virtual Circuit (PVC) (Digital Transmission Services)   | Permanent Virtual Circuits (PVCs) are shared connections between end-points. PVCs play a central role in Frame Relay networks. They are also supported in some other types of networks, such as, X.25.  |
| Personal Communications<br>Services (PCS)<br>(Telephone Service)  | Personal Communications Services (PCS) is a digital wireless telecommunications service, similar to cellular service, but operating on different radio frequencies.   |
| Personal Computers/ Workstations ( <u>Servers</u> —Ineligible) ( <u>Ineligible Internal</u> Connections Components) | Personal computers, or workstations, are computers designated or designed as end-user equipment. They may operate in a stand-alone environment or may be connected to a host computer as part of a network. They are differentiated from computers configured as servers that are designed to route information to and from end-user equipment. |
| Personal Digital Assistant<br>(PDA)   | A Personal Digital Assistant (PDA) is a handheld device that can provide several functions such   |

| (Ineligible Internal<br>Connections Components)  | as calendaring, telephone, and e-mail. Some PDAs may also have wireless networking features.   |
|--|--|
| Phone Calling Cards<br>( <u>Telephone Service</u> )  | Phone Calling Cards generally have the appearance of a credit card and provide a means to make long distance calls from any phone. Charges for the call are subtracted from the calling card balance or are included in the calling card subscriber's monthly phone bill.  |
| Phone Modems<br>( <u>Circuit Cards</u> )   | Phone modems are devices that convert data signals into suitable form for transmission and receipt over a telephone line.  |
| POTS<br>( <u>Telephone Service</u> )   | "POTS" stands for "Plain Old Telephone<br>Service" and provides local telephone dial-tone<br>service.  |
| Power Strips/Power Distribution Units(PDU) (Ineligible Internal Connections Components)        | A Power Strip is a group of sockets that allow for multiple power cords to plug into a single device. A Power Distribution Unit is a power strip designed for data centers or racks with greater capacity and features than a power strip.   |
| Printer (Ineligible Internal Connections Components)   | A printer is a device that receives computer information and prints it on paper.   |
| Private Branch Exchange<br>(PBX)<br>( <u>Telephone Service</u> )                               | A PBX is a centralized telephone switching system located at a business or organization site. The PBX provides internal station-to-station dialing and access to the public switched network.  |
| Processor Terminator Card (Circuit Cards)  | A processor terminator card is a device installed in a multi-processor computer to signal the computer that only one processor is installed.   |
| Proxy Server ( <u>Data Protection</u> ) ( <u>Servers</u> )                                     | A proxy server is a device that sits between "trusted clients" (e.g., workstations inside an organization) and "untrusted clients" (e.g., the Internet) that provides security features and often times address translation. To the "untrusted clients", communication appears to be taking place with the proxy, even though the communication is passed to and from the trusted clients. |
| Public Address (PA) System (Telephone—Ineligible) (Ineligible Internal Connections Components) | A Public Address System allows the user to make announcements through the use of amplifiers and speakers.  |

| PVBX<br>( <u>Video Components</u> )  | A Private Video Branch Exchange (PVBX) is a PBX designed for video information. A PVBX can link classrooms or other locations together and can interconnect end-user and other equipment, such as cameras, monitors, and videocassette recorders.   |
|--|---|
| Racks and Cabinets (Other Eligible Internal Connections Components)                    | A rack is a metal supporting framework for mounting cables, equipment, and/or wires. A cabinet is an enclosure for equipment, terminating cables, connection devices, and/or wires.   |
| Radio Loop<br>( <u>Telephone</u> )   | 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. |
| Relay I/O Module<br>( <u>Data Protection</u> )   | A Relay I/O Module allows protection by an Uninterruptible Power Supply (UPS) for equipment not pre-designed for a UPS interface.   |
| Remote Access Components (Servers)   | Remote access components, such as a remote access router or communications server, allow users to access network resources by dialing in from an off-site location in order to connect their local computer with network devices.  Dialing in most cases typically utilizes standard telephone lines but, in some cases, may be based on other technologies.                      |
| Reverse Directory Assistance (NOT Eligible for Funding as Telecommunications Services) | Reverse Directory Assistance is a service that can use a phone number to provide the name and, in some cases, the address of the subscriber of that phone number.   |
| Router<br>( <u>Data Distribution</u> )   | 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, may provide features such as load balancing, and can provide trouble-shooting diagnostic capabilities.  |
| Satellite Dishes<br>(Interfaces)   | Satellite Dishes are antennas capable of receiving signals from and, in some cases, transmitting signals to communications satellites.  |

| Satellite Service<br>( <u>Digital Transmission</u><br><u>Services</u> )                                      | Satellite service provides communication between points on Earth by using an orbiting satellite as a communications relay point.   |
|--|--|
| Servers<br>( <u>Servers</u> )  | Servers are computers on a local area network that can provide access to files, software, printers, or other features that are shared among multiple users.  |
| Shipping Charges<br>(Miscellaneous Fees and<br>Charges)  | Shipping Charges are the charges associated with the delivery of products from their point of origin to the customer premises.   |
| Smartphone (Not Eligible for E-rate Funding as Internal Connections Components)                              | Mobile phone that offers more advanced computing ability and connectivity than a contemporary feature phone.   |
| Softphone (Not Eligible for E-rate Funding as Internal Connections Components)                               | A Softphone is end-user application software that allows users the use of a personal computer's microphone and speakers to make telephone calls.   |
| Software<br>( <u>Software</u> )  | Software is distinct from physical computer hardware and refers to the detailed instructions that operate a computer.  |
| Spare Parts (Not Eligible for E-rate Funding as Internal Connections Components)                             | Spare parts are components on hand to replace hardware that fails.   |
| Speakers (Not Eligible for E-rate Funding as Internal Connections Components)                                | Speakers are the components that provide sound from a computer, phone, intercom, or other device.  |
| Station Message Detail Recording (SMDR) (Not Eligible for E-rate Funding as Internal Connections Components) | Station Message Detail Recording (SMDR) and Call Detail Recording (CDR) are software/hardware PBX components that provide the ability to generate reports on call details. Those details include, but are not limited to, call duration, PBX station numbers, time and date, trunk route, dialed number, and cost of call. |
| Storage Media (Not Eligible for E-rate Funding as Internal Connections Components)                           | Storage media includes products such as floppy disks and recordable CD ROM that provide replaceable storage.   |
| Surge Protector (Not Eligible for E-rate Funding as Internal Connections Components)                         | Surge protectors provide electrical AC power outlets with circuitry that protects equipment against voltage spikes and electrical disturbances.  |

| Switchboard / Attendant<br>Console<br>( <u>Telephone Components</u> )                              | The operation of a PBX or Centrex system may require the use of a switchboard or attendant console for the transfer of incoming calls to the appropriate extension when systems are not equipped with Direct Inward Dialing. The switchboard or attendant console may include Direct Station Selection (DSS), which provides an easy means for transferring calls. |
|--|--|
| Switched Multimegabit Data<br>Service (SMDS)<br>( <u>Digital Transmission</u><br><u>Services</u> ) | Switched Multimegabit Data Service (SMDS) is a type of Digital 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.   |
| System Improvements and Upgrades (Other Eligible Internal Connections Components)                  | A system improvement or upgrade provides enhanced functionality to an existing product or configuration of products.   |
| T-1<br>( <u>Digital Transmission</u><br><u>Services</u> )  | T-1, which stands for Trunk Level 1, is a Digital 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.   |
| Tablet (Not Eligible for E-rate Funding as Internal Connections Components)                        | A complete mobile computer, larger than a mobile phone or personal digital assistant, integrated into a flat touch screen and primarily operated by touching the screen. It often uses an onscreen virtual keyboard or a digital pen rather than a physical keyboard.  |
| Tape Backup<br>( <u>Data Protection</u> )  | Tape Backup units provide copies of computer files on magnetic tape, for protection against a catastrophic failure. Tape backup technologies include QIC, DAT, 8mm, DLT, AIT, and ADR.   |
| Telephones (Not Eligible for E-rate Funding as Internal Connections Components)                    | Telephones, also known as telephone sets, telephone instruments, digital voice terminals, and voice terminals, are the end-user equipment used to transmit and receive telephone communications.   |
| Terminal Adapter<br>( <u>Interfaces</u> )  | A Terminal Adapter (TA) is a device that connects a computer to an external digital communications line, such as, an ISDN line.  |
| Terminal Server<br>( <u>Servers</u> )  | A Terminal Server is a specialized server that connects multiple terminals into a network. Traditionally, terminal servers were used to connect multiple "dumb" terminals into network resources. Today, they are also used to   |

|   | provide increased connectivity and performance for older computers workstations.   |
|---|--|
| Termination Charges<br>( <u>Other Miscellaneous</u><br><u>Ineligible Components</u> )             | Termination charges are fees assessed for the removal or discontinuation of a product or service.  |
| Test Equipment (Not Eligible for E-rate Funding as Internal Connections Components)               | Test Equipment is used to test hardware, software, cable continuity, telecommunications links, etc.  |
| Text Messaging<br>( <u>Telephone Service</u><br><u>Components</u> )                               | Text messaging or short message service (SMS) is a service that enables the transmission of alphanumeric messages, typically up to 160 characters.   |
| Transceiver<br>( <u>Interfaces</u> )  | A transceiver is a device that transmits and receives analog or digital signals. The term is used most frequently to describe the component in local area networks (LANs) that actually applies signals onto the network wire and detects signals passing through the wire. For many LANs, the transceiver is built into the network interface card (NIC). |
| Travel Time<br>( <u>Miscellaneous Fees and</u><br><u>Charges</u> )                                | Travel time refers to the time required for service provider personnel to travel to and/or from locations to provide eligible services.  |
| Trunk lines ( <u>Digital Transmission</u> <u>Services</u> )                                       | A trunk line is a communications path between two switching systems, such as equipment in a telephone company central office and a Private Branch Exchange (PBX). Central Office trunks connect a PBX to the central office switching system at the central office. Tie trunks connect two PBXs together.  |
| Two-Way Radio (Not Eligible for E-rate Funding as Internal Connections Components)                | Two-way radios are wireless end-user devices used to communicate, typically over short distances.  |
| Unbundled Warranty (Not Eligible for E-rate Funding as Basic Maintenance of Internal Connections) | A separately priced warranty allowing for broken equipment to be fixed or, in the event that the problem is beyond repair, replaced.   |
| Uninterruptible Power Supply<br>(UPS) / Battery Backup<br>( <u>Data Protection</u> )              | An Uninterruptible Power Supply (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.   |
| UPS Interface Expander (Data Protection)  | A UPS Interface Expander allows an Uninterruptible Power Supply (UPS) to provide power management to multiple devices.   |

| Video Amplifier<br>( <u>Video Components</u> )                               | A Video Amplifier is a device that strengthens the level of a video signal.   |
|--|---|
| Video Channel Modulator<br>( <u>Video Components</u> )                       | A Video Channel Modulator is a distribution box that takes standard video and audio input from video cameras, recorders, and other video components and distributes the signals to end users.   |
| Video Components<br>( <u>Video Components</u> )                              | Video components provide the capabilities and technologies to enable moving images on television screens or computer monitors.  |
| Video Content Storage<br>(Other Eligible Internal<br>Connections Components) | Video content storage enables the storage of videos and makes such videos available for retrieval at any given time.  |
| Video Service<br>( <u>Digital Transmission</u><br><u>Services</u> )          | Video services involve the transmission of visual images.   |
| Virtualization software<br>( <u>Software</u> )                               | Virtualization software allows for the creation of multiple virtual servers on a single server. The virtual servers share the hardware of the server upon which the software is installed.  |
| Virtual Private Network (VPN) Components (Data Protection)                   | A Virtual Private Network (VPN) uses encryption and/or tunneling services in order to provide highly secure communication over the public Internet or in some cases over point-to-point links.  |
| Voice Compression Module (Telephone Components)                              | A Voice Compression Module allows voice and fax traffic to share the same lines as data and LAN traffic.  |
| Voice Interface Card<br>(Telephone Components)                               | Voice Interface Cards (VIC) are usually components of a router or PBX system that interface with internal systems and the public switched telephone network. Examples include FXO Cards, E&M Cards, and FXS Cards.  |
| Voice Mail Components<br>( <u>Telephone Components</u> )                     | Voice mail components allow users to receive voice messages left by telephone callers and may have other features, such as message forwarding.  |
| Voice Mail Service<br>( <u>Voice Mail Service</u> )                          | A voice mail service allows users to receive voice messages left by telephone callers and may have other features such as message forwarding. A voice mail service is classified as an information service that is distinct from a telecommunications service or Internet access. |
| Voice/Fax Network Module (Interfaces)  | A Voice/Fax module is an access product that enables the transmission of multiprotocol  |

|   | data—voice, fax and LANover telecommunications services.   |
|---|--|
| Voice/Video over IP (VoIP) Components (Data Distribution)                           | Voice/video over IP (VoIP) components refer to equipment that utilizes the TCP/IP suite of protocols to provide voice and/or video communications.   |
| Web Casting (Not Eligible for E-rate Funding as Internet Access Services)           | Web Casting is a service provided over the Internet that delivers news or other content via web browser software or to an E-mail address. A user accesses a Web Casting site and chooses what news or content he/she wants to be informed about. Information content is then periodically delivered by the Web Casting supplier. |
| Web Hosting<br>(Internet - Related Services)  | A web hosting service is one that hosts a school's or library's website.   |
| Web Server (Not Eligible for E-rate Funding as Internal Connections Components)     | A web server is a computer server used to provide information to Internet users and can also be used to provide web-based software applications and other web-based functions.   |
| Web Site Creation Fee (Not Eligible for E-rate Funding as Internet Access Services) | A web site creation fee is a separate charge for creating a website.   |
| Wide Area Networks (WANs) ( <u>Digital Transmission</u> <u>Services</u> )           | A wide area network 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.  |
| Wire Managers<br>( <u>Cabling</u> )   | Wire managers are wire restraints to house or arrange wiring and cabling. They can be aluminum or plastic and may be rack-mountable.   |
| Wireless Internet Access<br>Service   | Wireless Internet Access Service provides Internet access to portable devices or other devices capable of receiving a wireless service.  |
| Wireless Local Area Network<br>( <u>Data Distribution</u> )                         | A Wireless Local Area Network provides the functionality of a local area network using wireless components rather than cabling.  |
| Wireless Local Area Network<br>Controller<br>( <u>Data Distribution</u> )           | A Wireless Local Area Network Controller is used in conjunction with access points to create a wireless local area network.  |
| Wireless PBX Adjunct<br>( <u>Telephone Components</u> )                             | A Wireless PBX Adjunct functions in conjunction with a Private Branch Exchange to enable use of cordless telephones on an organization's premises.   |

| Wireless Telephone Services (Telephone Service)                                  | Wireless telephone services provide connection to the public switched telephone network similar to traditional phone service, but utilize portable electronic devices and radio frequencies rather than hard-wired handsets. |
|--|--|
| Workstation (Not Eligible for E-rate Funding as Internal Connections Components) | See the entry for Personal Computers/Workstations for additional information.  |

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