## Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
Modernizing the E-rate Program for Schools and Libraries	) ) )	WC Docket No. 13-184
	ORDER	

Adopted: September 12, 2016 Released: September 12, 2016

By the Chief, Wireline Competition Bureau:

#### I. INTRODUCTION

1. In this Order, the Wireline Competition Bureau (Bureau) adopts the proposals we made in the *ESL Public Notice*<sup>1</sup> and releases the eligible services list (ESL) for funding year 2017 for the schools and libraries universal service support program (more commonly referred to as the E-rate program).<sup>2</sup> We also authorize the Universal Service Administrative Company (USAC) to open the annual application filing window no earlier than 60 days after release of this Order.<sup>3</sup>

#### II. BACKGROUND

- 2. Sections 254(c)(1), (c)(3), (h)(1)(B, and (h)(2) of the Communications Act collectively grant the Commission authority to specify the services that will be supported for eligible schools and libraries and to design the specific mechanisms for support.<sup>4</sup> Pursuant to this authority, the Commission delegated responsibility to the Wireline Competition Bureau to update the ESL annually, as necessary.<sup>5</sup>
- 3. In the *ESL Public Notice*, we sought comment on the proposed revisions to the ESL for funding year 2017.<sup>6</sup> Specifically, we proposed revising the description of leased dark fiber in the listing of Category One services to highlight difference between leased dark fiber and self-provisioned fiber under our E-rate program rules, removing the term "special construction" from Note 2 under eligible Category One data transmission services and Internet access services to better reflect the existing requirement that applicants seeking bids for leased dark fiber, with or without special construction, must also seek bids for the needed connectivity over leased lit fiber and must fully consider such bids, moving the location of certain eligibility explanations for Category One and Category Two services, and providing a new explanation of how to classify connections between multiple buildings of a single school.<sup>7</sup> We also sought comment on any further modifications to the ESL regarding the options

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<sup>&</sup>lt;sup>1</sup> Wireline Competition Bureau Seeks Comment on Proposed Eligible Services List for the E-rate Program, WC Docket No. 13-184, Public Notice, 31 FCC Rcd 5715 (WCB 2016) (ESL Public Notice).

<sup>&</sup>lt;sup>2</sup> See Appendix C, Schools and Libraries Universal Service Support Mechanism, Eligible Services List for Funding Year 2017 (FY2017 ESL). The ESL specifies the services and products that are eligible for E-rate discounts.

<sup>&</sup>lt;sup>3</sup> 47 CFR § 54.502(d) (requiring the final ESL to be released at least 60 days prior to the opening of the application filing window).

<sup>&</sup>lt;sup>4</sup> 47 U.S.C. §§ 254(c)(1), (c)(3), (h)(1)(B), (h)(2).

<sup>&</sup>lt;sup>5</sup> See 47 CFR § 54.502 (detailing the procedures for seeking comment on a draft ESL).

<sup>&</sup>lt;sup>6</sup> ESL Public Notice, 31 FCC Rcd at 5715.

<sup>&</sup>lt;sup>7</sup> *Id.* at 5715-16.

available for purchasing affordable high-speed connectivity.<sup>8</sup> The comment cycle closed on July 20, 2016.

#### III. DISCUSSION

- 4. Having considered the record, we update the ESL for funding year 2017 by adopting the four changes proposed in the *ESL Public Notice* with small modifications, for the reasons described below. We also decline to make any further changes to the ESL, including any of the changes proposed in the comments and reply comments received in response to the notice.
- 5. First, we adopt the proposed changes to the description of eligible leased dark fiber to read "Leased Dark Fiber (including dark fiber indefeasible rights of use (IRUs) for a set term)." As described in the *ESL Public Notice*, this revision is intended to further explain the distinction between leased dark fiber and self-provisioned fiber under E-rate program rules. We also adopt the proposal to delete "special construction" from Note 2 under eligible Category One data transmission and Internet access services, finding that this better reflects the existing requirement that applicants that seek bids for leased dark fiber must also seek and fully consider bids for leased lit fiber service, regardless of whether the funding request includes special construction. We received no comments objecting to these changes. Further, we make slight further revisions to that same Note to make explicit that, consistent with section 54.503(c)(1)(iv) of our rules, applicants that seek bids for self-provisioned broadband networks must also seek bids for the needed connectivity via broadband services provided over third-party networks and must fully consider such bids.
- 6. Second, we adopt the change proposed in the *ESL Public Notice* to revise the title of the section previously titled "Eligibility Explanations for Certain Category One Services" to include Category Two services, and to move it so that it appears in the ESL after the description of Category Two services. This change better reflects the fact that each of the eligibility explanations include a discussion of both categories of service, and we received no comments objecting to this proposed change.
- 7. Also, absent objections in the record, we adopt the proposal in the *ESL Public Notice* to provide an explanation of how to classify connections between multiple buildings of a single school for the purposes of requesting Category One or Category Two support. As explained in the *ESL Public Notice*, the E-rate rule's definition of WAN explicitly excludes "connections between or among instructional buildings of a single school campus or between or among non-administrative buildings of a single library branch." The rules also specify that internal connections eligible for Category Two

<sup>&</sup>lt;sup>8</sup> *Id.* at 5716.

<sup>&</sup>lt;sup>9</sup> *Id.* at 5715.

<sup>&</sup>lt;sup>10</sup> See Modernizing the E-rate Program for Schools and Libraries, Connect America Fund, WC Docket Nos. 13-184, 10-90, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538, 15550, para. 31 (2014) (Second E-rate Modernization Order) ("Dark-fiber leases and other dark-fiber service agreements are commercial arrangements in which a broadband customer purchases use of a portion of a provider-owned and maintained fiber network separately from the service of lighting (i.e. transmitting information over) that fiber."); Schools and Libraries Universal Service Support Mechanism, A National Broadband Plan For Our Future, CC Docket No. 02-6, GN Docket No. 09-51, Sixth Report and Order, 25 FCC Rcd 18762, 18772, para. 19 & n. 51 (2010) ("For purposes of the E-rate program, we will consider Indefeasible Rights of Use (IRU) purchase agreements as a lease of dark fiber.").

<sup>&</sup>lt;sup>11</sup> ESL Public Notice. 31 FCC Rcd at 5715.

<sup>&</sup>lt;sup>12</sup> Second E-rate Modernization Order, 29 FCC Rcd at 15553, 15557, paras. 39, 47-48.

<sup>&</sup>lt;sup>13</sup> 47 CFR § 54.503(c)(1)(iv).

<sup>&</sup>lt;sup>14</sup> ESL Public Notice, 31 FCC Rcd at 5716.

<sup>15 47</sup> CFR § 54.500.

support are services "necessary to transport or distribute broadband within one or more instructional buildings of a single school campus or within one or more non-administrative buildings that comprise a single library branch." Consistent with those definitions, the ESL provides an explanation of the term "campus" because the classification of connections between multiple buildings of a single school as Category One or Category Two services is determined by whether the buildings are located on the same campus. As described in the ESL, a campus, for the purposes of the E-rate program, is the geographically contiguous grounds where the instructional buildings of a single eligible school are located. A single school may have multiple campuses if it has instructional buildings located on grounds that are not geographically contiguous. Different schools, as opposed to different instructional buildings of the same school, located on the same grounds do not comprise a single campus. The portion of the grounds occupied by the instructional buildings for each school is a campus for that school. For more information on this issue, we have included a series of Frequently Asked Questions in Appendix B.

8. We make no other changes to the ESL for funding year 2017, and we specifically decline to address or consider comments requesting that we add services to the ESL or provide additional clarifications, as beyond the scope of this proceeding. In the ESL Public Notice, we reminded commenters that the decisions made by the Commission in the E-rate Modernization Orders were not open for reconsideration in this proceeding. Several commenters, however, made requests to add services to the ESL that would require the Commission to revisit its previous decisions in the E-rate Modernization Order and Second E-rate Modernization Order and/or asked the Commission to reconsider other issues resolved in those decisions. Due to the complexity of these issues and the limited scope of the ESL proceeding, we do not address these requests at this time.

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> For example, a single school with instructional buildings located miles apart are not a single campus and the connections between those buildings may be classified as Category One services. *See* Appendix B, Frequently Asked Questions Regarding Classification of Connections as Category One or Category Two, Q7.

<sup>&</sup>lt;sup>18</sup> For example, a high school and a middle school located on the same grounds are not a single campus and connections between these schools may be classified as Category One services. *See* Appendix B, Frequently Asked Questions Regarding Classification of Connections as Category One or Category Two, Q3.

<sup>&</sup>lt;sup>19</sup> See, e.g., DoIT Comments at 2-3 (requesting that dark fiber obtained via lease or IRU as part of a construction project, with the goal of reducing the overall construction cost, be classified as special construction), contra CenturyLink Reply Comments at 1-2 (replying that such a substitution could undermine the program by allowing after-the-fact changes to a fair and competitive procurement); see also, e.g., KB & Associates Comments at 1 (requesting that mobile broadband services to school buses be eligible for E-rate support); Wisconsin DPI Reply Comments at 1-2 (supporting eligibility of E-rate support for off-campus household and school bus broadband access). See also, e.g., DoIT Comments at 4 (requesting eligibility for redundant connections). This request would require the Commission to revisit its previous decisions. See Schools and Libraries Universal Support Mechanism, CC Docket No. 02-6, Second Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 9202, 9209-11, paras. 22-24 (2003) (declining to support duplicative services); Requests for Review by Macomb Intermediate School District Technology Consortium, Schools and Libraries Universal Support Mechanism, CC Docket No. 02-6, Order, 22 FCC Rcd 8771 (2007) (denying a request for review of the denial of support for redundant networks).

<sup>&</sup>lt;sup>20</sup> ESL Public Notice, 31 FCC Rcd at 5716, n.7.

<sup>&</sup>lt;sup>21</sup> For example, some commenters offered comments advocating for a pause in the phase down of support for voice services. *See, e.g.*, FFL Comments at 1 (requesting a pause in the phase down of support for voice services); Adtec, Inc. Reply Comments at 1-2 (supporting the suspension of the phase down). The Commission adopted the phase down of support for voice services in 2014 with a requirement for a report on the effects of the first two years of the phase-down due no later than by October 1, 2017. Without further action by the Commission, the phase down will continue. *See Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8870, 8926, 8928, paras. 140, 143 (2014) (*First E-rate Modernization Order*). Other commenters sought support for cellular data service for certain staff members for (continued....)

#### IV. ORDERING CLAUSE

9. ACCORDINGLY, IT IS ORDERED, that pursuant to the authority contained in sections 1 through 4, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 USC. §§ 151-154, 254, 303(r), and 403, and sections 0.91 and 54.502 of the Commission's rules, 47 CFR. §§ 0.91 and 54.502, this Order is ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Matthew S. DelNero Chief Wireline Competition Bureau

(Continued from previous page) emergency situations. See, e.g., AdTec, Inc. Comments at 1 (seeking support for cellular data service for certain staff members for emergency situations). See Second E-rate Modernization Order, 29 FCC Rcd at 8932-33, para. 151-53 (determining that data plans will only be eligible when they are the most cost-effective option for providing internal broadband access); see also Requests for Waiver of Decisions of the Universal Service Administrator by Batesville Community School Corporation et al., Schools and Libraries Universal Service Support Mechanism, Modernizing the E-rate Program for Schools and Libraries, CC Docket No. 02-6 and WC Docket No. 13-184, Order, DA 16-823 (WCB 2016) (denying requests for waivers related to funding for individual data plans based on public safety concerns). Still others sought support for services that the Commission declined to support. See, e.g., FireEve, Inc. Comments at 2 (seeking support for network security services including non-signature based detection and detonation chambers); Cox Comments at 1 (supporting eligibility for distributed denial of service (DDoS) prevention services); DoIT Comments at 3-4 (arguing for support of DDoS mitigation and content filtering services); WDPI Reply Comments at 2 (supporting the recommendation that content filtering be eligible). The Commission declined to further expand eligibility to additional network security services in order to focus Category Two funding on other necessary wireless local area network (WLAN) equipment and services. See First E-rate Modernization Order, 29 FCC Rcd at 8919, para. 121 & n.275.

## APPENDIX A

#### **List of Commenters**

## Comments and Reply Comments in Response to the ESL Public Notice

## WC Docket No. 13-184

## **Commenters**

- 1. AdTec, Inc.
- 2. Cox Communications, Inc. (Cox)
- 3. FireEye, Inc.
- 4. Funds for Learning, LLC (FFL)
- 5. Illinois Department of Innovation and Technology (DoIT)
- 6. KB & Associates

## **Reply Commenters**

- 1. AdTec, Inc.
- 2. CenturyLink
- 3. Sprint Corporation
- 4. Wisconsin Department of Public Instruction (WDPI)

#### APPENDIX B

# Frequently Asked Questions Regarding Classification of Connections as Category One or Category Two

## Q1: Are costs for applicant-owned wide area networks (WAN) now eligible as Category One services?

**A1.** Yes. Beginning in funding year 2016, costs related to applicant-owned WANs will be eligible for Category One support. In the *Second E-rate Modernization Order*, the Commission established a mechanism for applicants to seek Category One support for self-provisioned networks when self-provisioning is the most cost-effective option to meet their connectivity needs. Consistent with that decision, the Commission eliminated a prior rule that prohibited E-rate support for applicant-owned WANs. As a reminder, lease arrangements for non-exclusive access to service provider WANs have long been eligible for Priority One/Category One support under the E-rate program.

## Q2. What is a WAN for the purposes of the E-rate program?

**A2.** For broadband, connections forming a data network between multiple eligible schools or libraries are WAN connections for the purposes of the E-rate program. WAN connections do not include connections between or among multiple buildings of a single school campus or single library branch. Such connections are Category Two internal connections under the E-rate rules.

## Q3. What if the different schools or libraries are located on the same campus? Are the connections installed between them eligible for Category One support?

**A3.** Yes. Under the rules adopted by the *Second E-rate Modernization Order*, connections installed between two or more schools or libraries are eligible for Category One support, irrespective of whether the schools are located on the same campus.

Take, for example, a high-rise building with three different schools located on three different floors. As one option for meeting their connectivity needs, the three schools consider constructing a network that connects their facilities on different floors of the building, with a single connection running out to a service provider's point-of-presence (PoP). That configuration would be a WAN for the purposes of the E-rate program. The costs associated with installing the connection running out to the PoP and between the three schools within the building would be eligible for Category One support. Similarly, a connection between a middle school and high school located on the same campus would be eligible for Category One support.

# Q4. Isn't a connection that crosses a public right-of-way eligible for Category One support, and any fiber connection that does not cross a public right-of-way an internal connection?

**A4.** No. Before the *Modernization Orders*, the E-rate program's definition of "internal connections" included a rebuttable presumption that a connection that crossed a public right-of-way was *not* an internal connection. The purpose of that rebuttable presumption was to distinguish between connections that may be eligible for what was formerly called Priority Two support as part of an applicant's LAN from those that would not be eligible for E-rate support at all because they were part of an applicant-owned WAN.

Now that applicant-owned WANs are eligible for Category One support, there is no need for that distinction. In fact, the *E-rate Modernization Order* removed the rebuttable presumption and the reference to a public right-of-way from the definition of internal connections altogether.

The Commission now defines internal connections as services "necessary to transport or distribute broadband within one or more instructional buildings of a single school campus or within one or more non-administrative buildings that comprise a single library branch."

In short, the classification of a connection as a Category One or Category Two service turns on the function of the connection, *i.e.*, whether it is part of a WAN connecting multiple eligible schools or libraries, or whether it distributes broadband within a single school campus.

- Q5. So, in the high-rise example above, if three floors of the building are occupied by instructional facilities of a *single* school, the connections installed between the floors occupied by the single school would be internal connections?
- **A5.** Correct. The connections between the instructional facilities located on different floors of the high-rise building would distribute broadband within a single school campus. They would, therefore, be internal connections eligible for Category Two support.
- Q6. What about a single school campus that is intersected by a public right-of-way, with instructional buildings located on either side of the public right-of-way? Would the connections between all of the instructional buildings be internal connections?
- **A6.** Yes. The connections installed between the buildings on either side of the public right-of-way would distribute broadband to the instructional buildings of a single school campus, and would be internal connections eligible for Category Two support as opposed to WAN connections eligible for Category One support.
- Q7. What about a single school with multiple campuses that are located miles apart? Would connections installed between the instructional buildings on the different campuses be internal connections?
- **A7.** No. Internal connections distribute broadband within one or more instructional buildings of a single school campus, or within one or more non-administrative buildings that comprise a single library branch. Connections that distribute broadband to buildings of a single school located on *multiple* campuses located miles apart would not be internal connections, and may be eligible for Category One support.

<sup>&</sup>lt;sup>1</sup> 47 CFR § 54.500.

#### APPENDIX C

## Eligible Services List for Funding Year 2017 Schools and Libraries Universal Service Support Mechanism

(WC Docket No. 13-184)

The Federal Communications Commission's (FCC's) rules provide that all services that are eligible 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). Eligible schools and libraries may seek E-rate support for eligible Category One telecommunications services, telecommunications, and Internet access and Category Two internal connections, basic maintenance, and managed internal broadband services as identified herein. 47 CFR §§ 54.5, 54.500, and 54.502(a).

Additional guidance from USAC about the E-rate application process and about eligible services, including a glossary of terms, is available at USAC's website at <a href="http://www.usac.org/sl/">http://www.usac.org/sl/</a>. The documents on USAC's website are not incorporated by reference into the ESL and do not bind the Commission. Thus, they will not be used to determine whether a service or product is eligible. Applicants and service providers are free to refer to those documents, but just for informal guidance. This ESL applies to funding requests for Funding Year 2017.

## **Category One**

The first category of supported services, Category One, includes the services needed to support broadband connectivity to schools and libraries. Eligible Category One services are listed in the entries for data transmission services and Internet access and voice services. This category consists of the services that provide broadband to eligible locations including data links that connect multiple points, services used to connect eligible locations to the Internet, and services that provide basic conduit access to the Internet. With the exception of leased dark fiber and self-provisioned broadband networks, maintenance and technical support appropriate to maintain reliable operation are only eligible for support when provided as a component of these services. Voice services, as described below, are subject to a phase down of support that began in Funding Year (FY) 2015.

#### **Data transmission services and Internet access**

Digital transmission services and Internet access are eligible in Category One. These services include:

- Asynchronous Transfer Mode (ATM)
- Broadband over Power Lines
- Cable Modem
- Digital Subscriber Line (DSL)
- DS-1 (T-1), DS-3 (T-3), and Fractional T-1 or T-3
- Ethernet
- Integrated Services Digital Network (ISDN)
- Leased Lit Fiber
- Leased Dark Fiber (including dark fiber indefeasible rights (IRUs) for a set term)
- Self-Provisioned Broadband Networks
- Frame Relay
- Multi-Protocol Label Switching (MPLS)
- OC-1, OC-3, OC-12, OC-n
- Satellite Service
- Switched Multimegabit Data Service
- Telephone dial-up
- Wireless services (e.g., microwave)

*Notes*: (1) E-rate support is available for leased lit fiber, leased dark fiber, and self-provisioned broadband networks as described in the *Second E-rate Modernization Order* (FCC 14-189). Eligible costs include monthly charges, special construction, installation and activation charges, modulating electronics and other equipment necessary to make a Category One broadband service functional ("Network Equipment"), and maintenance and operation charges. Network Equipment and maintenance and operation costs for existing networks are eligible. All equipment and services, including maintenance and operation, must be competitively bid.

- (2) Applicants that seek bids for leased dark fiber must also seek bids for leased lit fiber service and fully consider all responsive bids. Similarly, applicants that seek bids for self-provisioned broadband networks must also seek bids for the needed connectivity via broadband services provided over third-party networks, and fully consider all responsive bids.
- (3) Applicants may seek special construction funding for the upfront, non-recurring costs for the deployment of new or upgraded facilities. The eligible components of special construction are construction of network facilities, design and engineering, and project management.
- (4) Staff salaries and labor costs for personnel of the applicant or underlying beneficiary are not Erate eligible.

## Eligible voice services

Eligible voice services are subject to an annual 20 percentage point phase down of E-rate support that began in FY 2015, as described in the *E-rate Modernization Order*. For FY 2017, the effective discount rate will be 60 percentage points less than other Category One services. The reduced discount rate for voice services will apply to all applicants and all costs for the provision of telephone services and circuit capacity dedicated to providing voice services including:

- Centrex
- Integrated Services Digital Network (ISDN)
- Interconnected voice over Internet protocol (VoIP)
- Local, long distance, and 800 (toll-free) service
- Plain old telephone service (POTS)
- Radio loop
- Satellite telephone service
- Shared telephone service (only the portion of the shared services relating to the eligible use and location may receive discounts)
- Wireless telephone service including cellular voice and excluding data and text messaging

## **Category Two**

The second category of equipment and services eligible for E-rate support, Category Two, includes the internal connections needed for broadband connectivity within schools and libraries. Support is limited to the internal connections necessary to bring broadband into, and provide it throughout, schools and libraries. These are broadband connections used for educational purposes within, between, or among instructional buildings that comprise a school campus (as defined on p. 7) or library branch, and basic maintenance of these connections, as well as services that manage and operate owned or leased broadband internal connections (e.g., managed internal broadband services or managed Wi-Fi). Category Two support is subject to per-school or per-library budgets as set forth in the *E-rate Modernization Order* and *Second E-rate Modernization Order*. The eligible components and services in Category Two are:

## **Eligible Broadband Internal Connections**

- Access points used in a local area network (LAN) or wireless local area network (WLAN) environment (such as wireless access points)
- Antennas, cabling, connectors, and related components used for internal broadband connections
- Caching
- Firewall services and components separate from basic firewall protection provided as a standard component of a vendor's Internet access service.
- Switches
- Routers
- Racks
- Uninterruptible Power Supply (UPS)/Battery Backup
- Wireless controller systems
- Software supporting the components on this list used to distribute high-speed broadband throughout school buildings and libraries

*Notes*: (1) Functionalities listed above that can be virtualized in the cloud, and equipment that combines eligible functionalities, like routing and switching, are also eligible.

- (2) A manufacturer's multi-year warranty for a period up to three years that is provided as an integral part of an eligible component, without a separately identifiable cost, may be included in the cost of the component.
- (3) Caching is defined as a method that stores recently accessed information. Caching stores information locally so that the information is accessible more quickly than if transmitted across a network from a distance. A caching service or equipment that provides caching, including servers necessary for the provision of caching, is eligible for funding.

## **Eligible Managed Internal Broadband Services**

- Services provided by a third party for the operation, management, and monitoring of eligible broadband internal connections are eligible managed internal broadband services (e.g., managed Wi-Fi).
- E-rate support is limited to eligible expenses or portions of expenses that directly support and
  are necessary for the broadband connectivity within schools and libraries. Eligible expenses
  include the management and operation of the LAN/WLAN, including installation, activation
  and initial configuration of eligible components, and on-site training on the use of eligible
  equipment.
- In some eligible managed services models, the third party manager owns and installs the equipment and school and library applicants lease the equipment as part of the managed services contract. In other cases, the school or library may own the equipment, but have a third party manage it for them.

### **Basic Maintenance of Eligible Broadband Internal Connections**

E-rate support is available for basic maintenance and technical support appropriate to maintain reliable operation when provided for eligible broadband internal connections.

The following basic maintenance services are eligible:

- Repair and upkeep of eligible hardware
- Wire and cable maintenance
- Configuration changes
- Basic technical support including online and telephone based technical support
- Software upgrades and patches including bug fixes and security patches

## **Eligibility limitations for Category Two:**

Eligibility limitations for managed internal broadband services – The equipment eligible for support as part of a managed internal broadband service may include only equipment listed as a broadband internal connections component above. Upfront charges that are part of a managed service contract are eligible for E-rate support except to the extent that the upfront charges are for any ineligible internal connections (e.g., servers other than those that are necessary to provide caching) which, if included in the contract, must be cost allocated out of any funding request.

Eligibility limitations for basic maintenance – Basic maintenance is eligible for support only if it is a component of a maintenance agreement or contract for eligible broadband internal connections. The agreement or contract must specifically identify the eligible internal connections covered, including product name, model number, and location. Support for basic maintenance will be paid for the actual work performed under the agreement or contract. Support for bug fixes, security patches, and technical support is not subject to this limitation. Basic maintenance does not include:

- Services that maintain ineligible equipment
- Upfront estimates that cover the full cost of every piece of eligible equipment
- Services that enhance the utility of equipment beyond the transport of information, or diagnostic services in excess of those necessary to maintain the equipment's ability to transport information
- Network management services, including 24-hour network monitoring
- On-site technical support (i.e., contractor duty station at the applicant site) unless applicants present sufficient evidence of cost-effectiveness
- Unbundled warranties

## Eligibility explanations for certain Category One and Category Two services:

**Internet access** – Eligible Internet access may include features such as basic firewall protection, domain name service, and dynamic host configuration when these features are provided as a standard component of a vendor's Internet access service. Firewall protection that is provided by a vendor other than the Internet access provider or priced out separately will be considered a Category Two internal connections component. Examples of items that are ineligible components of Internet access include applications, content, e-mail, and end-user devices and equipment such as computers, laptops, and tablets.

Wireless services and wireless Internet access – As clarified in the *Second E-rate Modernization Order*, data plans and air cards for mobile devices are eligible only in instances when the school or library seeking support demonstrates that the individual data plans are the most cost-effective option for providing internal broadband access for mobile devices at schools and libraries. Applicants should compare the cost of data plans or air cards for mobile devices to the total cost of all components necessary to deliver connectivity to the end user device, including the cost of Internet access and data transmission service to the school or library. Seeking support for data plans or air cards for mobile devices for use in a school or library with an existing broadband connection and wireless local area network implicates the E-rate program's prohibition on requests for duplicative services.

Off-campus use, even if used for an educational purpose, is ineligible for support and must be cost allocated out of any funding request.

Managed internal broadband services, such as managed Wi-Fi, are eligible only for Category Two support.

Connections between buildings of a single school – The classification of connections between multiple buildings of a single school is determined by whether the buildings are located on the same campus. A "campus" is defined as the geographically contiguous grounds where the instructional buildings of a single eligible school are located. A single school may have multiple campuses if it has instructional buildings located on grounds that are not geographically contiguous. Different schools located on the same grounds do not comprise a single campus. The portion of the grounds occupied by the instructional buildings for each school is a campus for that school.

- Connections between buildings on different campuses of a single school are considered to be Category One digital transmission services.
- Connections between different schools with campuses located on the same property (e.g., an
  elementary school and middle school located on the same property) are considered to be
  Category One digital transmission services.
- Connections between buildings of a single school on the same campus are considered to be Category Two internal connections.

## **Miscellaneous**

As described below, various miscellaneous services associated with Category One or Category Two are eligible for support. Applicants should request eligible miscellaneous services in the same category as the associated service being obtained or installed.

#### Fees

Fees and charges that are a necessary component of an eligible product or service are eligible including:

- Change fees
- Contingency fees are eligible if they are reasonable and a regular business practice of the service provider. Contingency fees will be reimbursed only if the work is performed.
- Freight assurance fees
- Lease or rental fees on eligible equipment
- Per diem and/or travel time costs are eligible only if a contract with a vendor for the eligible product or services specifically provides for these costs
- Shipping charges
- 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.

### Installation, activation, and initial configuration

Installation, activation, and initial configuration of eligible components are eligible. These services may include:

- Design and engineering costs if these services are provided as an integral component of the installation of the relevant services
- Project management costs if these services are provided as an integral component of the installation of the relevant services
- 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 is part of the contract or agreement for the equipment. Training must occur coincidently or within a reasonable time after installation.