

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: November 16, 2018

Released: November 16, 2018

By the Chief, Wireline Competition Bureau:

I. INTRODUCTION

1. In this Order, the Wireline Competition Bureau (Bureau) adopts the eligible services list (ESL) for funding year (FY) 2019 for the schools and libraries universal service support program (more commonly referred to as the E-Rate program). Specifically, based on the record before us, we adopt the proposals set forth in the Bureau’s Public Notice seeking comment on the proposed ESL for FY2019 and the additional changes discussed below. In addition, we release the ESL for FY2019 and authorize the Universal Service Administrative Company (USAC) to open the annual application filing window no earlier than 60 days after the release of this Order.

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. Pursuant to this authority, the Commission delegated responsibility to the Bureau to update the ESL annually. In the FY2019 ESL Public Notice, we sought comment on revisions to the ESL for FY2019. In this connection, we identified one significant change made between the FY2018 ESL and the proposed FY2019 ESL. Specifically, we proposed to eliminate the “Eligible Voice Services” section of the ESL and added a note to clarify that dedicated voice channels on an Integrated Services Digital Network circuit are no longer eligible for E-Rate funding consistent with the Commission’s decision in the 2014 First E-Rate Order to phase down E-Rate program

1 The ESL specifies the services and products that are eligible for E-Rate discounts.

2 Wireline Competition Bureau Seeks Comment on Proposed Eligible Services List for the E-Rate Program, WC Docket No. 13-184, Public Notice, DA 18-789 (WCB 2018) (FY2019 ESL Public Notice).

3 See Schools and Libraries Universal Service Support Mechanism, Eligible Services List for Funding Year 2019 (FY2019 ESL), Appendix B, below. 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).

4 47 U.S.C. §§ 254(c)(1), (c)(3), (h)(1)(B), (h)(2).

5 See 47 CFR § 54.502(d) (detailing the procedures for seeking comment on a draft ESL).

6 FY2019 ESL Public Notice at 1.

support for voice services by FY2019.<sup>7</sup> The comment cycle on the *FY2019 ESL Public Notice* closed on September 13, 2018.<sup>8</sup>

### III. DISCUSSION

3. Having considered the record, we update the ESL for FY2019, which is attached as Appendix B to this Order, by adopting the changes proposed in the *FY2019 ESL Public Notice*. We also adopt additional changes to the FY2019 ESL as discussed below. We decline to make any further changes to the ESL for the reasons discussed below.

4. *Category One Changes, Clarifications, and Requests.* First, we eliminate the “Eligible Voice Services” section of the ESL and add a note to clarify that dedicated voice channels on an Integrated Services Digital Network circuit are no longer eligible for E-Rate funding. As we stated in the *FY2019 ESL Public Notice*, this change is consistent with the *2014 First E-Rate Order*, where the Commission announced it would phase down support for voice services over a four-year period.<sup>9</sup> Moreover, we received no comment objecting to this change to the ESL. Accordingly, in FY2019, voice services will no longer be eligible for support by the E-Rate program.

5. Next, we eliminate the first sentence of Note (1) under Category One on the ESL to clarify that Note (1) applies to all eligible Category One services.<sup>10</sup> Among other things, this change resolves questions raised by commenters regarding the eligibility of Category One network equipment.<sup>11</sup> To further clarify, we reiterate that “modulating electronics and other equipment necessary to make a Category One broadband service functional (“Network Equipment”)” are eligible for Category One support, and remind applicants that “[a]ll equipment and services . . . must be competitively bid.”<sup>12</sup> In response to questions raised by commenters about whether Category One network equipment may be leased from a service provider,<sup>13</sup> we reiterate that “[l]ease or rental fees on eligible equipment” are eligible for Category One support.<sup>14</sup> In response to questions raised regarding network equipment with

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<sup>7</sup> *FY2019 ESL Public Notice* at 1. In the *2014 First E-Rate Order*, the Commission phased down E-Rate program support for voice services over a four-year period. 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, 8923, para. 135 (2014) (*2014 First E-Rate Order*); 47 CFR § 54.505(d).

<sup>8</sup> *FY2019 ESL Public Notice* at 1. The Bureau received seven comments and four reply comments in response to the *FY2019 ESL Public Notice*. Appendix A contains a list of the commenters and the acronyms, if any, used herein to refer to these commenters.

<sup>9</sup> *2014 First E-Rate Order* at 8923, para. 135; 47 CFR § 54.505(d); *FY2019 ESL Public Notice* at 1.

<sup>10</sup> *FY2019 ESL Public Notice*, Attachment at 2 (“E-Rate support is available for leased lit fiber, leased dark fiber, and self-provisioned broadband networks as described in the *Second 2014 E-rate Order* (FCC 14-189).”).

<sup>11</sup> SECA Comments at 1-2; FFL Reply Comments at 1-2, E-mpa Reply Comments at 2.

<sup>12</sup> *FY2019 ESL*, Appendix B at 2.

<sup>13</sup> FFL Reply Comments at 2; SECA Comments at 2.

<sup>14</sup> *FY2019 ESL*, Appendix B at 7. As the ESL indicates, lease or rental fees for eligible equipment are eligible for support regardless of category. Further, we decline to adopt Funds for Learning’s request that the Commission adopt a “bright line” standard for Category One network equipment so that applicants “may request Category 1 discounts for the purchase or lease of network electronics and related components necessary for the transmission of data across [a] public right of way.” FFL Reply Comments at 1. The Commission previously removed the presumption that a connection that does not cross a public right-of-way is an internal connection. *2014 First E-Rate Order*, 29 FCC Rcd at 8919, para. 126 & n.287 (eliminating the rebuttable presumption that a connection that crossed a public right-of-way was not an internal connection). As a result, FFL’s request would contradict previous Commission decisions regarding the distinction between Category One and Category Two services<sup>14</sup>. *Id.* Thus, FFL’s proposed bright line standard is beyond the scope of this proceeding.

mixed eligibility,<sup>15</sup> we remind applicants that “[i]f the price for components that enable the [local area network (LAN)] can be isolated from the price of the components that enable the Category One service, those costs should be cost allocated out of the Category One funding request.”<sup>16</sup> Finally, we decline a request to make redundant Category One services eligible for support,<sup>17</sup> as this request is inconsistent with previous Commission decisions.<sup>18</sup>

6. *Category Two Changes, Clarifications, and Requests.* First, we make certain administrative changes to the listing of eligible components and services in the second category of equipment and services eligible for E-Rate support, Category Two. In response to requests that the FCC Form 470 Category Two Internal Connections drop-down menu options more closely align with the eligible equipment listed in the ESL under Category Two Internal Connections,<sup>19</sup> we reorder the eligible components and services listed under “Internal Connections,” and break out “Cabling” as an independent list item under Internal Connections.

7. We also add clarifying language to the Eligible Broadband Internal Connections subcategory on the ESL. Specifically, after “[s]oftware supporting the components on this list used to distribute high-speed broadband throughout school buildings and libraries, we add the following parenthetical: “(applicants should request software in the same category as the associated service being obtained or installed).”<sup>20</sup> This language mirrors language found in the Miscellaneous section of the ESL,<sup>21</sup> and is intended to provide applicants guidance on how to request bids for this type of eligible component on the FCC Form 470.<sup>22</sup> This language does not impose an additional requirement on applicants. Accordingly, applicants may request both equipment and software necessary to use the equipment on the FCC Form 470, or request just the equipment on the FCC Form 470, and still receive support for both the equipment and the software necessary to use the equipment (e.g., right-to-use software or client access licenses) by requesting the equipment and software either together or separately on the FCC Form 471.<sup>23</sup> We note, however, that software upgrades and patches, including bug fixes and security patches, are considered basic maintenance of internal connections, and as such, applicants should seek bids for basic maintenance of internal connections if they intend to request funding for these services.<sup>24</sup>

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<sup>15</sup> E-mpa Reply Comments at 2, 4.

<sup>16</sup> *FY2019 ESL*, Appendix B at 6.

<sup>17</sup> Cherokee County School District Comments at 1 (requesting that redundant systems be made eligible).

<sup>18</sup> *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>19</sup> *See, e.g.*, Letter from Winston E. Himsworth, Executive Director, E-rate Central, to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Docket No. 02-6, WC Docket No. 13-184, 2 (filed Apr. 11, 2018) (*E-rate Central Ex Parte*).

<sup>20</sup> *FY2019 ESL Public Notice*, Attachment at 3.

<sup>21</sup> *FY2019 ESL*, Appendix B at 7.

<sup>22</sup> *E-rate Central Ex Parte* at 2.

<sup>23</sup> SECA Comments at 3 (requesting clarification regarding whether separate requests for client access licenses are not required on the Form 470 and whether licenses should be requested on the Form 471 in the same category as the associated product).

<sup>24</sup> *FY2019 ESL*, Appendix B at 4.

8. Second, we address a request for clarification regarding the eligibility of lease or rental fees for eligible Category Two equipment.<sup>25</sup> As noted above,<sup>26</sup> “[l]ease or rental fees on eligible equipment” are eligible for support regardless of category.<sup>27</sup> We also address a request for clarification regarding requests for caching services.<sup>28</sup> As noted above, applicants may request both equipment and software necessary to use the equipment on the FCC Form 470 or request just the equipment on the FCC Form 470 and still receive support for both the equipment and the software necessary to use the equipment by requesting the equipment and software either together or separately on the FCC Form 471.<sup>29</sup> We remind applicants that servers are ineligible except when necessary for the provision of caching.<sup>30</sup> Accordingly, applicants requesting E-Rate funding for servers must indicate that this equipment is necessary for the provision of caching on their FCC Form 471.

9. Third, we decline several requests that additional services or equipment be eligible for E-Rate support under Category Two.<sup>31</sup> For example, Aruba requests that policy management systems and self-provisioned network management be added to the ESL as eligible services.<sup>32</sup> As explained in the *FY2016 ESL Order*, the Commission determined in the *2014 First E-Rate Order* that network management and operation services are only eligible when provided by a third party as part of eligible managed internal broadband services.<sup>33</sup>

10. We also decline Aruba’s request to have E-Rate program support cover the entire cost of multi-year contracts for basic maintenance of internal connections in the first funding year of the contract<sup>34</sup> because this request is contrary to E-Rate program rules.<sup>35</sup> Similarly, Cherokee County School

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<sup>25</sup> SECA Comments at 3-4 (requesting clarification regarding whether leasing of equipment is eligible under internal connections, managed internal broadband services, or both).

<sup>26</sup> See *supra* para. 5, n.13.

<sup>27</sup> *FY2019 ESL*, Appendix B at 7.

<sup>28</sup> ApplianSys Comments at 1.

<sup>29</sup> See *supra* para. 7.

<sup>30</sup> See also *FY2019 ESL*, Appendix B at 3, 5.

<sup>31</sup> Some commenters requested network or data security services and products be made eligible. See Cherokee County School District Comments at 1 (requesting that network security services to protect schools from potential data breaches be made eligible, as well as content filters and load balancers); see also Cumberland County Schools Comments at 2-4 (requesting surge protection and lightning suppression equipment be made eligible). In 2014, the Commission eliminated support for data protection devices and declined to expand eligibility to additional network security services to focus Category Two funding on other necessary wireless local area network equipment and services. See *2014 First E-Rate Order*, 29 FCC Rcd at 8919, paras. 120-21 & n.275. Another commenter requested that physical safety and security equipment be made eligible. Tech Ed Comments at 1 (requesting that physical safety and security devices (e.g., cameras) and related equipment and monitoring services be eligible). Support for these types of services would be inconsistent with the Commission’s rules and previous Commission decisions. See 47 CFR § 54.503(c)(2)(ii)(A) (requiring that the services supported by E-Rate funds be used primarily for educational purposes); 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, 31 FCC Rcd 7731, 7733, para. 6 (WCB 2016) (denying requests for waivers related to funding for individual data plans based on public safety concerns).

<sup>32</sup> Aruba Comments at 2.

<sup>33</sup> *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Order, 30 FCC Rcd 9923, 9931, para. 21 (WCB 2015) (*FY2016 ESL Order*).

<sup>34</sup> Aruba Comments at 2-3.

<sup>35</sup> See 47 CFR § 54.507(e) (stating that to the extent that applicants sign multi-year contracts, the program will only “commit funds to cover the pro rata portion of such a long term contract scheduled to be delivered during the

District requests that proactive, preventative maintenance be eligible.<sup>36</sup> We remind applicants that, except for bug fixes, security patches, and other discrete technical support, the E-Rate program will only provide support for maintenance for actual work performed under a contract.<sup>37</sup> We also decline commenters' request that we adopt a rebuttable presumption that all funding requests for Category Two equipment include a request for maintenance of these products.<sup>38</sup> Under the Commission's rules, applicants are required to seek competitive bids for all services eligible for support.<sup>39</sup> As the Bureau has previously noted, internal connections are separate and distinct from basic maintenance services, and a vendor who sells internal connections components would not necessarily also provide the maintenance of those products.<sup>40</sup> Therefore, adopting the rebuttable presumption recommended by commenters would be contrary to the Commission's competitive bidding rules, as well as the practical reality of how internal connections and basic maintenance services are oftentimes provided.

11. Finally, we decline commenters' requests that we revise the Category Two subcategories<sup>41</sup> and that we provide a list of the specific equipment or services that may be eligible under each Category Two subcategory.<sup>42</sup> Such a list is unlikely to capture all existing, developing, and new services that could be eligible under these subcategories by the time the ESL is released each year and could unnecessarily limit the equipment or services for which applicants could receive funding, as well as the flexibility that applicants currently have to determine the solution that best fits their needs. We note, however, that applicants with questions about how to categorize specific equipment or services may contact USAC to discuss the specific facts necessary to determine the appropriate categorization.

12. *Other Requests.* We decline to address comments that raise matters beyond the scope of this proceeding,<sup>43</sup> including those where commenters recommended changes to program forms.<sup>44</sup>

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funding year for which universal service support is sought"); *see also Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9062, para. 544 (1997).

<sup>36</sup> Cherokee County School District Comments at 1.

<sup>37</sup> *Schools and Libraries Universal Service Support Mechanism, A National Broadband Plan for Our Future*, CC Docket No. 02-6, GN Docket No. 09-51, Order, 25 FCC Rcd 17324, 17325-26, paras. 5-6 (WCB 2010) (basic maintenance of internal connections contracts are eligible for funding, but only for work that is actually performed under the contract, except for software upgrades and patches, including bug fixes and security patches, which are eligible insofar as, but for these specific services, the service or equipment would not function and serve its intended purpose with the degree of reliability ordinarily provided).

<sup>38</sup> E-mpa Reply Comments at 9; E-Rate Provider Services Reply Comments at 1-2.

<sup>39</sup> 47 CFR § 54.503(b).

<sup>40</sup> *Petition for Reconsideration by Chicago Public Schools, Schools and Libraries Universal Service Support Mechanism*, CC Docket No. 02-6, Order, 29 FCC Rcd 9289, 9292, para. 8 (WCB 2014).

<sup>41</sup> E-mpa Reply Comments at 4-9, 10 (requesting that all Category Two subcategories be eliminated and replaced with "recurring" and "non-recurring" Category Two subcategories); FFL Reply Comments at 3-5 (requesting that Category Two services be consolidated into a single list); SECA Comments at 3-4 (requesting that Category Two subcategories be replaced with a single list); E-Rate Provider Services Reply Comments at 1-2 (requesting that Category Two subcategories be eliminated and that "recurring" and "non-recurring" designations be used to indicate the funding request's service delivery and billing parameters). We remind stakeholders that in 2014, the Commission extended the eligibility for basic maintenance and managed internal broadband services only through FY2019. *Modernizing the E-rate Program for Schools and Libraries*, WC Docket Nos. 13-184, 10-90, Second Report and Order and Order on Reconsideration, 29 FCC Rcd 15538, 15569, para. 95 (2014).

<sup>42</sup> SECA Comments at 3 (requesting clarification regarding which Category Two subcategory eligible equipment/services fall into (e.g., internal connections, basic maintenance, or managed internal broadband services)).

<sup>43</sup> Cherokee County School District Comments at 1 (requesting that rollover Category Two budgets be provided beyond FY2019, that the budget cycles align with the availability of these funds, that USAC reimburse applicants faster, and that the E-Rate application process be simplified); E-Rate Provider Services Reply Comments at 2

**IV. ORDERING CLAUSE**

13. 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 U.S.C. §§ 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

Kris Anne Monteith  
Chief  
Wireline Competition Bureau

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(requesting that the Commission restructure Category Two budgets to eliminate per-entity budgets and adopt per-district budgets); E-mpa Reply Comments at 2 (requesting that the ESL be made available before July 1 in future funding years). Another commenter requested that E-Rate services be provided on school buses. Spencer Community School District Comments at 1 (requesting that wireless Internet service provided on school buses be eligible). See *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Order, 31 FCC Rcd 9767, 9769, para. 8 & n.19 (WCB 2016).

<sup>44</sup> FFL Reply Comments at 3 (stating that there should always be the option to provide an "other" description on the E-Rate application); USTelecom Reply Comments at 2-4 (requesting that the Commission establish an alternate service category for Category One "finished services"); E-Rate Provider Services Reply Comments at 2-3 (requesting that the Commission simplify the FCC Form 470 Category One drop-down menu and eliminate the requirement to specify the transport media, i.e., allow applicants to simply request the type of service and speed they wish to purchase); E-mpa Reply Comments at 2-4, 9-10 (requesting that the FCC Form 470 Category One drop-down menu options be revised and that applicants instead solicit service based on the range of speeds for which they wish to solicit proposals).

**APPENDIX A****List of Commenters****Comments and Reply Comments in Response to the  
*FY2019 ESL Public Notice*****WC Docket No. 13-184****Commenters**

1. ApplianSys
2. Aruba, a Hewlett Packard Enterprise Company (Aruba)
3. Cherokee County School District
4. Cumberland County Schools
5. Spencer Community School District
6. State E-Rate Coordinators' Alliance (SECA)
7. Tech Ed Services, Inc. (Tech Ed)

**Reply Commenters**

1. E-Rate Management Professionals Association (E-mpa)
2. E-Rate Provider Services, LLC (E-Rate Provider Services)
3. Funds for Learning, LLC (FFL)
4. United States Telecom Association (USTelecom)

## APPENDIX B

**Eligible Services List for Funding Year 2019  
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). 47 CFR § 54.502(a). The E-Rate program is administered by the Universal Service Administrative Company (USAC). 47 CFR § 54.5. 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 §§ 54.500 *et seq.*

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 <http://www.usac.org/sl/>. 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 may refer to those documents, but should do so only for informal guidance. This ESL applies to funding requests for Funding Year 2019.

**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 and/or Internet access. 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.

**Data Transmission and/or Internet Access**

Data transmission and/or Internet access services 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)
  - *Note:* Dedicated voice channels on an ISDN circuit are no longer eligible.
- Leased Lit Fiber
- Leased Dark Fiber (including dark fiber indefeasible rights of use (IRUs) for a set term)
- Self-Provisioned Broadband Networks (applicant owned and operated networks)
- Frame Relay
- Multi-Protocol Label Switching (MPLS)
- OC-1, OC-3, OC-12, OC-n
- Satellite
- Switched Multimegabit Data Service
- Telephone dial-up



- Wireless (e.g., microwave)

*Notes:* (1) 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 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 E-Rate eligible.

**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 below in the section titled “Eligibility Explanations for Certain Category One and Category Two Services”) 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 47 CFR § 54.502. The eligible components and services in Category Two are:

**Eligible Broadband Internal Connections**

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

*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 internal broadband 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 the equipment for it.

**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 above as broadband internal connections. 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/ISP service** – Eligible Internet access services 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 service provider or priced out separately will be considered a Category Two internal connections component. Examples of items that are ineligible components of Internet access services 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 2014 E-Rate Order* (FCC 14-189), 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 data transmission and/or Internet access 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 WLAN 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 data 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 data transmission services, unless they share the same building.
- Connections between buildings of a single school on the same campus are considered to be Category Two internal connections.

**Network equipment with mixed eligibility** – On-premises equipment that connects to a Category Two-eligible LAN is eligible for Category One support if it is necessary to make a Category One broadband service functional. If the price for components that enable the LAN can be isolated from the price of the components that enable the Category One service, those costs should be cost-allocated out of the Category One funding request.

**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. These types of charges include customer charges for universal service fees, but do 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 coincidentally or within a reasonable time after installation.