The Wireline Competition Bureau (Bureau) seeks comment on the attached proposed eligible services list (ESL) for the schools and libraries universal service support mechanism (more commonly known as the E-Rate program) for funding year (FY) 2019.¹ We invite stakeholders to comment on any aspect of the proposed ESL. Below, we identify significant changes made between the FY2018 ESL and the proposed FY2019 ESL:

- In the 2014 E-Rate Order, the Commission phased down E-Rate program support for voice services over a four-year period.² Accordingly, voice services will no longer be supported by the E-Rate program in FY2019. Therefore, in the proposed FY2019 ESL, we eliminate the “Eligible Voice Services” section 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.³

Pursuant to section 1.419 of the Commission’s rules,⁴ interested parties may file comments on or before August 29, 2018 and reply comments on or before September 13, 2018. All comments are to

¹ See 47 CFR § 54.502(d) (detailing the procedures for seeking comment on a draft E-Rate program ESL); Attachment, Draft Schools and Libraries Eligible Services List for Funding Year 2019.

² 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 E-Rate Order); 47 CFR § 54.505(d) (“Discounts for category one voice services shall be reduced by 20 percentage points off applicant discount percentage rates for each funding year starting in funding year 2015, and reduced by an additional 20 percentage points off applicant discount percentage rates each subsequent funding year.”); see also 2014 E-Rate Order, 29 FCC Rcd at 8929, para. 143 (directing the Bureau to evaluate the impact of the discount reductions for voice support in a report by October 2017 and stating that if the Commission does not pursue further action before the application filing window opens for funding year 2018, the voice services phase down will continue).

³ See Attachment at 1.

⁴ 47 CFR § 1.419.
reference WC Docket No. 13-184 and may be filed by paper or by using the Commission’s Electronic Comment Filing System (ECFS).

- **Electronic Filers:** Comments may be filed electronically over the Internet by accessing ECFS at: [https://www.fcc.gov/ecfs/](https://www.fcc.gov/ecfs/).

- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service (USPS) mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- All hand- or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC headquarters at 445 12th Street, SW, Room TW-A325, Washington, D.C. 20554. Filing hours are from 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes or boxes must be disposed of before entering the building.

- Commercial overnight mail (other than USPS express and priority mail) must be sent to FCC, 9050 Junction Drive, Annapolis Junction, MD 20701.

- USPS first-class, express, and priority mail must be addressed to 445 12th Street, SW, Washington, D.C. 20554.

We also request that one copy of each filing be sent to each of the following:

1. Stephanie Minnock, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 5-C312, Washington, D.C. 20554; e-mail: stephanie.minnock@fcc.gov;

2. Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 5-B521, Washington, D.C. 20554; e-mail: charles.tyler@fcc.gov.

People with Disabilities. To request materials in accessible formats (braille, large print, electronic files, or audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0531 (voice), 202-418-0432 (TTY).

Availability of Documents. Comments, reply comments, and ex parte submissions will be publicly available online via ECFS. These documents will also be available for public inspection in the FCC’s Reference Information Center (RIC), which is located in Room CY-A257 at FCC headquarters, 445 12th Street, SW, Washington, D.C. 20554. The RIC is open to the public Monday through Thursday from 8:00 a.m. to 4:30 p.m. and Friday from 8:00 a.m. to 11:30 a.m.

“Permit-but-Disclose” Proceeding. The proceeding this Public Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments,

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5 Documents will generally be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

6 47 CFR §§ 1.1200 et seq.
memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the ex parte memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with section 1.1206(b) of the Commission’s rules. In proceedings governed by section 1.49(f) of the Commission’s rules, or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through ECFS in the docket available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules.

For further information, please contact Stephanie Minnock, Telecommunications Access Policy Division, Wireline Competition Bureau by email at stephanie.minnock@fcc.gov or by phone at (202) 418-1953 or TTY (202) 418-0484.

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7 47 CFR § 1.1206(b).
8 47 CFR § 1.49(f).
ATTACHMENT

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) 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). 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:

<table>
<thead>
<tr>
<th>Eligible Broadband Internal Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Antennas, connectors, and related components used for internal broadband connections</td>
</tr>
<tr>
<td>• Cabling</td>
</tr>
<tr>
<td>• Caching</td>
</tr>
<tr>
<td>• Firewall services and firewall components separate from basic firewall protection provided as a standard component of a vendor’s Internet access service</td>
</tr>
<tr>
<td>• Racks</td>
</tr>
<tr>
<td>• Routers</td>
</tr>
<tr>
<td>• Switches</td>
</tr>
<tr>
<td>• Uninterruptible Power Supply (UPS)/Battery Backup</td>
</tr>
<tr>
<td>• Access points used in a local area network (LAN) or wireless local area network (WLAN) environment (such as wireless access points)</td>
</tr>
<tr>
<td>• Wireless controller systems</td>
</tr>
<tr>
<td>• 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)</td>
</tr>
</tbody>
</table>

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 coincidently or within a reasonable time after installation.